REPORT OF THE COMMITTEE
FOR REVIEW OF
NATIONAL POLICY ON EDUCATION 1986

FINAL REPORT

26TH DECEMBER, 1990

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ACKNOWLEDGEMENTS

(RAMAMURTI)

NEW DELHI   Chairman

December 26, 1990   Committee to review the NPE, 1986.

PREFACE

When on the 7th May, 1990 the Government of India announced the appointment of a Committee 'to review the National Policy on Education (NPE), 1986, there were people who asked why this hurry in instituting a review even before the expiry of the stipulated period of five years.

The question is legitimate. But the reasons that influenced the decision of the Government have been given in the resolution of the Government itself. It says:

"Despite efforts at social and economic development since attainment of independence, a majority of our people continue to remain <u>deprived of education</u>. It is also a matter of grave concern that our people comprise <u>50 per cent of the world's illiterate</u>, and large sections of children have to go without <u>acceptable level of primary education</u>. Government accords the highest priority to education both as a <u>human right</u> and as the <u>means</u> for bringing about a transformation towards a <u>more humane and enlightened society</u>. There is need to make education an <u>effective instrument</u> for securing a status of <u>equality for women</u>, and persons belonging to the <u>backward classes and minorities</u>. Moreover, it is essential to give a <u>work and employment orientation</u> to education and to exclude from it the <u>elitist aberrations</u> which have become the glaring characteristic of the educational scene. Educational institutions are increasingly being influenced by <u>casteism, communalism and obscurantism</u> and it is necessary to lay special emphasis on <u>struggle against this phenomenon</u> and to move towards a genuinely <u>egalitarian and secular social order</u>. The National Policy on Education (NPE), 1986 needs to be <u>reviewed</u> to evolve a <u>framework</u> which would enable the country to move towards this <u>perspective of education</u>."

obviously, the basic concerns mentioned here are:

one, provision of education of a minimum quality to all children;

two, removal of illiteracy;

three, struggle against petty parochial passions and prejudice;

four, social transformation towards equality;

five, orientation of education to work and employment.

These concerns are not new except the Right to Work now being sought to be enshrined in the Constitution. They were there when The Challenge of Education was written in 1985 and The National Policy on Education formulated in 1986. While The Challenge of Education felt that 'the present scenario is an indication of the failure of the education system', the Policy on Education stressed the need 'to make education a forceful tool' for its two roles I combative and positive During the four years since 1986

the situation has grown much worse. Everywhere there is economic discontent, cultural decay, and social disintegration. The youth are in revolt. Violence is fast becoming a way of life. But, in spite of concerns expressed from time to time,. not much success has attended our feeble efforts to arrest the descent downhill. The nation is faced today with a crisis of many dimensions. Its very survival is threatened. In the total crisis of the nation, along with Politics, Business, and Religion, Education has its full share. Why has failed to play the role that every Commission or Committee appointed since independence has assigned to it is the first question.

One fundamental reason for failure has been that while we go on making radical protestations, our education to this day continues to be governed by the same assumptions, goals and values that governed it in the days of the British Raj. The British believed in the 'downward filtration theory' under which education and culture would inevitably flow from the classes to the masses. They kept the common people away from education, and education away from life. But things have not much changed since they left. Even today the principal beneficiaries of our education are the upper and middle classes. To them also we give a wrong education. Our formal system remains confined to the f our walls of a school or college. It is tied down to textbooks and examinations. Even then the books are unreadable and the examinations totally unreliable. The courses of study are so framed that the students are not equipped with any productive skills. Whatever education they receive cuts them off from their natural and social environment. They become aliens to their own community. They lose faith in life itself. What Jayaprakashji wrote in 1978 still holds true. According to him, it also converts them into a parasitic class which perpetuates and even intensifies the poverty of the masses. The system has failed to promote individual growth. It also becomes more of a hindrance than a help to bring about an egalitarian transformation'. If this be true, can we say that we have basically departed from the Macaulay tradition? And, if this is what our education has done to us, one may well ask, is not no education better than bad education?

The other important reason is that our education has been a routine sectoral activity left to the initiative and judgement of specialists at the desk, controlled and , guided by those far removed from where people live and work. The whole system is so completely centralised that little, if any, initiative is left to people even at State or district levels. Education co-related to life has to be linked to clearly defined social objectives and comprehensive strategies. But the whole approach of government activities is sectoral, so much so that the different policies of the Government such as educational agricultural, industrial, forest, water, or even a policy for scheduled castes and tribes, do not refer to each other, and are often even mutually contradictory. They are, in fact, designed to attain objectives internal to their respective sectors, and not to any fundamental social objectives. The result is that the only option left is expansion without proper thought to quality or relevance. So, our education has expanded without thought to quality or relevance.

One may admit that for this situation education alone is not responsible. During the last forty-three years we have pursued a model of economic development that has led to the creation of two Indias - one of the rich, the other of the poor. A new privileged

class has come into being. It holds monopoly over political and economic power and sources of wealth. It controls culture and education. It is firmly established everywhere. It is this class whose interests our education is made to serve. The result is that as in economy so in education, two parallel systems have come into being one for the rich, the other for the poor. No wonder, a divided education finds itself totally devitalised, and incapable of meeting the challenges of independent India's national life. To the rise and growth of this class, holding sway over the whole range of national affairs, can be traced most of the ills we are faced with - the erosion of social and moral values, weakening of democracy, the partisan character of our development, corruption and a number of other elitist aberrations. It is responsible for the impoverishment of the nation's very soul. It is, therefore, time the nation, most of all education, took serious note of this phenomenon, and guarded against further damage to national life.

It is clear that the present system of education, in terms of education for the people, has outlived its utility, whatever it ever had. But before we have a new pattern of education we must have a new model of development. In a country like ours, with vast areas of backwardness, economic, social, educational, development, democracy, and education have to go together. They have to be woven together in an integrated programme of transformation and reconstruction. Peaceful transformation is an organic process in which economy and education cannot work in isolation with each other. Take for example the Right to Work. Even if it is enshrined in the Constitution, it is the economy alone that can create opportunities of employment; education can only empower people for work. This is the principal reason why, despite, growing unemployment, vocational education has not become popular. Economy failed to create jobs, so vocational training became meaningless. If people have to be equipped for self-employment there must be a national policy to decentralise processes of production, guarantee wages and incomes, safeguard the interests of the small producers against the onslaught of centralised industry and metropolitan economy, and ensure growth with-equity. Similarly if education has to make worthwhile contribution to national unity, it must be accompanied by a, programme I of strengthening local communities down to village or, muhalla levels. It is at those levels that people have to learn to live and work together. Real stable unity can be achieved only through a process of cooperation and sharing. The lessons and values of co-existence are not learnt through exhortations. So also, strengthening of local communities is linked with the development of a common or neighbourhood school system. Life at the community level is inter-related. It cannot be cut up into compartments. Similarly the education of harijans, adivasis, or other backward communities must go along with such measures to end poverty as land-reforms, cheap housing, and village industrialisation so that in a plan of agro- industrial rural economy a dependable means of livelihood could be guaranteed to every family. A struggle against poverty is fundamentally a struggle against ignorance and injustice. It includes a struggle against parochial passions, inequity, ill-health and illiteracy. For the poor development, democracy, and education should mean emancipation.

Once the fact of the inter-relatedness of our life and its problems is recognised, the need for developing a holistic and participatory approach becomes clear, not only in education, but in development and democracy also. Participation must go beyond

government departments and reach the people in villages and muhallas. While there should be understanding and coordination among departments, there should be active participation among the people themselves. The NPE '86, and before it the Kothari Commission, have repeatedly referred to development and democracy in relation to education. The problem is how to inter-relate them into a programme and deliver it to the people as a package.

Let us take an example. The way to do it would be to treat the village itself as a unit for an integrated programme of education, democracy, and development. The Panchayati Raj Bill, 1990 proposes that each village will have a Gramsabha composed of all the adults in the villages male and female. It will have wide powers and functions. As a representative of the village this Gramsabha may be asked to prepare a plan of development including education for the village with its own priorities. As part of the village plan, each family will have its own small plan. The Gramsabha will make sure that its whole village plan provides for each family a dependable means of livelihood - land for agriculture, cattle for dairying, tools for crafts, or other means of gainful employment. The Gramsabha itself will be responsible for implementing the plan. As for resources, the funds available for all the different development and education schemes - there is quite a number of them - may be pooled and placed at the disposal of the Gramsabha which may form its own committees to look after different activities.

