

REPORT  
ON EDUCATIONAL DEVELOPMENTS  
1974-76

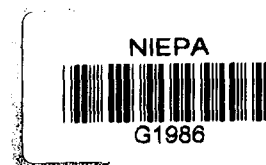
# EDUCATION IN INDIA



# 1974-1976

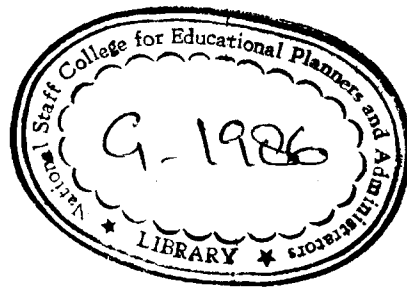
PRESENTED AT  
XXXVI INTERNATIONAL CONFERENCE  
ON PUBLIC EDUCATION  
GENEVA, SEPTEMBER, 1977

MINISTRY OF EDUCATION & SOCIAL WELFARE GOVERNMENT OF INDIA,  
NEW DELHI



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## NATIONAL REPORT ON EDUCATIONAL DEVELOPMENTS IN INDIA IN 1974-76

### PART I : ORGANISATION AND STRUCTURE OF THE EDUCATION SYSTEM

#### General Principles

The Indian Constitution places the responsibility for 'education', in the main, with the States while it vests the Central Government with direct responsibility in a few specified areas, viz. , coordination and determination of standards in institutions for higher education or research and scientific and technical institutions, Union agencies and institutions for professional, vocational or technical training and the promotion of special studies or research; and the administration and maintenance of Central universities and any other institutions including those for scientific or technical education financed by the Government of India wholly or in part and declared by Parliament by law to be an institution of national importance. The Constitution also specifies certain other areas which are the joint responsibility of the Centre and the States; these are : vocational and technical training of labour; legal, medical and other professions; and economic and social planning (which essentially includes educational planning). Besides, the Constitution provides for two onerous responsibilities on the 'State' (the term involves both the Centre and the States), viz. provision of universal elementary education and promotion of the educational and economic development of the weaker sections of the society. Again, another article places a special responsibility on the Government of India for promoting the spread of Hindi language and its development.

A recent amendment to the Constitution, makes "education, including technical education, medical education and universities" a joint responsibility, in lieu of mainly States' responsibility, subject to other provisions included in the Constitution.

In discharging these Constitutional responsibilities, Governments at the Centre and in the States enacted legislations to govern the educational institutions and administer the programmes at various levels and in different fields. The States statute books, for example, cover legislations relating to school education and higher education, including State universities, boards of secondary education, compulsory primary education, etc. , while the Central statute book includes University Grants Commission Act, Acts governing the Central univer -

sities, the five Indian Institutes of Technology, the Apprentices Act, and the like. The Central Ministry of Education has also set up specialised organisations/institutions to carry out specific tasks as autonomous organisations by Government Resolutions, as distinct from statutory organisations.

Major programmes have been afoot since 1971 following the National Policy on Education (1968) that covers vital areas like the introduction of universal, free and compulsory elementary education, teachers' education and their status and emoluments, equalisation of educational opportunity, identification of talent, work-experience and national service, science education and research, education for agriculture and industry, examination reforms, spread of literacy and adult education, uniform educational structure in all parts of the country and a few others covering certain crucial areas of secondary and higher education and the development of languages. The system of education contained in the National Policy comprises ten years of schooling, followed by two years of higher secondary stage providing two distinct streams of academic and vocational education and the first degree of three years' duration in general academic streams.

Following the National Policy on Education, the country is steadily moving towards the realisation of the Constitutional directive of providing free and compulsory education for all children until they complete 14 years of age, i.e., in classes I-VIII. By 1975-76, it is estimated that 64.7 million children of 6-11 age-group have been enrolled in classes I-V, representing 83.9 per cent of the total age-group population, while 15.94 million children of 11-14 age-group have been enrolled in classes VI-VIII representing 36.9 per cent of the total age-group population.

Education in classes I-V is already free in government schools and schools run by local self-government bodies in all parts of the country. Education is also free in classes VI-VIII in all States except for boys in three States which also propose to extend free education for boys up to class VIII shortly. Education up to the secondary stage is also free for both boys and girls in 7 States and 5 Union Territories while education for girls up to the secondary stage is free in 6 States, and in the remaining States free secondary education is provided for backward and poorer sections of the people. All States except five (Manipur, Meghalaya, Nagaland, Sikkim and Tripura) have enacted legislations for compulsory primary education, while such legislations are available for three Union Territories (Andaman & Nicobar Islands, Chandigarh and Delhi).

The Indian Constitution does not discriminate against any citizen on grounds of religion, race, caste, sex, place of birth, etc. But social and economic conditions constitute the main impediments in bringing children of

the weaker sections of the community, particularly scheduled tribes' children, and girls into schools in sufficient numbers. Universalisation of primary education now depends mainly on overcoming these impediments. Girls' education has, however, made significant progress. By the end of 1975-76, there were 640 girls for every 1000 boys in classes I-V, while the corresponding figures for classes VI-VIII were 470 girls for every 1000 boys.

Coeducation is not discouraged at any level of education, but there has been a felt need for schools and colleges exclusively for girls. Women students have free access to courses in arts, humanities, sciences and technology. Simultaneously, professional courses like teaching, social work, nursing, nutrition, dietetics, etc. in which women's services are needed most, have been expanded.

### System of Administration

The system of educational administration in India follows by and large the Constitutional provisions indicated earlier. The Central Ministry of Education plays a major role in ensuring a coordinated development of education all over the country and in developing national programmes in some essential areas like higher education and research. State Education Departments share the main responsibility in administering education, particularly at the school level.

The Central Ministry of Education is guided, in the main, by the Central Advisory Board of Education whose membership includes, among others, all the State Ministers of Education, and by the Board's various committees on different aspects and programmes. There are a few other advisory and consultative bodies like the National Council for Teacher Education, the National Council for Women's Education, the National Book Development Board, the National Board of Adult Education, the All India Council of Sports and the All India Council for Technical Education.