Inspite of 'narrow domestic walls' separating people the village is an organic whole. When its Gramsabha as a planning and implementing body starts functioning it will provide an object lesson in participatory, face-to-face, democracy. In the discharge of its responsibilities it will soon know how to agree inspite of differences, how to quarrel and resolve conflicts, and how to mobilise resources for common good, and so on. People will also learn from experience that virtues like tolerance, honesty and openness are not only good but useful too. As the work progresses and development mindedness grows and problems arise the village people will realise that without education and training progress is not possible. Writing the muster roll, keeping records, handling money, measuring dug earth, calculating wages, repairing the pumping set or implements, protecting crops, increasing the yield of milk, first-aid to simple injuries, and a lot of other problems will create a situation in which there will be a compelling demand for know-how, for information, for literacy, functional and general, and training in a number of skills.

It will be a challenging situation. Our present-day administrators and teachers are not equipped to meet it. They have thought that the village itself could become a school for which all the intellectual and productive resources available in the village itself and its neighbourhood would have to be mobilised. In a village becoming a school those who are educated will teach; those who have skill will train; those who have experience will guide and enlighten. The engineer, the doctor, the accountant, the mechanic, the social worker and others, retired or serving, will have their place in a scheme of education that a situation like this demands. It will be participatory education for life through life. It will be fully co- related to productive work, and natural and social environment. Otherwise it will be no education at all.

One may ask, how will the children be educated? They will be formally educated in the regular village school which may be called a Gramshala. The children will work with their parents according to their capacity. In the afternoon or in the morning as convenient, they will attend their Gramshala for two to three hours for formal and graded education. The Gramshala will hold separate classes for young men and adults in the evening. For an hour the adults may discuss their common problems. Another hour may be devoted to literacy or something else. The nearest middle or high school will be equipped with a science laboratory and a workshop for special courses in subjects like mechanical skills, functioning of the Gramsabha and Panchayat, development planning, Anthyodaya, mobilization and use of resources, accounting, and number of other related subjects.

India lives in its villages. That is the great mantra that Gandhiji gave us. It is there that our producers live, voters live, the poor and the illiterate live. It is the villages that hold the key to the country's problems. So vision of future India can be greater than to rebuild its half-a-million villages. The irony is that in terms of the teeming millions inhabiting these villages our development, our democracy, and our education have all become irrelevant. But once we decide to approach them in the right spirit they are bound to respond, and rise to end their suffering. It may be that in the first phase selected homogeneous SC/ST and other backward villages may have to be taken up. In case whole villages do not come forward in the beginning, then mutual-aid teams may have to be formed. Naturally in the whole process of rebuilding villages education will have the most vital part to play, because it alone can prepare people's minds to receive new ideas, and accept new tools, new relationships, and new forms of organisation.

When, in 1937, Gandhiji presented his Scheme of education he called it NAI TALIM, New Education. He knew that a new India would need a new education. His Nai Talim was education transformed to build a new social order based on truth and non-violence. If we do want our education to become a 'forceful tool' for social transformation there is no way except to adopt the essential features of Nai Talim with such adaptations as may be necessary to meet contemporary needs. One obvious need is to arrest the almost complete erosion of social and moral values. Truth and non-violence are everlasting spiritual values that we have inherited from our past, but when applied to real life, they come closest to the values of modern science and democracy. There are sure indications in the world of thought that sooner than later ground may be prepared for an integration between science (truth) and spirituality (unity of life). Democracy (non-violence) may be a link between the two. That may well lay the foundations of a new culture, far different from the one in which we are living. For a brighter India of tomorrow we need a new culture which combines the best in both science and spirituality. Let our transformed education show the way.

Participatory education, participatory development, and participatory democracy will be possible only when we decide upon a policy of planned decentralisation. Decentralisation does not mean merely devolution of certain functions from the centre to lower levels of administration. It is, in fact, concerned with the role of the State vis-a-vis the civil society. It involves a clear shift of power from the former to the latter. There is

no denying that during the last forty years there have been failures both in centralisation and decentralisation as forms of governance. But in a democracy people have, after all, to be trusted. The future lies with them. If democracy has to live, it is their power that has to be developed, and not of the State. For this the necessary objective conditions have to be created. To ensure social justice and other democratic values local communities have to be strengthened, and their social processes regenerated. They must be left free to decide and run the whole show of local life one great advantage of doing so will be that local conflicts - there is no end to them will become more manageable. Centralisation has proved divisive, and if persisted in, it will create more divisions, and will ultimately break up our society, and destroy the unity of the country. Less of state and more of civil society is the answer to many of our political, social and moral ills. We have trusted the voter and he has not betrayed democracy. Let us trust the citizen, and he will not betray the values of a civil and humane society. We have spent forty-three years on building the state, let us now start building the nation. In this process education must attain primacy. It must become Power. Education as Power is too important to be left to specialists alone.

In the body of the report, under decentralisation, we have suggested the formation of Educational Complexes. The fact is that all the agencies working in rural areas - the panchayats and gramasabhas, voluntary organisations, the educational institutions and government departments, as also enlightened citizens in the greater cause of building the nation. It should not be difficult to do so at the level of the local community.

Our people have so far depended upon the State alone to bring about the needed educational and social transformation. The result has been far from happy. The experience of the past forty- three years has shown that the State in India still represents, by and large, the haves and the upper and middle classes and that the representatives of the weaker sections play only a minor role therein. This has led to growing alienation between the masses and the elite in all spheres of national life. That explains why there is resistance to all changes that would affect the position of the privileged classes, e.g. the introduction of the common school system or increase in fees, or again emphasis on elementary education in preference to secondary and higher education. The contradictions produced by politico-economic and educational systems are too glaring. The situation is fast is fast becoming explosive, if not reversed in time, the consequences will be tragic.

No more will a patch here or a patch there will do. The need of hour is a people's movement for a New Education, not for a few but for all. The present entrenched system is not likely to respond except under the relentless pressure of public opinion and peaceful people's action. In this report we have tried to draw as clearly as we could, in national education related to our genius, present needs, and future progress. In doing so we have widened the horizons of education. The three key-points in our thinking have been universalisation, vocationalisation and decentralisation. We have drawn upon the great tradition of India, the experiences and experiments of pioneers in our own country and abroad, and great thinkers like Gandhi, Tagore, and others.

All the basic reforms recommended in this report cannot be introduced at once. So, the reforms may be divided into three categories - immediate, intermediate, and ultimate. There are still questions that require fuller consideration. A thousand practical details have to be worked out. Innovations will have to be made, and extensive experiments carried out. But a beginning in the right direction brooks no delay, and a total transformation of our education system should be brought about in a period not longer than ten years. The 1990s are going to be crucial for us as a nation. What we do in the next ten years will determine how we shall face the challenge of the next century.

We have taken what may be called a holistic view of education. We hold that in all the stages of education the same values should permeate. Each stage should be complete in itself. The present system in which the lower stage is a preparation for the higher should be given up. This will be easy to do if degrees are delinked from jobs, and there is only one stream of education including both vocational and general. Universal education upto the matriculation standard plus a sound grounding in a vocation is a goal we should work for. But for the present we have decided to lay stress on elementary education upto class VIII. This is the minimum level every boy and girl in India should be enabled to attain.

For the ideas expressed in this preface, I alone am responsible. My perceptions and experiences are primarily of a social worker, which I have been ever since I left college teaching in 1954 to join village service especially in the field of rural education. But the report itself is the result of the collective labours of the Committee. Its members have worked as a team and worked out agreed decisions. We have differed in argument, sometimes vehemently, but have always ended in complete agreement.

Let me end with an appeal to all our countrymen who have the nation's best interests at heart, be they administrators, teachers, social workers, students or just citizens. The nation is in peril. In its introduction the New Education Policy of 1986 rightly says, "There are moments in history when a new direction has to be given to an age-old process". This is a truth of great significance. I have no doubt that if each one of us realises the significance of this truth, even partially, and contributes his mite we shall overcome the crisis much sooner than we imagine. The future belongs to those that dare and act.