The Central Ministry of Education is headed by a Minister of the Union Cabinet, assisted by one or two Ministers of State or Deputy Minister and by a secretariat headed administratively by a Secretary to the Government of India. To carry out the direct and implied Constitutional responsibilities, the Ministry during the years has built up a number of offices and organisations. For coordination and determination of standards in higher education including technical education and research, Parliament enacted legislations for setting up and governing the University Grants Commission (1956); six Central Universities, viz., Aligarh Muslim University (1920, amended in 1965), Banaras Hindu University (1915, amended in 1958), Delhi University (1922, amended in 1961),

Jawaharlal Nehru University, New Delhi (1966), University of Hyderabad (1974), and North-eastern Hill University, Shillong (1973); and the five Indian Institutes of Technology at Bombay, Delhi, Kanpur, Kharagpur and Madras (1961). To increase the employability of engineering degree and diploma-holders, Parliament adopted the Apprentices (Amendment) Act, 1973, modifying the original Apprentices Act, 1961. While scientific research is promoted in a chain of non-academic specialised research laboratories under the Council of Scientific and Industrial Research, set up by the Central Government and, in the universities, the Central Ministry of Education set up, by Government resolutions, two significant organisations, viz., Indian Council for Social Science Research and Indian Council for Historical Research. Besides, a number of organisations have been set up, again by Government resolutions to carry on specific responsibilities. The most important, by virtue of scope and extent, among them, is the National Council of Educational Research and Training, which strives to promote the qualitative aspects of school education throughout the country. More important of the others are : National Staff College for Educational Planners and Administrators, New Delhi, Indian Institute of Advanced Study, Simla, Central Schools Organisation, New Delhi, Central Board of Secondary Education, New Delhi, Central Hindi Institute, Agra, Central Institute of Indian Languages, Mysore, Central Institute of English and Foreign Languages, Hyderabad, Rashtriya Sanskrit Sansthan (National Sanskrit Institute), New Delhi, Lakshmbai College of Physical Education, Gwalior and Netaji Subhash National Institute of Sports, Patiala. In the field of technical education, the Central Ministry of Education has set up or runs besides the IIT's, a number of educational institutions like the Indian Institute of Science, Bangalore, 14 Regional Engineering Colleges, three Indian Institutes of Management at Ahmedabad, Bangalore and Calcutta, Technical Teachers' Training Institutes at Bhopal, Calcutta, Chandigarh and Madras, Indian School of Mines, Dhanbad, School of Planning and Architecture, New Delhi, National Institute for Training in Industrial Engineering, Bombay and National Institute of Foundry and Forge Technology, Ranchi.

In every State, there is an Education Minister at the apex, in some states, assisted by a Minister of State and/or Deputy Minister. A Secretary is the administrative head of a State Education Department which has two main organs, viz., (i) secretariat looking after policy-making and coordination and (ii) Directorate of Education that performs the functions of direction, regulation and inspection.

There are State Institutes of Education in the States as part of the administrative set-up looking after the academic aspects; these are replicas of the National Council of Educational Research and Training set up at the Centre. Besides, functional inspectorates or bureaux like inspectorates for physical education and audio-visual education, vocational guidance bureaux, evaluation units (for improving examination systems), etc., function.

Both at the Centre and in the States, educational programmes are looked after by a number of Ministries/ Departments, besides the Ministry/Department of Education. While the responsibility for major fields of education vests in the Ministry/Department of Education, medical education is looked after in the Ministry/ Department of Health and Agricultural education in the Ministry/Department of Agriculture. While technical education remains in the Ministry of Education at the Centre, in some States it remains in other departments like the Department of Industries, etc.

Educational planning in India is a joint endeavour of the Central and State Governments. A Planning Division in the Central Ministry of Education works in close liaison with the Education Division of the Planning Commission of the Government of India. On the basis of the broad guidelines issued by the Planning Commission, tentative plans are prepared by the Central Ministries, and the State Governments. Joint consultation on educational planning between the Centre, States and Planning Commission is promoted in all-India forums like Central Advisory Board of Education or State Education Ministers' Conference. Tentative plan programmes are discussed and examined at various levels before they are finally approved for inclusion in the five-year plans which are flexible and permit modification on the basis of experience, emergence of newer needs or changes in the resource position.

### Educational Financing

Owing to a variety of reasons, educational financing in India has developed to be a multi-source system, although the State has been taking an increasingly commanding position in this behalf since Independence. Education is now financed by the Central Government, State Governments, local authorities and through fees and other sources that include endowments, donations and voluntary contributions. The proportion of government funds to total educational expenditure in a few significant years has been :

1950-51	57.1%
1965-66	70.4%
1970-71	75.6%
1975-76	77.0%

Educational financing by the Central Government and the State Governments consists of two categories of budgets, viz., Plan and non-Plan. In accordance with the annual outlays for the various Plan programmes,



consolidated financial assistance is given directly to the States by the Central Ministry of Finance, while the Plan annual budget of the Central Ministry of Education is kept within the allocation indicated by the Planning Commission and the Ministry of Finance. It has been a notable feature in the post-independence period that the Central Government have been extending increasing financial assistance to the State Governments for education, besides incurring considerable direct expenditure in education for the programmes in the Central and Centrally Sponsored Sectors.

During the years 1975-76 and 1976-77, the amounts provided in the budgets for education in the various Departments of State Governments and Union Territory Administrations were :

	(In Millions of Rupees)	
	*1975-76	*1976-77
State Governments	17,386	20,188
Union Territories	652	729
	-----	
Total	18,038	20,917
	-----	

\* Fiscal years, from April to March.

Further, on the basis of estimated expenditure in the Central budget, excluding grants-in-aid to States and Union Territories, the Central expenditure was Rs.1968 million in 1976-77 as compared to Rs.1625 million in 1975-76. Thus the budgetted expenditure in 1976-77 compared favourably with that of the previous year with an increase of more than 15 per cent in the case of States and Union Territories and about 21 per cent in the case of the Central budget. When compared with the earlier year (1974-75)'s budget figures, the increase becomes more conspicuous.

For all States and Union Territories taken together, the percentage of educational expenditure to the total budget of States and Union Territories was estimated at 26.1 per cent in 1976-77 as it was in 1975-76. However, 26 per cent of the aggregate budget continued to be spent on education in the case of States. In the case of the Union Territories alone, this share formed 27.2 per cent of the total Union Territories budget in 1976-77 compared with 29.1 per cent in 1975-76.

In 1976-77, the percentage of budget expenditure on education to the total States' budget ranged between 11 and 40.4 in the case of the States, and 9.1 and 40.9 among the Union Territory Administrations.

### Structure and Organisation

The structure of the educational system in India varies from State to State, but there are four major patterns, viz.,

- (i) 10+2+3 in one State, with the two-year intermediate stage located in junior colleges, preceded by ten-year schooling and followed by three years for the first degree;
- (ii) 10+2+2 in one State, where a ten-year school course precedes a two-year intermediate course and a two-year course for the first degree;
- (iii) 11+3 in one State and one Union Territory, where an eleven-year higher secondary course precedes a three-year course for the first degree; and
- (iv) 10 (or 11 or 12 in some cases)+1+3 in other States where a school course of 10, 11 or 12 years is followed by a year of pre-university course and a three-year course for the first degree (alternatively, the pre-university year is added to the secondary school course designating it as higher secondary). Thus the school course (including higher secondary, pre-university or intermediate classes) consists of 11, 12 or 13 years.

The school course precedes a 3-year course (2 years in one state) for the first degree in humanities, sciences and commerce and a two-year course for master's degree. The duration of courses in technical and professional education differs from course to course, consisting of 3 to 5½ years for the first degree.

As reiterated by the Central Advisory Board of Education, proposals were formulated to introduce the uniform educational system on 10+2+3 pattern. Most recently, thinking has been veering round to allowing a 2-year pass course at the first degree level, in place of the uniformly 3-year course for the first degree. Nineteen States/Union Territories have introduced 10+2+3 pattern to which reference has been made earlier and 10 more States/Union Territories have accepted it and would be implementing it shortly, while the remaining, namely, one Union Territory and one State are considering the matter. In the event of the new pattern of education taking shape, it has been proposed that the first degree course in all engineering colleges in the country should be normally of four years' duration after 10+2 stage.