NEW DELHI   (RAMAMURTI)

December 26, 1990

CHAPTER I

METHODOLOGY AND PROCEDURES

1.1.1 The Committee to review the National Policy on Education (NPE), 1986 was formed on 7th November, 1990 as per Government Resolution No. F.1-6/90-PN (D.I) with Acharya Ramamurti as Chairman and sixteen others as Members. The terms of reference were:

- to review the National Policy on Education, 1986 and its implementation;

- to make recommendations regarding the revision of the Policy; and

- to recommend action necessary for implementation of the revised Policy within a time frame.

1.1.2 Full text of the resolution is presented in Appendix-I.

1.2.1 As the Government Resolution envisaged that the Committee would devise its own procedure, it set for itself the following modalities:

* Transaction of business through Sub-Committees;

* Scrutiny of background documents obtained from Government;

* Consultation with Bureau Heads of the Department of Education dealing with various specialised areas;

* Scrutiny of citizens' perceptions;

* Conduct of field/case studies;

* Drawal of academic support from specialists co- opted/associated with Sub-Committees; and

* Formulation of perspective for review of education policy, receiving responses thereto from interest groups and interactions with them.

1.2.2 In specific terms -

The following six Sub-Committees were constituted by the Committee for considering various subjects (Particulars of the composition of the Sub-Committees are presented in Appendix-II):-

Sub-Committee I : Access, Equity and Universalisation.

Sub-Committee II : Education and Right to Work.

Sub-Committee III : Quality and Standards in Education.

Sub-Committee IV : National Unity, Value Education and Character Building.

Sub-Committee V : Resources and Management

Sub-Committee VI : Rural Education.

1.2.3 The main Committee and its Sub-Committees held twenty-seven meetings. (Twenty meetings of Sub-Committees and seven meetings of the main Committee).

1.2.4 The National Front Manifesto (Lok Sabha Elections, 1989) and the Eighth Five Year Plan Approach document approved by the National Development Council (NDC) and Cabinet were kept in view.

1.2.5 Statement of background documents obtained from Government and referred to is furnished in Appendix-III.

1.2.6 Specific papers in regard to implementation of NPE, 1986 and relevant issues were obtained from the various Bureau Heads of the Department of Education and the status of policy implementation reviewed including thorough presentations made by them. A list of these papers - GP series - is presented in Appendix-IV.

1.2.7 Special analytical papers were obtained from resource organisations under the Department of Education and reviewed. A list of these papers - GOP series - is presented in Appendix-V.

1.2.8 Special papers on various aspects of education were obtained from experts, academics, etc. and reviewed. List of these papers - NGP series - is presented in Appendix-VI.

1.2.9 All the suggestions in regard to review of Education Policy from individuals and organisations were scrutinized, computerised and got circulated amongst the members of the Committee to facilitate their work in the Sub-Committee meetings as well as those of the main Committee. These suggestions are contained in five volumes of the document entitled "Citizens' Perceptions" presented in Annexure I. The Table below gives particulars of the number of letters (citizens' perceptions) received from various quarters.

Table 1

REVIEW OF NATIONAL POLICY ON EDUCATION, 1986

Number of letters received citizens perceptions)

S.No.	Sources	No. of letters
1.	VIPs	24
2.	Other individuals	250
3.	Seminar proceedings	4
4.	Organisations	62
5.	Institutions	4
6.	Newspaper articles	11
	Total..	------------ 355 ------------

1.2.10 A further break-up of the number of suggestions received (arranged subject-wise) from the above six sources is presented in the Table below:

Table 2

REVIEW OF NATIONAL POLICY ON EDUCATION, 1986
Statement showing number of suggestions: Theme-vise

Subject	SOURCES						Total
	A	B	C	D	E	F	
Goals of Education	4	55	0	8	1	2	70
Current Problems	2	47	0	17	0	6	72
Planning and Management	27	248	14	116	2	3	410

	A	B	C	D	E	F	Total
Structure of Education	5	56	0	7	1	0	69
Content and Curriculum	13	176	13	51	1	4	258
Language in Education	6	123	2	33	1	4	169
Evaluation and Examination	1	42	3	14	0	0	60
School Edu. - Elementary and and Secondary	18	106	5	35	0	5	169
University & Higher Education	10	97	7	10	1	0	125
Technical & Management Education	2	28	0	8	0	0	38
Non-Formal Education.	10	37	0	22	0	0	69
Teachers	6	91	14	20	0	0	131
Education and Employment	2	85	7	42	0	2	138
Social Justice	10	34	3	20	0	4	71
Resources	2	32	4	19	0	0	57
Rural Education	1	28	24	18	0	4	75

Total	119	1285	96	440	7	34	1981

A - VIPs   B - Other Individuals   C - Seminar proceedings

D - Organisations   E - Institutions   F - Newspaper articles

1.2.11   The following is a graphic presentation of the source-wise number and percentage of suggestions received:

Individuals (0)   1285   (64.9%)

Others   41   (2.1%)

Organisations   440   (22.2%)

Seminar proceedings   96   (4.8%)

Individuals (VIP)   119   (6.0%)
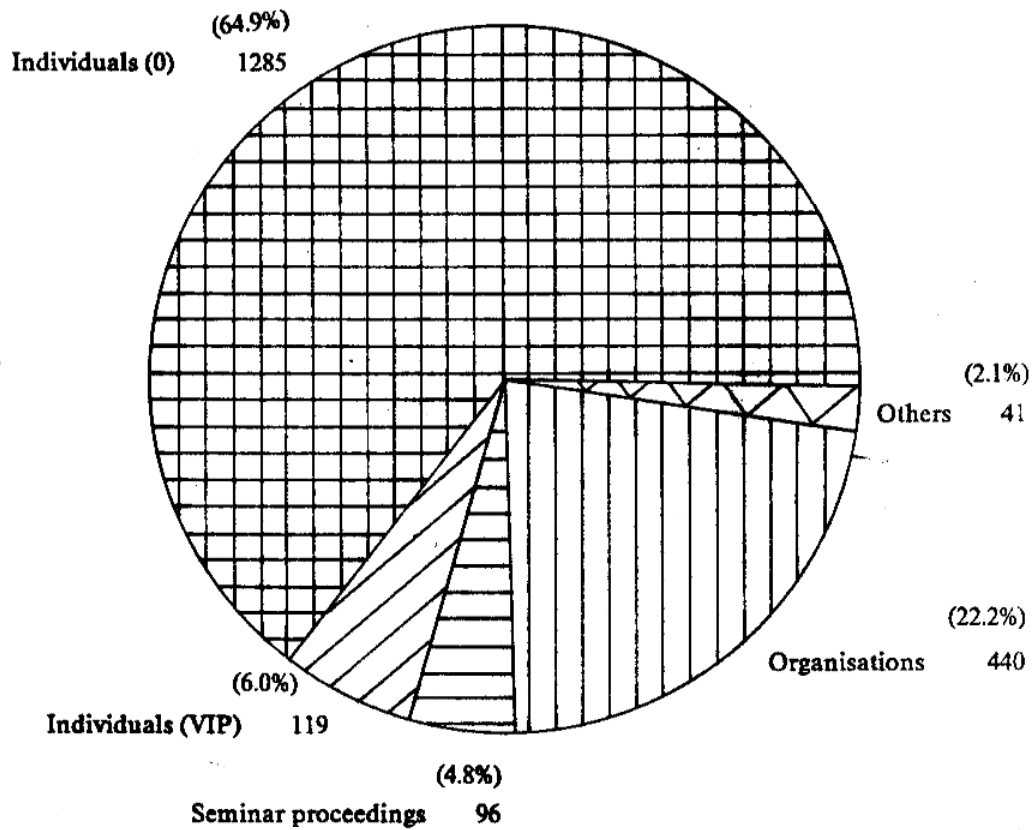
1.2.12 **Theme-wise analysis of the number of suggestions is presented in the following graph:**

NATIONAL POLICY ON EDUCATION
Themewise no. of suggestions

No. of Suggestions

Theme	Value
1	70
2	72
3	410
4	69
5	256
6	169
7	60
8	169
9	125
10	38
11	69
12	131
13	138
14	71
15	57
16	75