A chart showing the broad features of the pattern that existed before and is in the process of being replaced by the new pattern is appended.

### Promotion Practices and Examinations

Evaluation and promotion practices at various levels of education have been undergoing changes on modern and scientific lines. The age-old earlier system of declaring students as 'passed' or 'failed' in the whole of a terminal examination on the basis of scoring in individual subjects is now giving place to the system of internal assessment and indicating grades obtained in various subjects. What is more, as recommended by the Education Commission (1964-66), certain stages, particularly classes I - II of the lower primary stage, are being treated as an ungraded unit. Cumulative records showing the pupils' performance throughout the year including assessment on personality traits, interests and aptitudes are being introduced in more and more educational institutions. Opportunities are being progressively provided to the pupils to better their performance in subjects of their poor results without losing their education time.

The Central Board of Secondary Education set up by the Central Ministry of Education to which more than 1000 secondary schools, including those run by the Central Schools Organisation of the Central Ministry of Education, are affiliated, has decided to introduce the semester system in the plus two stage of the new pattern of school education, where the first three semesters will be internally assessed and the external examination of only the fourth semester will be conducted by the Board. The certificate to be issued by the Board will also mention the grades awarded to the student by the school in the first three semesters. Again, in uniformity with the grades awarded at the university level, the Board has decided to adopt a system of school-level grades on a 7-point scale, viz., Grade A: Excellent; Grade B: Very Good; Grade C: Good; Grade D: Average; Grade E: Fair; Grade F: Marginal; and Grade G: Poor.

The University Grants Commission has been promoting intensively the shift from numerical marking to the grading system and the introduction of continuous internal assessment. 25 universities have agreed to introduce grading system in postgraduate stage beginning with admissions in 1976-77.

### School Year

The school year in India varies from State to State. This is inevitable in a country of so large a size and having markedly differing climates in its various parts. In some States, the school year begins in January, in others it begins in April, June or July.

## Curricula

School curricula in India is mostly developed at the State level, whereas at the higher education stage, curricula are developed by the universities. To raise the educational standards in various parts of the country and in developing a national system of education, the Central Ministry of Education has been playing an increasingly extensive and important role. The National Council of Educational Research and Training, set up in 1961, was assigned the task of dealing with all problems of school education. It has been engaged in preparing the over-all frame-work for the development of curricula for the various stages of school education in close collaboration with the State Education Departments. The Council has been producing syllabi and textbooks, teachers' guides, supplementary and instructional materials, science kits, etc. The State Governments adapt or adopt them, keeping in view the local and regional needs.

In the context of the national pattern of education proposed for introduction solely on academic considerations, two approach papers, one on 'curriculum for the Ten-year School' and the other on 'Higher Secondary Education and Its Vocationalization' at the plus two stage have been evolved, following a consensus in two national conferences. Of the salient features, the most conspicuous relates to the introduction of work experience right from class I up to class X. It is being introduced as a distinct subject to provide a corrective to some of the deficiencies of the existing system of education and to make it more relevant to life. Broad graded syllabi for more than 40 items of work experience, to be chosen by the school and students, according to local conditions, facilities and needs have been worked out. Designed to making the products of education more employable, it will help the realisation of educational values like inculcation of the dignity of labour, capacity to work hard, love of aesthetics, innovation and experimentation and infusing greater confidence to face challenges. Work experience in ten years of schooling is proposed to be followed by the vocational stream at the plus two stage which is designed to offer, in addition, an academic stream. With flexibility in effecting interchangeability between the two main streams, depending upon the students' performance, the vocational stream is likely to be a terminal stage for a majority of the students at this stage. The entire question, however, is currently being reviewed and in the light of the findings of the review, details regarding their implementation will emerge.

In the field of higher education, the University Grants Commission has taken a number of steps in bringing about the needed changes in the contents of courses on the basis of relevance, flexibility, diversification and modernisation. Firstly, guidelines for restructuring first degree courses, relating them to the needs of the rural environment and urban needs prepared with the help of an expert committee have been sent to the univer-

sities. Secondly, subject panels set up by the Commission have already taken stock of the present status of teaching and research in various subjects and are preparing guidelines for updating courses on a continuing basis, making them relevant to the needs of students and the society in general and setting in motion a machinery for reviewing current academic programmes and courses so as to keep pace with advances in the subjects. Thirdly, efforts are on to spell out general problems and perspectives of teaching and research in various subjects in order to formulate draft outlines for revision and modernisation of courses and thus help develop curricula more relevant to the social realities. Fourthly, at the undergraduate level programmes for diversifying courses in arts, science and commerce, relating them to employment opportunities have been planned in collaboration with prospective employers like industry, trade and business organisations in the regions. New well-defined programmes for the development of pre-Ph.D. and postgraduate courses of regional relevance replacing traditional courses have also been planned. Fifthly, guidelines preparatory to the introduction of the enriched first degree course at the plus three stage from 1977-78 have also been issued.

For the development of curriculum in the field of technical education, curriculum development centres have been set up to evoke the optimal course structure for the undergraduate diploma and degree courses in various disciplines, viz., IIT, Bombay and Roorkee University: civil engineering: IITs at Bombay and Madras: mechanical engineering: IITs at Delhi and Kharagpur: chemical engineering: IIT<sup>1</sup> Kanpur: core curriculum: and Technical Teachers' Training Institutes and Allahabad Polytechnic: polytechnic courses. These centres work in close liaison with the institutions, industry and other employing agencies and thus ensure relation of the curricula in various disciplines to the needs of the developing economy.

### Teacher Education

The professional education of teachers is basic to improvement of standards in education and specially to the adoption of improved methods of teaching and evaluation. Training institutions in India catering to the production of trained teachers for various levels of school education mainly consist of :

- (i) Primary teachers' training institutions, offering certificate and diploma courses, mostly run or aided by the State Education Departments; and
- (ii) Secondary teachers' training colleges, offering degree courses, mostly run by universities as constituent or affiliated colleges.

Besides, the National Council of Educational Research and Training operates a large and significant programme of teacher education mostly through its four Regional Colleges of Education at Bhubaneswar, Ajmer, Mysore, and Bhopal.

There are at present 960 primary teachers' training institutions and 496 secondary teachers' training institutions throughout the country. It is noteworthy that of a total number of 1,243,000 teachers in lower primary schools, 83 per cent are trained, while in the higher primary level the corresponding figures are 780,000 and 94.6 per cent and those in high and higher secondary schools are 717,000 and 82.3 per cent.

Entry requirements for the various teacher education courses, including their levels and length are as below:

- (i) One-year certificate and diploma courses, meant for teachers of primary and junior schools: Pass in higher secondary or intermediate courses;
- (ii) One-year degree courses in education (B.Ed.), meant for secondary school teachers: Holders of first or master's degrees;
- (iii) Four-year integrated courses leading to B.A.B.Ed. or B.Sc.B.Ed., meant for secondary school teachers: Pass in higher secondary;
- (iv) Two-year correspondence-cum-summer course, meant for untrained graduate or postgraduate teachers;and
- (v) One-year (mostly) master's degree in education (M.Ed.), meant for secondary school teachers: Pass in first degree in general education (arts, science or commerce) and pass in first degree in education.

Besides, programmes of M.A.M.Ed. and M.Sc.M.Ed. are offered usually to teacher-educators in secondary teacher training colleges and higher level educational personnel like inspectors, supervisors, senior educational administrators and research workers.

Programmes for in-service teacher education in India are as impressive in extent and intensity as those for pre-service training. Firstly, the National Council of Educational Research and Training has been organising four-week summer institutes for secondary school teachers in various States for orientation particularly in science and mathematics, in collaboration with the University Grants Commission. During 1974-76, 328 such institutes were organised with the participation of 13,178 teachers. Secondly, the Council has organised a massive training programme for teachers with a view to preparing them for implementing the new curriculum for the first ten years of the national pattern of education, in 8 States, in collaboration with the concerned State Govern-

ments, involving 19,690 teachers. Thirdly, the Council also undertook, in this context, an equally large-scale orientation programme for secondary school teachers and primary teacher-educators. A Correspondence Education Cell has been set up in the Council mainly to guide the correspondence-cum-summer school course for practising teachers, as indicated earlier run by its four Regional Colleges of Education, each of which is expected to cover about 12,000 teachers in its respective region. Besides, correspondence-cum-contact courses (comprising correspondence lessons of six months followed by two weeks of contact) have been developed for secondary school teachers and elementary teacher-educators. The programmes for teachers aim at upgrading and enriching content, methodology and evaluation techniques with reference to the new pattern of school education, while the programme for teacher-educators aims at filling up gaps in the essential knowledge that they might not have acquired in their earlier training programmes. As a further link in this chain, the Council has a programme of training in-service teachers through a number of Centres of Continuing Education. Fourthly, special courses for in-service teachers like workshops in the new methodology of teaching sciences through project method and training in work experience, have been organised.

In the field of technical education, there are four Technical Teachers' Training Institutes at Madras, Calcutta, Bhopal, and Chandigarh whose regular programme includes, in the main, a 12-month training course of degree-holder technical teachers and an 18-month course for diploma-holders. The Institutes also run several short-term in-service training courses for technical teachers.

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## PART II : EDUCATIONAL DEVELOPMENTS IN 1974-76

### Policy Orientations

The programmes spelt out in the National Policy document have been undergoing such modifications and adjustments as are warranted in the light of the socio-economic changes in the country. Following wide consultations on a country-wide scale among the various educational agencies at all levels, a few priority areas were underlined for immediate attention. These were: restructuring courses involving revision of curricula, production of better teaching and learning materials, adoption of improved methods of teaching and evaluation, improving teacher education and gearing the teaching community to effective implementation of the programmes, adoption on a large scale of non-formal educational programmes for reducing wastage in and universalising primary education, for regulating pressure on enrolments at the higher stages and for removing adult illiteracy, improving standards and promotion of research in higher education including technical education, linking institutions for technical education with industry, and linking higher education including technical education with manpower needs. Above all, the proposal of restructuring the system of education on the 10+2+3 pattern has been under consideration.

An account of the measures that were set afoot to implement these programmes both at the Central and State levels, is given in this Part of the Report.

### New Educational Legislative Measures

Mention may be made of two important legislative measures enacted by parliament in the recent past. The first is 'The Delhi School Education Act, 1973'. Passed mainly to ensure security of service for teachers and to regulate the terms and conditions of their employment, the Act seeks to provide a statutory basis for improving the management of schools, particularly those under private agencies and thus help raise standards of school education. The Act, it is hoped, will serve as a model for similar legislations by State Governments. The second is the University Grants Commission Amendment Act, 1972. The Act, while providing for the expansion and strengthening of the Commission, seeks to provide that no grant would be given from the Central Government funds to a university that is established after the commencement of the 1972 Amendment Act, unless the Commission, after satisfying itself as to such matters as may be prescribed, declares such university fit for receiving grants.



## Development of Services for Pre-school Children

The Central Government during the period embarked upon a major programme for the provision of educational and other services for pre-school children. The programme signifies an integrated approach in providing a package of services that are essential for the proper physical and mental development of children below the age of six, the formative phase of their lives. A special committee of the Central Advisory Board of Education examined in 1972 the question of developing educational and other related services for pre-school children. The adoption of a National Policy for Children followed in 1974. It accords a high priority to child health and nutrition. Following this Policy, the Central Government have introduced the Integrated Child Development Services Scheme in 33 projects in the country on an experimental basis in 1975-76. Out of these 33 projects, 29 are in rural or tribal areas and 4 in urban slums. Each project aims at developing a package of services to the pre-school children and pregnant and nursing mothers comprising supplementary nutrition, immunisation, health check-up, referral services, nutrition and health education, and non-formal pre-school education. The non-formal pre-school education for children in the age-group 3-5 is designed to develop in the child desirable attitudes, values and behaviour patterns and aim at providing environmental stimulation. Flexible in approach, the child is encouraged and stimulated to grow at his own pace, satisfying his curiosity and channelising it in a creative direction. The content of education, equipment, training, etc. are determined on the basis of the recommendations of the Education Commission (1964-66) and the report of the Study Group on the development of pre-school children to enable them to enter school with confidence. The projects are being implemented in close cooperation with the State Governments, and in their implementation, voluntary organisations, local bodies, and similar institutions are intimately associated.

## Developments in School Education

As already indicated, by far the most important educational programme under implementation relates to the radical transformation of the content and structure of education so as to make it a powerful instrument of social and economic change. The Education Commission (1964-66) recommended a package deal comprising reconstruction of the educational system on the 10+2+3 pattern, revision and upgrading of curricula, production of better teaching and learning materials, adoption of improved methods of teaching and evaluation and, above all, improvement of education and training of teachers and their service conditions.

The first ten years of schooling under the new pattern of education are treated as an integrated unit with the object of providing a general undifferentiated education needed for a changing complex and science-based modern society. The next stage of two years of higher secondary or intermediate education is proposed as the first stage towards differentiation and specialisation with diversified curricula. With substantial vocationalisation at this stage, two major streams are proposed—one, a predominantly academic course with several options in humanities and natural and social sciences and the other a predominantly vocational course with several options with supporting and related courses in humanities and natural and social sciences. There is provision for interchangeability depending upon the performance and abilities of students.

The National Council of Educational Research and Training has played a very effective role in the framing of the curricula which, as pointed out in part I, have been developed with national consensus. The distinctive features are as below :

- (1) New school curricula are flexible enough to accommodate regional and local needs; they provide enough learning possibility for the gifted children and compensatory education for the children coming from the weaker sections of the society;
- (2) Work experience is now an integral part of learning system in all stages of 10-year school education; its aim is to provide a bridge between learning system and world of work;
- (3) Science and mathematics education has become compulsory for all stages of the 10-year school;
- (4) Examination reform has been undertaken to make the external and internal evaluation more scientific.
- (5) The curricula provide for non-formal education through multiple entry into the formal system; and
- (6) At +2 stage curriculum is designed to sensitise students with respect to a large number of vocational families existing and likely to emerge in a given geographical area.