Themes
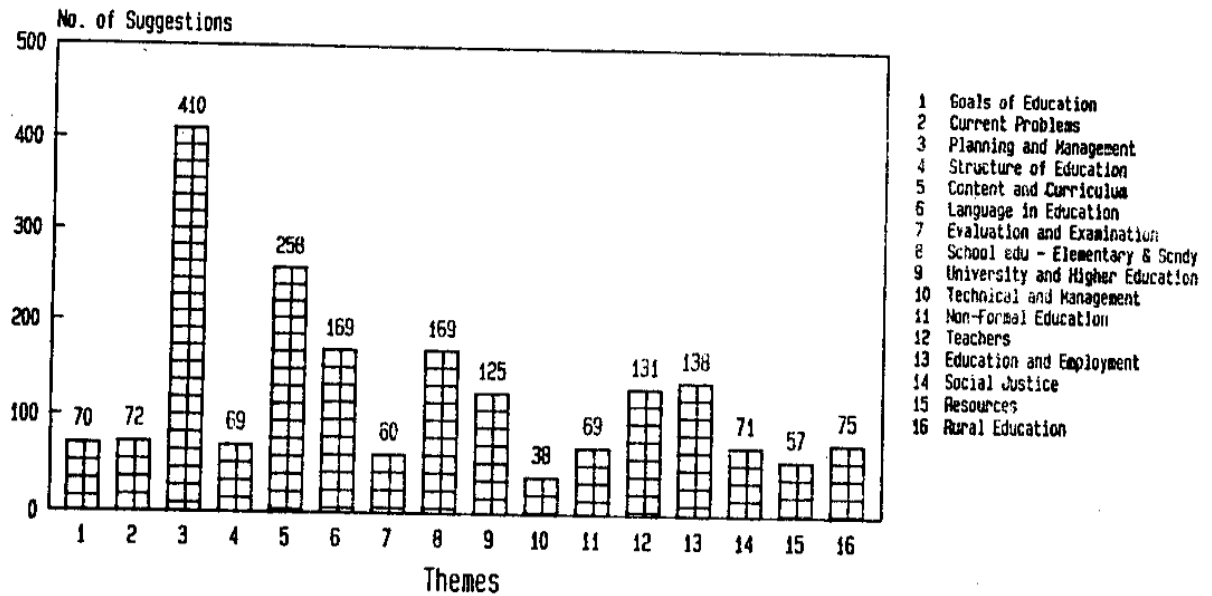
1   Goals of Education
2   Current Problems
3   Planning and Management
4   Structure of Education
5   Content and Curriculum
6   Language in Education
7   Evaluation and Examination
8   School edu - Elementary & Scndy
9   University and Higher Education
10 Technical and Management
11 Non-Formal Education
12 Teachers
13 Education and Employment
14 Social Justice
15 Resources
16 Rural Education

NICNET

1.2.13 The Committee interacted with the Committee of Experts appointed by the Government to examine implementation of the recommendations of the Gujaral Committee for Promotion of Urdu. It also had special interactions with the then members of the Planning Commission Dr. Rajni Kothari, Shri L C Jain and Shri J D Sethi as also the Education Secretary, Shri Anil Bordia and Chairman of the UGC, Dr. Yashpal.

1.2.14 A field study of 28 Navodaya Vidyalayas in the States of Gujarat, Jammu & Kashmir, Madhya Pradesh, Rajasthan and Uttar Pradesh made by 49 experienced field functionaries was conducted, apart from getting feedback from Chairman and certain members of the Committee based on their visits to Navodaya Vidyalayas in certain other States as well. Yet another field study on nonformal education was also organised in the States of Maharashtra and Madhya Pradesh.

1.2.15 Six studies were commissioned particulars of which are given in Appendix VII.

1.2.16 Study reports on different aspects of Education and reports on experiences of other countries on crucial subjects were received. Particular mention may be made in this context of 'Responsibility skills: "Lessons for Success" Elementary School Curriculum' prepared by Thamas Jefferson Center, Pasadena, California, U.S.A, 'How To Be Successful in Less Than Ten Minutes A Day: Creating a School Climate of Responsibility' prepared by Thamas Jefferson Center, U.S.A., Information Material of Chicago Foundation for Education, U.S.A., 'A New Decade of Moral Education' - A report of the Regional Workshop on Moral Education held in Tokyo on 18-31 January, 1990, 'Improving Linkages Between Research and Educational Reform - Report of the Regional Seminar on Educational Research in Asia and the Pacific held in Tokyo on 18 Oct. - 2 Nov. 1989.

1.2.17 Based on the reports of the Sub-Committees, Government and non-Government papers, Citizens' Perceptions, Special presentations by Bureau Heads and experts and field and case studies , the Committee prepared in September, 1990 a document entitled "Towards an Enlightened and Humane Society : A Perspective Paper on Education" in English and Hindi and mailed the same to about 2,700 respondents, seeking their comments. The categories of people and organisations to whom the paper was mailed included all Members of Parliament, other political leaders, editors of newspapers, Education Ministers of States, secretaries and Directors of Education in State Governments, Secretaries to the Government of India, Vice-Chancellors, Heads of Academics in central and State Resource Institutions, teachers' organisations, award-winning teachers, students and youth organisations, voluntary organisations (organisations engaged in activities, welfare programmes, minority organisations, private educational institutions), industry organisations and trade unions, besides prominent members of the public.

1.2.18 All the responses received were computerised into five volumes of "Responses to a Perspective Paper on Education" presented in Annexure II and circulated amongst the members of the Committee.

1.2.19 Based on the Perspective Paper, a series of seminars/workshops were also organised in different parts of India. A statement containing particulars of these seminars/workshops is furnished in Appendix-VIII. The suggestions that emerged therein were duly incorporated in the document of responses referred to above.

1.2.20 With reference to the Perspective Paper on Education, 419 responses were received as per information furnished in the following Table:

Table 3
REVIEW OF NATIONAL POLICY ON EDUCATION, 1986
Statement showing number of responses to
`A Perspective Paper on Education'

Sl.No.	Sources	No. of letters
1.	Academics, Vice-chancellors and Resource Organisations	113
2.	MPs and Political Leaders	6
3.	Teachers and Teachers' Organisations	77
4.	Students and Students' Youth Organisations	27
5.	State Governments	19
6.	News Paper Editors/Articles	35
7.	Seminars/Workshops	20
8.	Voluntary Organisations, Important people	115
9.	Central Government Departments	3
10.	Industrialists and Trade Unions	4
	Total	419

1.2.21 Particulars of the number of comments received from the above 10 sources (arranged subject-wise) are presented in the Table below:

Table 4

REVIEW OF NATIONAL POLICY ON EDUCATION, 1986
Number of comments on A Perspective Paper on
Education : Theme-wise

Sl.No.	Number
1. General Comments	408
2. Goals, Roles and Values	116
3. Right to Education	35
4. Elementary Education and Universalisation	251
5. Secondary Education and Vocationalisation	194
6. Higher Education (General and Technical)	137
7. Equity and Diversity (Navodaya Vidyalayas)	221
8. Adult and Continuing Education	90
9. Content and Curriculum	179
10. Examination Reforms	125
11. Decentralisation of Management	163
12. Languages	159
13. Teachers and Students	159
14. Resources (Centrally Sponsored Schemes	139
Total	2376

1.2.22 The distribution of the number of respondents source-wise, is presented in the following graph:

1. Academic, Vice-Chancellors and Resource Organisations
2. MPs and Political Leaders
3. Teachers and Teachers' Organisations
4. Students and Students Youth Organisations
5. State Governments
6. News Paper Editors and Articles in News Papers
7. Seminars and Workshops
8. Voluntary Organisations and Important People
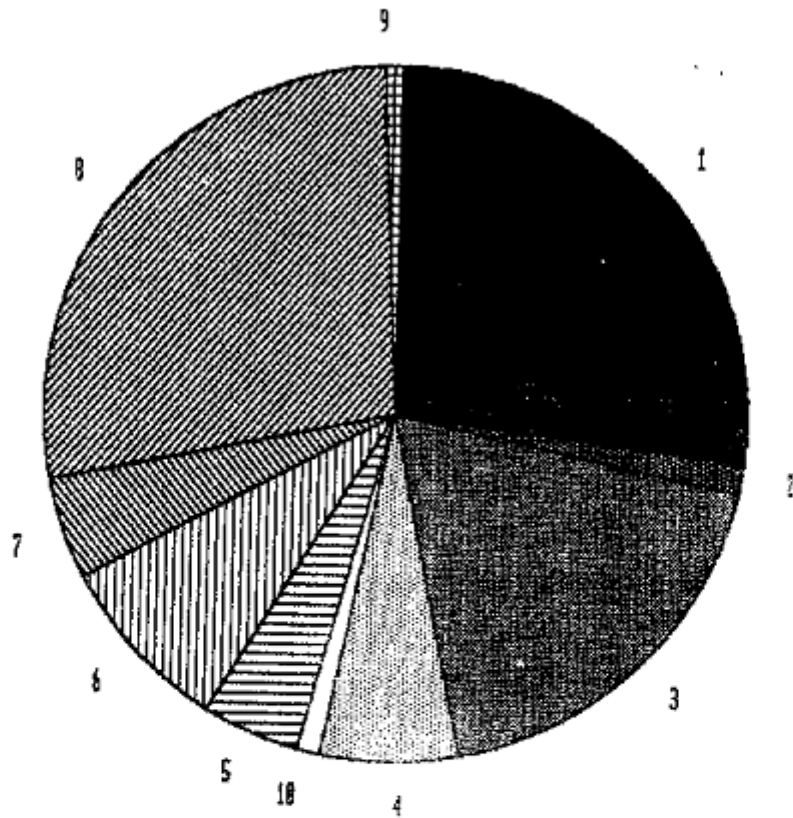9. Central Government Department
10. Industrialists and Trade Unions

10

1.2.23　　The number of respondents and comments, theme-wise, are presented in the following graph:
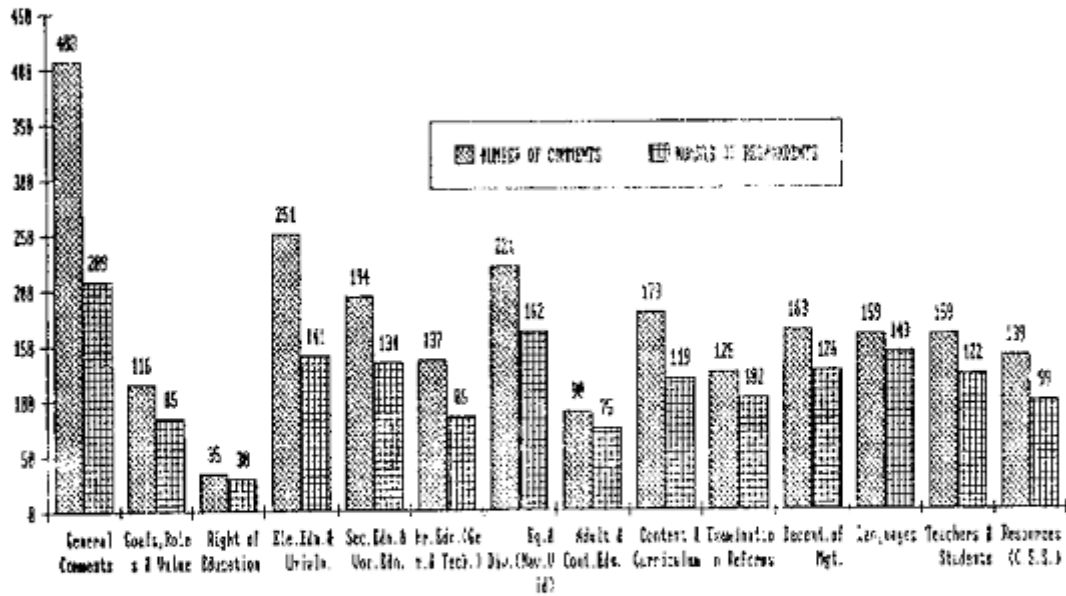
1.2.24 Keeping in view the responses received on the Perspective Paper on Education, the Committee held seven national level interaction meetings with the various interest groups at IIT, New Delhi between October 25th and November 7th, 1990. Particulars of those who attended these interaction meetings may be seen in Annexure-I to the Volume-III of 'Responses'. These interest groups were the following:

* Students and youth organisations.

* Teachers' organisations including award winning teachers.

* Voluntary organisations and specialist groups of women, etc.

* Academics and representatives of resource organisations.

* Ministers, Secretaries and Directors of Education from the States and Concerned Ministers and functionaries in the Central Government.

* Industry representatives and trade unions.

* MPs, political parties and editors of newspapers.

1.2.25 Both for the purpose of preparing the Perspective Paper on Education and for the Final Report, the Committee constituted a Drafting Committee with the following composition:

(i) Dr. C N R Rao

(ii) Dr. Anil Sadgopal

(iii) Father T V Kunnunkal

(iv) Shri S Gopalan

1.2.26 Acharya Ramamurti in his capacity as Chairman of the full Committee participated in several meetings of the Drafting Committee. Dr. Vidya Niwas Misra was also,, towards the later stages of Committee's work, invited to participate in the work of the Drafting Committee.

1.2.27 A three-member Academic cell was constituted to provide academic assistance to the Drafting Committee (see Appendix - IX for composition).

1.2.28 The Drafting Committee also received help, in the preparation of certain chapters, from the experts mentioned in Appendix - X

1.3.1 According to the Resolution constituting the Committee, was to complete its work on the 6th of November, 1990. However, there was a brief slippage in the schedule of the

Committee on account of the interactions with interest groups originally scheduled for the end of September, 1990 having to be postponed in the then existing situation in Delhi. This was duly reported to the Government. The Government also took note of it.

1.3.2 With the change in Government, mid-way through the Committee's work, the Chairman of the Committee addressed a letter to the new Minister for Human Resource Development on 22nd November, 1990 and sought confirmation about whether the Committee could go ahead with its work. The Chairman, along with Dr. Anil Sadgopal and Member- Secretary also called on the Hon'ble Minister subsequently on the 23rd of November, 1990. The Hon'ble Minister replied to the Chairman on 23rd November, 1990, confirming that the Committee could complete its work and present its report by the middle of December, 1990.

1.4.0 Earlier on, in July, 1990, the Government had requested the Committee to furnish an interim report on the respective roles of the Central and State Governments and the related question of Centrally Sponsored Schemes. The Committee took the view that it might not be appropriate to submit any interim prior to interactions with all the interest groups and accordingly this was brought to the notice of Government. took note of it.

1.5.0 The drafting Committee had a series of sittings from December 13, 1990 and prepared the final report of the Committee. The Committee approved this on 26th December, 1990 for presentation to Government.

CHAPTER 2

APPROACH

2.1.1 The approach of the Committee in reviewing the National Policy on Education, 1986 and its implementation has been guided by the following principal concerns:-

* Equity and social justice.

* Decentralisation of educational management at all levels.

* Establishment of a participative educational order.

* Inculcation of values indispensable for creation of an enlightened and humane society.

* Empowerment for work

2.1.2 The above concerns have been built into the recommendations of the Committee as underlying and all pervasive perceptions so as to realise the Constitutional and cultural goals of education.

2.2.1 In order to achieve equity and social justice and thereby remove elitist aberrations, education has been viewed by the Committee in the overall context of social, economic, regional and gender based disparities. For example, any effort at vocationalising education will carry no meaning unless, concurrently, the Government lays down an appropriate Income and Wages Policy. Likewise, national policies concerning removal of economic disparities such as for land reforms, employment, health and nutrition etc. have to be concurrently established/reviewed. of course, it is not for this Committee to give recommendations in regard to policies concerning other major sectors. However, mention is made of this only to bring home the point that an educational order based on considerations of equity and social justice cannot autonomously come about without interlinkages with these policies.

2.2.2 A very vital component of the overall strategy for securing equity and social justice in education is the development of the Common School System. The Committee is fully aware that this is no new innovation but has been with us for over quarter of a century since the report of the Education Commission, 1964-66 and the essential point is that this has just remained a concept and its non- implementation has only contributed to the accentuation of the existing educational disparities. Concrete steps for translating this concept into action have to be taken. In order to achieve this objective, the existing Government, Local Body and Government-aided schools have to be transformed through quality improvement into genuine neighbourhood schools. Private schools also should be similarly transformed in course of time by making them freely accessible.

2.2.3 It is particularly in the context of the need for establishing the Common School System that some of the members of the Committee nave found it difficult to go along with the Navodaya Vidyalaya Scheme. It is, inter-alia, for this reason that the Committee as a whole has advocated against establishment of more Navodaya Vidyalayas, not to speak of the inequity in nurturing talent only in a few. It is on account of the unfairness in judging a scheme for the implementation of which adequate resources as orginally envisaged were not provided, and of the need for a fair and total review of the scheme that the Committee has made alternative recommendations on its future. The Committee, of course, has also taken into account the practical difficulties in abruptly discontinuing a scheme which involves about 50,000 students and 3,000 teachers.