The new curricula for the ten-year schooling have been introduced in the 1000 and odd schools affiliated to the Central Board of Secondary Education including the 222 pace-setting Central Schools run by the Central Schools organisation for the children of transferable Central Government employees. The Central Board of Secondary Education also took decisive steps to upgrade the existing 11-year schools to 12-year ones and to implement vocationalisation at the plus two stage. The schools which will be upgraded to provide classes XI and XII have been identified. They include 400 schools run or aided by the Union Territory Administration of Delhi and a good number of Central Schools. A district-level survey to identify the present and emerging employment opportunities, the vocations, the precise courses and the institutions where they have to be intro-

duced is considered essential before the programme of vocationalisation is introduced effectively in the schools. To start with, it is proposed to conduct such surveys in selected districts.

The National Council of Educational Research and Training has also been engaged in the preparation and production of high-level educational materials, including textbooks, work-books and teachers' guides for the implementation of the new curricula. The States have been requested to examine the NCERT materials for adoption or adaptation.

An indication of the massive programmes for orientation and preparation of teachers for the introduction of the new school curricula has been given in Part I of this Report. Here mention needs to be made of a few innovative programmes designed to improve standards in the field of school education. These are being implemented under Central auspices.

Firstly, a programme for the reorganisation and expansion of the teaching of science throughout the school stage has been under implementation since the beginning of the Fourth Plan, i.e., 1969-70, with assistance from Unicef. It involves development of new syllabi and instructional materials by the NCERT in collaboration with Unesco experts. These are made available to the State Governments for adaptation or adoption. It also involves organisation by the NCERT of in-service training programmes for the teachers of the selected schools and supply of laboratory equipment to key institutions like State Institutes of Science Education, State Institutes of Education, teachers' training colleges and teachers' training schools and a limited amount of paper for printing new instructional materials.

Assistance under the pilot phase of the Programme was limited to supplying new textbooks and science kits free of cost to 50 selected lower primary schools and 30 selected higher primary schools in each State and meeting the expenditure on providing in-service training to the teachers of the schools covered under the Programme. The pilot phase is by now over in all the States and Union Territories. Up to the end of March, 1975, 85,955 higher primary science kits and 13,302 lower primary science kits were supplied. During the Fifth Plan period (1974-79) emphasis is on the lower primary school stage and the application of science to the child's living conditions, phasing out gradually the support for the higher primary stage.

Secondly, two experimental pilot projects, covering fifteen States and Union Territories, again with Unicef assistance, are being introduced. One relates to primary education curriculum renewal and its object is to develop

innovative curricula and related instructional material, techniques, etc. which could meet the educational needs of a large number of children who are likely to remain in school for only a few years or who are not reached at all. The curriculum is to be adjusted to the life style of the child and to the socio-economic opportunities likely to be available. The second relates to developmental activities in community education and participation. Its object is to develop and test new types of educational activities as a feasible means of meeting the minimum educational needs of large groups who are currently partially or totally deprived of any form of education. Approach here is based on two premises; viz., that children's education, to be meaningful, has to proceed concurrently with gradual changes and modifications of their socio-economic environment, and by consolidating educational services for these groups, the reinforcing of the other services can be maximised.

Besides, another project, namely children's media laboratory, is being followed, concerning mainly the Central-level agencies. Its object is to develop or discover inexpensive, non-formal, effective media of educational and entertainment value for children of 4-8 age-group to teach them the information, skills and attitudes that will enhance their life opportunities.

Thirdly, an Educational Technology Programme is being followed since 1972-73. Its object is to bring about qualitative improvement in education by stimulating and promoting integrated use of mass media and instructional technology at all levels. The programme which is assisted by UNDP, is being implemented through a Centre for Educational Technology (CET) set up at the National Council of Educational Research and Training, New Delhi, and through Educational Technology Cells in 11 States. Among the CET activities, mention may be made of (1) developing and testing feasibility of methods of education designed to bring the non-school-going children under a suitable educational system, (2) a multi-media package consisting of television and radio programmes, activity guides, materials and tutorials for in-service training of teachers, (3) a pilot project of an open school, (4) prototypes of teaching materials for languages and special cassette tape cases for rural areas, and (5) self-instructional programme guides for primary school science.

During 1975-76 the Educational Technology Programme concerned itself largely with the utilisation of the facilities made available under the Satellite Instructional Television Experiment (SITE) for educational purposes. This one-year experiment, which started in August, 1975, enabled television to reach remote villages in selected districts of six States. Educational programmes comprising a total transmission time of 90 minutes were broadcast to primary school children in 2400 schools. Teachers were trained in the utilisation of television programmes and were provided with support materials for the daily transmissions. The Satellite was also used

for in-service training of science teachers. A multi-media package developed by the CET for this purpose comprised television component in addition to radio broadcasts, experiments in science supported by self-instructional and other printed materials and tutorials by a senior teacher. 47,000 primary teachers in the six States were trained in October 1975 and July 1976 in training programmes of twelve days' duration each.

A series of evaluation studies has been undertaken to assess the impact of the school television programmes broadcast under SITE. A collaborative effort between the several agencies involved in planning, production and utilisation of the programmes, the studies are programme-specific and seek to obtain the reactions of teachers and pupils, both of whom comprise the new television audience.

The account of developments in the field of school education during the period will remain incomplete without a mention of the non-formal education programmes being introduced at the school level. The bulk of the Indian population is poor and the poor parents naturally need the services of their children at home or require their earnings outside the home to balance their family budgets. Therefore, it becomes impossible for the children from poor families to attend formal classes on a full-time basis. Moreover, the formal school system has only one-point entry, i.e., in class I. The non-enrolment and wastage are solely due to this state of affairs. Non-formal education programmes are proposed to be introduced under which older children of, say, 9 plus or 11 plus who might have missed the regular entry point are allowed part-time classes with multiple entries. Pilot projects have already been introduced with these objectives in many parts of the country. It is hoped that universalisation of primary education will be achieved through this significant programme within a short time and at a lesser cost.

Several Boards of Secondary Education are throwing their examinations open to private candidates. The number of part-time secondary schools is increasing and correspondence courses in secondary education have been introduced.

Although the Constitutional directive of providing universal primary education for children of the age-group 6-14 still continues to remain unfulfilled, substantial progress has been achieved in this regard. Progress would appear spectacular when we draw a comparison of the present figures with those of 1950-51, when the

country embarked upon the path of planned development, as indicated below :

	(In Million)	
	1950-51	1975-76
<u>Age-group 6-11</u>		
Enrolment : Classes I-V	19.15	64.7
Enrolment as Percentage of Age-group Population	42.6%	83.9%
<u>Age-group 11-14</u>		
Enrolment : Classes VI-VIII	3.1	15.94
Enrolment as Percentage of Age-group Population	12.7%	36.9%

Progress in the number of institutions and number of teachers at the primary stage has been as below :

Year	Lower Primary Schools		Higher Primary Schools	
	(Classes I-V)		(Class VI-VIII)	
	Number of Schools	Number of Teachers	Number of Schools	Number of Teachers
1950-51	209,671	537,918	13,596	85,496
1975-76	453,530	1,242,911	105,264	779,495

Corresponding figures of enrolment, number of schools and number of teachers at the secondary stage have been as below :

	(In Million)	
	1950-51	1975-76
Enrolment : Classes IX & Above	1.2	8.81
Enrolment as Percentage of 14-17 Age-group Population	5.2%	22.4%
Number of Secondary Schools	7,288	42,940
Number of Secondary Teachers	126,504	716,964

## Developments in Higher Education

As indicated earlier, the University Grants Commission, a statutory body set up at the Centre, is charged with the responsibility of coordination, maintenance and improvement of standards of higher education in the country. Of the various programmes followed by the Commission, restructuring and up-grading courses at various levels of higher education holds a prominent place.