2.2.4 The rural areas in general, and the tribal areas in particular, have suffered in terms of resources, personnel and infrastructure facilities. This phenomenon of regional disparities in educational development has acquired a major political dimension in the current Indian scene. it is reflected in the regional and sub- regional movements. Therefore, the need of the hour is planning for, and implementation of, educational development programmes in terms of disaggregated targets and, area, community and gender specific activities. This would mean concrete programmes being established on ground for the disadvantaged groups - SCs and Tribes, women, the educationally backward minorities and the handicapped with appropriate budgeting for the same. No doubt, there have been special component plans for the SCs and sub-plans for the Tribes. But these plans have largely remained exercises on paper, not concretely provided for in the budget documents. The consequence has been that these plans have not had any impact on the educational standards of the SCs and STs in terms of enrolment, retention and reduction in drop out rates. Excepting for the implementation of a small sheme, "The Integrated Education for the Disabled", the handicapped do not significantly feature in the educational programmes of the Centre or the States. The Programmes for the educationally backward minorities have not been significant, having been construed as the almost exclusive domain of the States.

2.2.5. In order to promote, participation of the girls and women in education at all levels, there is need for an integrated approach in designing and implementing the Schemes that would address all the factors that inhibit their education. mere implementation of disaggregated schemes such as opening of Non formal Education Centres for Girls, Adult Education Centres for Women etc. by themselves are not adequate. In this context special mention may be made of inter- action of Early Childhood Care and Education (ECCE) with primary education. Education of women is not to be construed of a question of mere access but of empowering them through education of all on equality of sexes.

2.2.6 The modifications suggested in the case of vocationalisation of School Education have been construed in the context of equity and social justice as well. The Scheme, as it is now implemented, though unintendedly, has come to be viewed by the students as well as the parents, as one meant for the less fortunate. It is also on account of this that a single stream of School education with vocational as well as non-vocational components of different mixes becomes relevant and important.

2.2.7 Examination reforms also have their justification from the point of view of equity and social justice. The Examination system tilts heavily in favour of the privileged who have access to certain facilities such as special teaching learning material, special coaching etc. It is, inter alia, to rectify this inequitable tilt that examination reforms have been suggested.

2.2.8 One of the factors seriously inhibiting access for the rural students to Higher Education is the continuing sway of English. Hence, equity demands that Education in the media of regional languages is encouraged at all level. This would call not merely for political and academic commitment for the switch over to the regional languages media but a package of other measures including conscious efforts at organising tests for recruitments in the public and private services in the regional languages, at least options for taking university examinations in these languages and incentives for the same apart from production of appropriate teaching learning materials, reference literature etc.

2.3.1. The fundamental justification for decentralised planning and management of education is the sheer size and diversity of the country. In the sphere of education, the size and diversity of the country get reflected in the magnitude of the population to be provided education, number of the educational institutions to be established from the primary to the university level, the number of languages in which delivery services have to be organised, the cultural and regional diversities which have to be linked to the content and process of education etc. Decentralisation is the only solution to these problems. There is need for decentralisation of educational planning and management all the way down at all levels, from the Centre to the States, from the States to the districts, from the districts to the blocks, from the blocks to the panchayats/villages and habitations. The Committee does realise that a further complexity is added to the dimensions of decentralisation by the uneven status of establishment of the Panchayat Raj system in the country. But this does not detract from the need for decentralisation.

2.3.2 Decentralisation in the university system would mean autonomy for the universities and colleges as well as for the respective faculties and individual teachers. Examination reforms including establishment of continuous, comprehensive internal evaluation cannot come about unless delegation of authority and decentralisation of functions becomes real down to the level of teachers. Educational complexes recommended by the Committee are construed as an instrument of bringing about decentralisation.

2.3.3 Side by side with emphasising decentralisation as the corner-stone of planning and implementation of educational programmes, the Committee would lay much store by convergence of services already available through the parallel infrastructure created in several departments vitally connected with the Education. This would call for institutionalised coordination mechanisms to be evolved and to be set into operation as a rule of practice.

2.4.0 The Committee has envisaged the concept of participative educational order as being relevant to every stage of education as only involvement through participation can bring about the environment for genuine reform. Important modalities contemplated in

this regard are involvement of the colleges and universities in issues of regional development and improvement of school education; creation of school complexes, bringing about mutual coordination between primary schools, middle schools, high schools, colleges and universities (the universities affiliating themselves, as it were, with these complexes so that management of education becomes a job of the professional); forging education-industry interactions for the purpose of bringing about cost effective and practice oriented vocationalisation of school education; involvement of the village communities in working for the goal of universal elementary education; non-formalising the formal school system so that the system itself reaches out to the door-steps of those who are out of school, apart from being attractive to, and also be capable of, retaining them; assignment of meaningful role to genuine voluntary agencies engaged in educational development programmes; and, of course, the teacher being placed centre-stage in educational reform at all levels with careful attention devoted to their status, recruitment modalities, service conditions and training.

2.5.1 NPE 1986 as a whole reflects that educational development was construed in the background of human resource development. In fact, the Policy called for new designs of human resource development for availing of the unprecedented opportunities that would be thrown up by the ensuing decades. In the view of the Committee, the human being is to be valued as more than a resource. Mere emphasis on the resource aspect has overtones of utilitarian connotations. *

While utilitarian aspects are important, the human being has to be developed with accent on character building, dignity of labour and value to the society at the national and international levels.

2.5.2 In the view of the Committee value education is to be construed as a continuous process which is to be sustained throughout the process of growth of the individual from childhood to adolescence, then to adulthood and so on. Inculcation of values has to be seen as distinct from the output of individual schemes and programmes of school regimen. The hidden curriculum, as distinct from the explicit ones obtaining in the class room situation, is much more important for the development of balanced personality amongst the students. It is also the role of value education, to bring about integration of the hand, head and heart to ensure that education does not alienate the students from the family, community and life. one of the key roles of education should be creation of a work culture at all stages of education so that the individual develops into a socially and economically useful human being with respect for the welfare of all living beings (Sarva bhootha hitha) . Above all else, critical appreciation and concern for the cultural and artistic heritage of the country has to be instilled amongst the students. It is this package of values which will help the creation and sustenance of and enlightened and humane society in the country.

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*In order to de-emphasise the utilitarian over-tones of the expression Human Resource Development, the Committee is of the opinion that the nomenclature of the Ministry, namely, Ministry of Human Resource Development should be changed into Ministry of Education. The term Education is broad enough to encompass the aspects of Culture & Arts, Youth Affairs & Sports and Women & Child Development.

2.6.0 It has been clearly within the perception of the Committee that much of what is contained in its report has already been dealt with by different Commissions and Committees which were called upon to go into educational policy from time to time from the 19th century onwards. However, it is a fact that many of the ideas and concepts have remained as such without being translated into action and much impact has not been brought to bear upon the educational development of the country in the desired lines. The Committee's effort has, therefore, largely been one of advising on possible alternative modalities of implementation.

CHAPTER 3

ROLES, GOALS AND VALUES IN EDUCATION

3.1.0 The goals of education have been defined again and again in different contexts. But it would seem appropriate to accept, as a frame of reference, the goal of education, as envisaged by the Father of the Nation, Gandhiji: "The goal of education is to establish a non-violent and non-exploitating social and economic order". Much reflection and wisdom had gone into this pithy statement, which is as relevant today as it was in his time or even more so. This is the purpose of education in a modern, democratic society, its long term goal. But can we define the role of education, more specifically and concretely, in terms of a process definition?

3.2.0 Education is a process, a long drawn out one, indeed a life- long process of **Learning to Be by Learning To Become.** It cannot, therefore, be linked merely to what takes place in a school, over a fixed period of hours or years. In order to qualify as an important first step of a process and of a lifelong process, it must equip the student with capabilities to continue **to learn as well as to unlearn**, seeing both learning and unlearning as important. Thus first or 'beginning education' is only the initiation of the child into the world of Knowledge, of Attitudes and Values and of Skills. The 'beginning education' must provide foundational knowledge (a mere heap of facts and data for memorisation, will not prove to be a foundation on which one can build later), a critical exploration into the perspectives and values of the community of people he lives and deals with, and the beginnings of a set of psycho-motor skills.