To restructure the university courses at the first degree level, making them relevant to rural development and the needs of the community, the Commission proposes to orient the existing courses towards rural problems without creating a completely different channel for such studies. The set of guidelines prepared by an Expert Committee has the following main features :

- (1) The 'academic component' of courses needs to be combined with 'applied components' relevant to the real problems and 'work experience' situations faced and felt in different regions particularly in the rural areas;
- (2) Reorientation of traditional subjects to the needs of the rural community and the introduction of relevant applied disciplines related to basic subjects or subject groups; and
- (3) Reorientation of courses in such a manner that students can apply theoretical knowledge to the problems of the region through field work, project work, extension, etc.

18 universities were selected for experimentation with the first degree level courses, thus reoriented.

An account of the other steps taken by the Commission for restructuring courses and improving content at various levels of higher education, making it more relevant to the national needs, has been given in Part I of this Report.

While the bulk of assistance of the Commission to universities and colleges relates to improving the infrastructure facilities like academic and residential accommodation, library and laboratory facilities, academic and technical personnel, and workshop and other material facilities, the Commission has been promoting a number of carefully planned programmes of qualitative improvement.

The College Science Improvement Programme (COSIP) initiated by the Commission in 1970-71 has been aimed at improving the quality of science teaching at the under-graduate stage. This is attempted at two levels: (i) at selected colleges for improvement of science teaching in all science subjects in the college; and (ii) in

selected university departments for improving science teaching in all the colleges affiliated to the university in the subject. During 1975-76, 35 university departments and 113 colleges have been participating in this programme. The Programme has, inter alia, resulted in producing new teaching materials, books, demonstration equipment and in introducing new laboratory exercises and some project works.

Based on the experience of the Science Improvement Programme, the Commission has initiated recently, for implementation during the Fifth Plan (1974-79), a similar programme for College Humanities and Social Sciences Improvement Programme (COHSIP). Sixty-nine colleges have been selected for support under this programme each of which would be entitled to financial assistance to the tune of Rs.300,000 for a period of three years for strengthening teaching, initiating tutorials and seminar work, preparing reading materials and biographical notes and for introducing internal assessment. The colleges are to supplement their teaching with the help of additional staff appointed for the purpose, postgraduate and research students on the rolls of the colleges and guest lecturers from other institutions.

Another interesting programme proposed to be undertaken by the Commission relates to the setting up of Science Education Centres during the Fifth Plan period. These Centres are designed to initiate appropriate activities and programmes for innovations in science education at the university level. to design and fabricate necessary materials required for teachers, and to produce literature including textbooks, teachers' guides, laboratory manuals, etc.

A major specific programme undertaken by the Commission for improving standards relates to the Centres of Advanced Study and Departments of Special Assistance which are expected to pursue excellence, improve quality and raise standards at the postgraduate and research stages of education. Promising university departments are carefully selected on the basis of their work, reputation, existing facilities and potentialities for further development. Outstanding teachers and scholars including visiting scholars from abroad and fellows work in these centres. The Commission's programme includes 50 more departments in addition to 51 Centres of Advanced Study/Departments of Special Assistance during the next few years. To involve a large number of departments into the programme, departmental support within a ceiling of Rs.1,000,000 is being provided to such departments as are not strong enough yet but have a research potential.

In India, university education is imparted not only in the university teaching departments and university colleges, but also in colleges affiliated to the universities for the purposes of courses of study and examination.



The Commission proposes to consolidate the postgraduate teaching as far as possible in the university teaching departments, university centres of postgraduate studies or through co-ordinated programmes by groups of colleges rather than allowing new individual colleges to start postgraduate departments which will not be viable.

The Commission has recently undertaken steps for according autonomous status to selected colleges with potentialities so that these colleges can experiment with new programmes and innovate new ideas. Further, a new scheme has been put into operation under which one or two colleges in each district are identified as 'lead colleges' and specially supported to develop their competence and facilities. About 100 colleges with viable enrolment, a satisfactory student-teacher ratio and good facilities are proposed to be selected in consultation with the universities to be developed as 'lead colleges'. These are designed to take up quality programme on the basis of diversification, modernisation, etc. and help in providing good education to socially underprivileged sections of the community.

At the higher education stage, the emphasis has been on regulating enrolments in the interest of maintaining standards and utilising properly the scarce resources. Simultaneously, attempts are being made to ensure that special facilities which are required in the case of backward areas and for socially underprivileged sections of community are not curtailed, but provided adequately.

Another noteworthy attempt relates to supporting the universities to obtain computer facilities or computer time. A few regional computer centres are proposed to be set up and it is hoped that by the end of the Fifth Plan, i.e. 1978-79, each university with good research activity will have either a small computer of its own or will have access to large computer facilities available in the neighbourhood for the purchase of computer time required for academic programmes.

Production of textbooks holds an important place in the improvement of standards. The programmes followed in this behalf are aimed at better books, books by Indian authors and books in Indian languages. The UGC book production programme aims at producing university-level books by outstanding scholars. About 700 university-level books in various disciplines in Hindi have already been published and another 600 such books are under preparation. The State Governments have, with Central assistance, published 3,000 university-level books in various languages including 2,600 original works, and 1,700 more such books are under publication.

To improve the standard of teachers in the universities and colleges, the UGC has instituted a scheme of teacher fellowships, under which a college teacher is enabled to take one--three years' leave for undertaking programmes of Ph.D or M.Phil. During the period of leave the teacher's service interest will be protected.

Facilities for university education have developed in this country considerably. During 1969-74, the number of universities (including institutions deemed to be universities) increased from 89 to 104, the number of colleges rose from 3297 to 4308, the student enrolment shot up from 1.79 million to 2.23 million. As against this, during the first two years of the Fifth Five Year Plan, viz., 1974-76, the rate of increase in higher education dropped down from an average of 12.90 to 5.90 per college. No new university was opened in 1975-76. By March, 1976, there were 111 universities and institutions deemed to be universities, 4508 colleges, 2.47 million students and 167,623 teachers in the universities and colleges. The average annual growth rate of 200 colleges during 1969-74, fell down to 80 new colleges in 1974-75 and 120 in 1975-76.

Of the total student population in universities and colleges in 1975-76, 88.5% were pursuing undergraduate studies, 9.1% postgraduate studies, 0.7% research and 1.7% diploma/certificate courses. Courses in social sciences and humanities including oriental learning were the most popular, claiming 44.5% of the total enrolment. 19.1% of the students pursued courses in natural and biological sciences, 17.1% students studied commerce courses and 19.3% pursued studies in professional courses such as engineering and technology, medicine, agriculture and veterinary science, law, teachers' training, etc.

The main emphasis has recently been on consolidation and regulation of enrolment in formal full-time institutions bringing in, however, flexibility in ensuring social justice. Larger enrolment in existing institutions should also be conducive to raising the standards of collegiate education. The decline in the growth of full-time regular student enrolment could also be attributed to the additional facilities made available for non-formal education through private study and correspondence courses. Correspondence courses have established themselves as a recognised form of non-formal education, in no way inferior to the formal system of education. The guidelines circulated by the Commission are intended to ensure that standards in correspondence courses are maintained and that teachers involved in correspondence courses are a part of the faculty in each discipline. Eleven universities are providing correspondence courses, covering about 50,000 students. The object is to have at least one university in every region to provide correspondence courses in various disciplines. University examinations are also being increasingly thrown open to private candidates and at present 50 universities are offering this facility at the first or second degree level, or both, in one or more faculties and about 150,000 students avail themselves of private study at the first degree level.

## Developments in Technical Education

As in the field of higher education, emphasis in professional education in engineering and technology continues to be on quality improvement, consolidation and strengthening existing facilities rather than on expansion. The major programmes pursued during this period towards this end include development of post-graduate studies and research, establishing linkages between technical institutions and industry, linking technical education with manpower requirements, reorganisation and diversification of degree and diploma courses and quality improvement programmes.

The top policy-making body in technical education is the All India Council for Technical Education, with its four regional committees and four boards of studies and the Council of Indian Institutes of Technology.

The five Indian Institutes of Technology achieved a substantial progress as advanced centres for training of scientists and technologists and they are now better equipped to improve the tone and quality of engineering and technological education in the country. Since, to promote excellence, concentration of resources is necessary, each of the five institutes follows its own programmes of specialisation. They are: Kanpur IIT : systems engineering, materials technology, nuclear engineering and electronics; Madras IIT : metal forging, production engineering and heat power; Bombay IIT : aeronautics with emphasis on propulsion technology; Kharagpur IIT : structural engineering, electrical power engineering, naval architecture and ship-building and agricultural engineering; and Delhi IIT : electrical machine design, electronics and radar studies and textile studies. By way of establishing close links with industry and developing consultancy services, about 3,500 industrial consultancy projects were undertaken by the IITs during the last four years. Such projects involve systematic investigation of raw materials, development of new processes and products, and understanding of the scientific principles behind technological operations.

Consultancy centres function also in the 14 Regional Engineering Colleges, established as a joint venture of the Central and State Governments and selected departments or institutions offering postgraduate courses. Developing fruitful interlinking between technical education and industry received greater attention during the period through other measures, besides, like organisation of co-operative programmes including sandwich courses, practice schools apprenticeship training, etc.

Indication about curriculum development programmes followed in the field of technical education has been given in Part I of this Report. Today, India can claim to have the third largest aggregate of scientific and technological manpower in the world. She is in a position to prove her self-reliance in many fields of sophisticated productive activity.

#### Developments in Teacher Education :

An account of the teacher education facilities in various fields of education has been given in Part I of this Report. Reference is here made to the faculty improvement programmes followed in the fields of higher education including technical education. The University Grants Commission has been encouraging and offering facilities for all university teachers to obtain their M. Phil and Ph.D degrees. The Commission has also launched several programmes of in-service education for the improvement of university and college teachers. Refresher courses, advance-level institutes on specialised topics, fellowships for teachers, national associateships, and seminars and conferences on specialised subjects occupy a very important place in the UGC Faculty Improvement Programme.

In the field of technical education, 200 fellowships were offered every year for the training of teachers for M.Tech. and Ph.D programmes. Roughly 400 teachers were provided industrial training every year.

In this connection, mention may be made of the useful services being provided for the training of educational planners and administrators by the National Staff College for Educational Planners and Administrators, New Delhi, set up in 1962. There has been a growing realisation that the traditional character of educational administration in the country needs fundamental transformation in order to achieve the goals set out in the five-year plans of educational development. The Staff College has undertaken intensive research in problems connected with educational planning and administration, provided consultancy and extension services for the diffusion of modern management techniques and arranged for the reorientation of senior educational administrators. A number of important reorientation courses for the district and other education officers of the States who are the key functionaries in the planning and administrative set-up at the State and district levels, and for principals of the Central Schools, and colleges, were organised during the period.

#### Educational Programmes for Youths and Adults

Youth in the age-group 15 to 25 constitute the most vital segment of the country's human resources. Since a vast majority of them are still illiterate or semi-literate, a comprehensive scheme of non-formal

education for them was launched in 1975-76. It is a joint venture of the Central and State Governments, correlating non-formal education programmes with the developmental activities in which the youth of this age-group can be meaningfully involved. The primary object is to enable young workers, both in urban and rural areas, to receive the education they desire and need, through programmes of part-time education organised by various groups of workers like peer groups, adult workers, school teachers, student volunteers of National Service Scheme and social workers. The programme is related to the local needs of learners and includes general knowledge, literacy skills, health and family life education and orientation to employment or self-employment. The programme has so far covered about 150 districts out of which about 50 districts are being entirely financed by the Central Government. It is benefiting about 300,000 youth of this age-group every year.

In the field of adult literacy, quite a few significant projects are being followed. The Functional Literacy Programme constitutes the single most important ongoing programme, started in 1967-68. Its object is to provide functional literacy to the farmers engaged in increasing agricultural production through the high-yielding variety crop cultivation programme.

Functional literacy programmes are being extended to cover other groups also. One of them relates to the Functional Literacy of Adult Women in which literacy is linked with the Integrated Child Development Programmes, to which reference has been made earlier. Other areas to which functional literacy is being extended include the development of small farmers, farmers in drought-prone areas and tribal communities.

Non-formal educational programmes are promoted to cover urban workers also, linking them with their economic activities, on the one hand, and social and cultural responsibilities, on the other. Besides, voluntary agencies are being assisted to follow intensive programmes to remove adult illiteracy.

As a result of the efforts made since independence, literacy is growing rapidly specially in the age-group 10-34 where it has almost doubled, from 22.3 per cent in 1951 to 43.7 per cent in 1971.

Extension of library services constitutes an important step in the field of non-formal education for youths and adults. Library services in rural and other areas are being expanded to provide follow-up reading materials brought out by the Directorate of Non-Formal (Adult) Education, New Delhi, an office under the Central Ministry of Education, and State Resource Centres being set up in the States. The Directorate is being developed as the National Resource Centre for non-formal education programmes and this centre provides the necessary

academic and technical support to the programmes. The Raja Rammohun Roy Library Foundation, set up in 1972, has been engaged in promoting the library movement in the countryside and has been supplying books and reading materials to libraries, particularly in non-metropolitan areas. It has, so far, covered about 6,000 libraries in the rural and semi-urban areas.