3.3.0 The major goals and roles of education may be further elaborated seeing the same as a process of empowerment and of becoming, (for the individual, which, for the same reason, also becomes) an instrument for social change. To specify:

a. Education must provide a techno-informative or a sound knowledge base, empowering the person through knowledge and on which one can build later on.

b. Education must also provide opportunities to aquire skills, through engaging the students in a variety of processes and situations. These skills would be basic life skills, such as foundational skills in communication, computation, social skills and manual skills, which would enable the student to develop specific job oriented skills later.

c. Education must further provide a climate for the nurture of values, both as a personalised set of values forming one's character and including necessarily social, cultural and national values, so as to have a context and meaning for actions and decisions, and in order to enable the persons to act with conviction and commitment.

d. Education must play an interventionist and catalytic role too for promoting national cohesion and unity by empowering the students to become agents of social change.

3.4.0 Can education, a sub-system of the macro society, effectively influence the mass society? Seemingly difficult, almost impossible, to effect change from within the system. This is where the catalytic role (change from within) through intervention can make the difficult happen, the seemingly impossible, possible. How? Here are a few brief comments:

3.5.1 Present day curriculum is full of content, of techno -informative data, much of it neutral data, consisting of facts and figures, theories, inventions and laws etc. Several of these facts are also selected facts, namely some facts are selected in and others are selected out. To that extent, there is an open curriculum and an equally real <u>hidden</u> curriculum, the latter having as much or more influence on the students as the former. While one merely informs, the other effectively forms opinions, mind-sets, and values.

3.5.2 To illustrate: In the presentation of the history of India's freedom struggle, facts are mentioned, leading one to conclude that independence was won, without the involvement of a large mass of the people of India, particularly of the common and deprived sections of society. Social Studies lessons studiously avoid any reference to the inequalities and unfair treatment that the SC/ST and other minorities have been facing in free India. The student does not learn, from the curriculum, of the educational, social and economic disparities. Structures of the Government, of the courts etc are given in great detail, but little provision for legal literacy, namely to appreciate one's rights and also of one's duties. In fact, the section on fundamental duties, in the constitution, is among the most unread chapters. Though a work culture is an urgent national need, the curriculum does not include any significant treat of it. A common myth is created that the national wealth and the GNP is the work of a handful of States, of a few scientists and of industrial and business classes of people, leaving out the major contribution to the national economy by the common masses. When dealing with preventive and curative aspects of health, the rich traditional knowledge and skills for effective cures and preventions hardly find a mention. Many more such examples could be cited.

3.5.3 Such biased inclusions and exclusions form stereotypes and myths in the minds of the young. The prevalent attitude of not discussing items of life and reality in the classroom, even in the upper classes, out of fear that this will arouse communal passions or because they are seen as political and not educational (!) is an aspect that needs a second look. Are we educating for life and for reality or merely for award of marks and certificates? Our present day education, at school and even University levels, provides little scope for organised and regular <u>reflection,</u> <u>and even less for experimental learning</u>, without which internalisation will not take place. Such education remains superficial.

3.5.4 Such internalisations will mean greater awareness and sensitization of the students and will prepare the way for action and decisions at the individual and community levels, by a group of informed citizens. Imitating the proverbial ostrich, which thinks that 'what I don't see, just isn't there' is not going to help in solving any of the problems. Far too little attention has been given to the third and fourth roles of education, namely the value education role and of being interventionist. Developing more appropriate curriculum,

through new designs and planning of transaction methodologies will need urgent attention.

3.6.0 Education should pave the way for enhanced awareness, greater openness, and ability and courage to question, and toughness to search for solutions. In other words, initial education is to be a **foundational experience**, a starter for enabling the individual to enter effectively and creatively into the many tasks and challenges of life. It is not a tool box that s/he would carry through life, in the belief that all eventualities can be dealt with, with the aid of the tools in the box! That is why certificate or degree education can be so misleading (as it often has been) about the real role and purposes of education. one view is to see the goal of initial education as equipping one with basic minimum levels of knowledge, attitudes/values and skills to start one's life journey. It is quite another view to assume that first education, whether completed at the primary, secondary or even tertiary stage, will reach one to one's destination in life.

3.7.0 Education, as an instrument of development, must, therefore be also a **truly freeing experience**, **a process of liberation**. Liberation from what? In our Indian context, liberation from the numerous prejudices based on caste, gender, religion, region, language etc; from prejudices based on superstitious beliefs; from a variety of unfounded fears; and positively, freedom to explore, to investigate; freedom to accept truth, even when it goes against one's earlier notions and beliefs. In that frame of reference, the more educated a person is, the less prejudiced, the more open s/he should become, less fearful to stand by one's convictions and when need arises, make demands from oneself and from others as well as for them This is what is meant by education becoming a freeing experience, an instrument of liberation. True education must humanise the person. Our forefathers experienced an effortless harmony between themselves, others and nature. Bhuthdaya or a feeling of universal compassion is one of the finest expressions of this mind-set of our ancestors and of our cultural heritage.

3.8.0 The indicator of educational effectiveness is to see the kind of competencies that the person has acquired and is capable of acquiring, in terms of knowledge, attitudes and skills. Education, in other words, must initiate a life-long process of developmental exploration, within its two dimensions, one of the self and the second of the community and the wider society. Nothing less is genuine education.

3.9.1 What is happening on the ground today is indeed a matter of real concern. Students acquire the necessary techno-informative package and want success and instant success at that. They are impatient to wait. In the cauldron of competition, few, laws exsist and even these are not respected. As a result, there has been growing brutalisation of our society. Science and technology have made many seemingly impossible things possible. The human and the humane, have taken a back seat. We have accepted democracy in our country, not merely as a form of government, but also a value frame. The luminous words of the preamble to the Constitution is the articulation of that value frame. We need to find practical answers to safeguard the autonomy of the individual (one's democratic right), while also making him aware and responsive to the rights of others.

3.9.2 Already in 1961, Jawahar Lal Nehru convened the first National Integration Conference. It welcomed the suggestion of Akhil Bharat Sarva Seva Sangh to launch a mass campaign for the following pledge to be signed by every adult Indian:

"I, as a citizen of India, affirm my faith in the universal. principle of civilised society, namely that every dispute between citizens, or groups, institutions or organisations of citizens, should be settled by peaceful means; and, in view of the growing danger to the integrity and unity of the country, I hearby pledge myself never to resort to physical violence in the case of any dispute, whether in my neighbourhood or in any other part of India"

3.9.3 Among the principal causes for our national unity not being strong has been the mixing of religion and politics, overstress on regions and localities, leading to the adoption of the norm of 'jobs for the sons of the soil only' and caste and religion-based tensions and riots.

3.9.4 In 1986, the National Integration Council laid down the basic principle: "Secularism is the bedrock of our nationhood. Every Indian has the right, sanctified by the Constitution, to pursue his religious beliefs and practices in full freedom. At the same time, tolerance and fraternal feelings are enjoined upon all communities". Back in 1937, the Zakir Husain Committee, appointed by the All India National Education Conference, and presided over by Mahatma Gandhi, held up the ideal of development of a citizenship in an organised, civilised, democratic and cooperative community and recommended that a course in history, in civics and in current events, combined with a reverential study of the different religions of the world, showing how in essentials they meet in perfect harmony should be introduced.

3.10.0 The honesty of science, in search of what is true, must find its reflection in personal and collective lives, as against the large- scale hyprocrisy of double standards and norms. Can such transformation take place without touching the deeper self in us, the mind and the spirit of man, namely what is spiritual? We are not referring to the role and relevance of religions here, but to the legitimacy of the role and place of the spiritual in an age of science, and perhaps, especially in an age of science.

3.11.1 Education is a multi-dimensional process. While developing the individual, there must also be a stress on education contributing to assist the student towards attaining national goals and purposes. There is a widespread feeling, among a cross section of the people in India today that all is not well with our body politic and that education must contribute actively and positively to find a part of the solution. Currently, national unity and secularism, scientific temper and modernisation, a work culture and work ethics, and above all a humane and caring society are among the pressing national goals. The Report on the National Commission on Teachers I (1983-85) mentions the following four national goals:

- A United, secular India

- A Modern Nation

- A Productive people

- A Humane and Caring Society.