### Educational Research

The National Council of Educational Research and Training, has been promoting research in crucial areas of school education. For this purpose, the Council set up an Educational Research and Innovation Committee. Three task forces set up by the Committee have identified major research problems in broad areas of universalisation of elementary education and its social relevance and improvement in teaching/learning strategies. The reports of the three task forces were discussed in an Educational Research Conference held recently. The Conference brought together the principal investigators of the Council's projects as well as some experts. The Conference, among other suggestions, recommended that the Council should take up certain national studies.

During the period the Council continued co-ordinating and promoting research in education through the Educational Research and Innovation Committee. Forty-two research projects, mainly in the following areas, were undertaken: curriculum developmental evaluation; psychology of learning and teaching; girls' and women's education; science education; teacher education; vocationalisation and job-oriented education; and educational problems of the deprived children. Besides, the Council continued to extend financial assistance to professional organisations working for the promotion of educational development in the country.

In the field of higher education, the University Grants Commission has made a significant beginning to provide direct support in promoting and strengthening research activities in universities as an integral part of its efforts to upgrade higher education. The Commission is implementing research problems with the help of science research councils and subject panels set up in various disciplines like sciences, humanities, social sciences, engineering and technology. The Commission has also been providing assistance for project-based research to individual workers, groups of research workers and selected departments of universities and colleges. Besides, the Commission has been providing core support for research to each university to encourage research and create interest in research in the university departments. This is because of the fact that the various departments which are at present in various stages of growth require facilities for research activities

so that they would be in a position to establish viable research groups capable of continuous effort both for the purposes of training as well as solving problems of scientific, technical, and regional or national significance.

In this connection, mention may be made of the sizable programme of research fellowships in various disciplines granted by the Commission enabling more than 1200 deserving scholars every year to undertake advance study and research in various problems.

Besides, there are three institutions, namely, Indian Council of Social Science Research, New Delhi, Indian Council of Historical Research, New Delhi, and Indian Institute of Advanced Study, Simla which follow a large programme of research supplementing the activities in the universities in their subjects of competence. The Indian Council of Social Science Research has developed several programmes of sponsored research in important areas like poverty and unemployment, education of backward communities like scheduled castes and scheduled tribes, area studies, population studies, rural and urban problems, etc. Of the various programmes followed by the Indian Council of Historical Research, mention may be made of the Programme of Preparation of Source Material on Indian History and Survey of Historical Writings during the last 25 years. Thirty volumes of source material on various aspects of freedom movement have already been published. The Indian Institute of Advanced Study is a centre of independent study and research in humanities and social sciences. Of the useful programmes followed and promoted by the Institute, mention may be made of a Source Book of Indian and Asian Civilisations. A massive volume on Dissent, Protest and Reform in Indian Civilisation is in press. Mention may also be made of two other projects, namely, India since Independence and Tribal Heritage of India.

#### Documentation

During the period solid steps have been undertaken to strengthen the Statistical Division in the Central Ministry of Education which serves as a clearing house of statistical information in the field of education. The Sixth National Conference on Educational Statistics was convened in September, 1975 to discuss the problem of time-lag in the collection of educational statistics and to suggest a revised system of collection. Following the recommendations of the Conference, a new system of collecting annual statistics has been introduced by which statistics on minimum items can be collected quickly and made available in time.



List of Main Official Publications Relating to Education and Issued during 1974-75 and 1975-76

Ministry of Education and Social Welfare (Department of Education)

- i. Polytechnical Education or Work Experience
- ii. Reading Habits of Primary School Children
- iii. Non-Formal Education
- iv. Central Advisory Board of Education - 37th Session
- v. Education in India 1973-75
- vi. Our Teachers
- vii. Women in the Indian Freedom Struggle
- viii. Special Educational Facilities for Scheduled Caste and Scheduled Tribe Students in Educational Institutions Administered by the Centre
- ix. Scholarships for Study Abroad and at Home
- x. 10+2+3 - A Major Change in School Education
- xi. Educational Statistics at a Glance, 1974-75
- xii. Pay Scales of Teachers in India, 1973-74
- xiii. Progress of Education of Scheduled Castes and Scheduled Tribes, 1969-70
- xiv. Selected Information on School Education, 1973-74

Department of Social Welfare

- i. Women in India - A Compendium of Programmes

University Grants Commission, New Delhi :

- i. Annual Report 1973-74
- ii. Annual Report 1974-75
- iii. Proceedings of the Vice-Chancellors Conference, 1975



- iv. UGC Support for Science Research in the Universities, 1976
- v. Mathematics in India: Meeting and Challenge, 1974
- vi. Support for Research in Humanities and Social Science, 1975
- vii. Faculty Improvement Programmes pertaining to Teachers in Affiliated Colleges, 1976
- viii. Report of the Regional Conference on Continuing Education, Hyderabad, 1976
- ix. Report of the Seminar on Continuing Education, Poona, 1976
- x. Principles and Mechanics of the System of Grading, 1976
- xi. Examination Reform: A Plan of Action (including Recommendations of Zonal Workshops), 1976

National Staff College for Educational Planners and Administrators, New Delhi :

- i. Educational Innovations in India - Some Experiments, 1974
- ✓ ii. Administration and Financing of Education in India with special Reference to the Fifth Five Year Plan, 1974
- iii. Brief Report of the All India Conference of District Education Officers on 10+2+3, 1976
- iv. Growing Multitudes and the Search for Educational Opportunity - Report of the National Meet of Experts on Population Dynamics and Education, 1974
- v. Educational Administration: A Survey Report, 1975
  - 1. Andhra Pradesh
  - 2. Arunachal Pradesh
  - 3. Andaman & Nicobar Islands
  - 4. Mizoram
  - 5. Dadra & Nagar Haveli
  - 6. Chandigarh
  - 7. Goa, Daman & Diu
  - 8. Lakshdweep
  - 9. Himachal Pradesh
  - 10. Pondicherry
  - 11. Government of India
  - 12. Delhi

National Council of Educational Research and Training, New Delhi

(1974-75)

- i. Teaching in Single Teacher School
- ii. Learning to le
- iii. The Teacher and National Reconstruction
- iv. Improving the Quality and Supply of School Textbooks
- v. Students Teaching and Evaluation
- vi. Non-Formal Education
- vii. The Curriculum for the Ten Year School

(1975-76)

- i. Field Studies in the Sociology of Education - Report on Orissa
- ii. Annual Report 1973-74
- iii. NCERT Research Scheme
- iv. The Changing of Occupational Pattern
- v. Measurement of Intelligence Among Adult Indians
- vi. Folder on Seminar Readings Programme
- vii. Pressure on Access to Secondary Education and Choice of School Subjects
- viii. Report on National Seminar on Nutrition Education
- ix. Indian Education 2001
- x. Field Studies in the Sociology of Education- The Report on Punjab
- xi. Third All India Educational Survey
- xii. Effective Teaching of History in India
- xiii. Education for Personality Development
- xiv. Cleanliness Programmes in Schools
- xv. Educational Wastage at the Primary Level
- xvi. Higher Secondary Education and its Vocationalisation
- xvii. Annual Report 1974-75

# EDUCATIONAL SYSTEM 1975