3.11.2 There is enough attention paid to the development of the individual through education. The social dimension of education necessitates that education be essentially value-based. There cannot be an education that is neutral or of a uniform type. Hence there cannot be an educational process and objectives that would fit every people and every nation. Education has to be culturally coloured and enriched. We may view culture from three levels of depth: a) the superficial or external level gives a sense of identity to a community, group, region or nation. In our case, the different kinds of distinctive dresses, the way birth, marriage or death rites are performed by different groups, food preferences and preparations, celebration of festivals etc. fall into this category and level. b) at a deeper second level, the more substantive aspects of a culture and its achievements are to be found, such as the different dance forms, music traditions, art and architecture, literature, as well as planning, systems of management etc. c) at the third or deepest level lie the foundational values, world-views, perspectives, mind-sets, and the philosophy of a people about the way they view basic realities of life, relations and after life.

3.11.3 The process of modernisation will necessarily bring about changes at level one and also, though more slowly, at level two. Both will be influenced and guided by the perceptions and changes at level three. That is why, acculturation is seen as basic and essential to education, in the Policy. There cannot be culture-free education.

3.11.4 The growing malaise in modern education is that it is seen and practised merely or mainly as a means of acquiring techno- informative knowledge and skills, with little or no <u>anchoring in the cultural roots of the country</u> and its perspectives. We do not mean this in any narrow, parochial sense, namely education seen as a means of brain-washing the students, making them adopt fundamentalist positions, in the name of religion, region, language or caste or any other. But unless education helps the students to develop not only a <u>personal identity but also a social and national identity</u> (which essentially means a set of value perspectives and world views, linked to one's cultural traditions) education cannot be said to have fulfilled its essential role.

3.12.1 A major task of reconstruction of the education system is to re-establish the links between education and life, and hence between the school and the community. The teachers, by and. large, see themselves as responsible for teaching certain assigned subjects and to do certain other assigned tasks. They have little or no links with the concerns and situations of the community in which the school is placed and for the people, whose children they teach. This **alienation** has to be put an end to. We see the imperative need for every school to be, in the real sense, a Community School.

3.12.2 A Community School would mean that the school is not only teaching the children from the community or area that it serves but is organically linked with the community,

has emotional attachment with it, and hence is actively involved with and extends itself into the life and concerns of the community. This linkage or bond will manifest itself in collaborating with the community for provision or support of various kinds of services. This kind of open-ended community and bridge building, breaking the traditional barriers, based on gender, group, caste, religion or language, is seen as an important role of education.

3.12.3 Such community schools did exist in some parts of the country, such as in Haryana, with the provision of hostels. In some tribal areas, "Ghotuls" still exist. These brought together the youth from the community, and involved themselves actively and in an organised fashion in outreach into the community, especially in times of special need. The Ghotul provided a structure for socialisation of the young, according to the community norms. Every school should develop into a community school, so that it goes out to the community of people around and is involved actively with their concerns while the community also reaches into the school, using its resources and facilities for community purposes.

3.12.4 What precisely will be the form of such extension work will depend on the quality of commitment and the competencies of the Head and teachers of the school and of the community that it is linked to. It may be related to agriculture, health, animal husbandry, population and family education, environment conservation or a variety of other developmental areas, of interest to the particular community. For a competent and imaginative head, it may also mean an on-going provision of services to the community by students who have been specially trained for technical jobs and for which the community would pay. The list would indeed be a long one. But whatever extension work is undertaken, it has to be relevant and should find a ready participation from the community.

3.12.5 The majority of our schools in the country, being situated in the rural sector, are already common schools and neighbourhood schools. The problem lies only with the minority of schools in the urban sector. But whether urban or rural, Government or private, **the average school remains divorced from the community**. There are already many rules and conditions for recognition and affiliation of a school. We suggest that one of the **essential conditions** be that the school would engage itself in meaningful and on-going developmental work with the community. Not as a bit of ritual SUPW or donating some money for this or that need but entering into a long-term partnership with the community and selectively involving itself with it.

3.12.6 This would be an effective way for all schools, whether urban or rural, Government or private, to become community schools and for the minority of urban schools to get involved in the concerns of the community around. This would pave the way for the minority of present urban schools and especially **the English medium aided and unaided schools** to become neighbourhood schools, as a first step towards fully entering into a Common School System. The schools need not see this as a tragedy or a sure means of loss of present standards. We suspect that the measure for standards is largely based, today, on the very inadequate yardstick of public examination results. The

more meaningfully a school can establish links with the community, by connecting subjects and curricula of the school with the situations and demands of the community, the greater will be the quality of learning that would result and hence the quality of education. A sea change would also occur in the attitudes of the urban school children, in the present English-medium schools.

3.12.7 However, the fundamental problem in our system is caused, not by a minority of schools but by the majority of schools, namely by the two categories that are fully supported by public funds, the Government schools and the Local Body schools. These have, by and large, remained outside the purview of any real educational audit, though they are required to submit many forms of how small amounts of money are spent. Abolition of the private schools, urged by several persons, will not solve the major educational problem, we feel. It can only be solved when the majority school sector finds it possible to substantively raise its present level of educational attainments and effectiveness.

3.13.1 In a recent National Conference, organised by NIEPA, under Government initiative, in December, 1989, the topic of empowering the Heads of Secondary, Schools was discussed and detailed recommendations were arrived at. It is strongly urged that the Government, both at the Central and State levels, take early decisions to introduce functional autonomy in the Government schools, within a clear frame of accountability and in a progressively phased manner, so that their quality can improve radically. Without such empowerment of the Head of the institution, it is not fair to demand that s/he adequately meets the many role expectations. Nor can the present neglect of the majority of students in the Government and Local Body schools be allowed to continue.

3.13.2 This kind of transformation of the quality of education, once made available in the normal Government schools, will pave the way for the Common School System to become a reality and will end the present division-of the country and its people. between those who have access to the privileged minority of schools, and patronised by the civil servants, those from the Armed Forces, from large industries and service sectors as well as the professions and business categories and the majority who can gain admission only in underprivileged ordinary or poor quality schools, which form the majority of schools. Quality of education thus makes a significant contribution to perpetuate the privileges enjoyed by a fairly small minority of the people. Some put the percentage at a small 3%, while a more fair percentage may be around 15-20. But even this is a totally unacceptable percentage, in our democratic set up.

3.13.3 It is recognised that the middle class, in our country, as in other countries, exercises a great deal of pivotal force in decision-making. Educational policies have indeed taken a stance in favour of the majority, but in practice, no effective steps have been taken to equalise opportunity, through provision of education of comparable quality to all. The 86 policy makes this remarkable statement of intent, but there is little evidence that action steps have kept up with policy intentions.

3.14.0 Developing schools into truly community schools will be one way of giving effect to the interventionist and catalytic role of education. Community schools will become a major force to break down the present division of educational haves and have-nots. It will also provide a context and climate for nurture of values, through organised reflection and decisions. The formation of the Educational Complex that the Committee has recommended will provide another buttress to attain national goals and purposes. Vocationalisation of education, which has also been recommended, will have a base to operate from. Improvement of the quality of schools, evolution of neighbourhood schools and leading to the Common School System are also linked to the proper development of making every school a community school. That is why we consider this a key recommendation.

3.15.0 The NPE was clear on the essential role of education as an acculturating process. It also saw and emphasised the role of development of human resource through education and training. The Committee views man as more than a mere resource, an economic commodity, and have stressed the human and have put the accent on the cultural and spiritual, as on science and technology for the total education of the total person. The Committee is in basic agreement with the 1986 Policy perspective and thrust but have elaborated on certain key result areas, which have not received adequate ground level priority, such as re-design of curriculum and methodologies and a machinery for effective implementation.

3.16.0 This, the Committee feels, remains the great unfinished task

CHAPTER 4

EQUITY, SOCIAL JUSTICE AND EDUCATION

Section A: Education and Women's Equality

4.1.1 The evaluation of policy in relation to 'women's education needs necessarily to be made in the larger context of the socio- cultural reality in which women live; and the educational situation that is sought to be addressed and subsequently redressed.

4.1.2 At the time of the formulation of NPE 1986, the existing data on the state of education (Government Reports and the Census of India 1981) clearly indicated the following trends in the educational situation of women. The NPE/POA also make reference to some of these.

- The rate of illiteracy among women is 75% as compared to 53 % for men. Illiterate women predominate in villages and particularly among the under-privileged sections of society. The illiteracy rate is as high as 90.1% among SC women and 92% among ST women (Census, 1981).

- Regional disparities in the state of women's literacy are also pronounced. While illiteracy among women in Kerala is 34%, it is as high as 89% in Rajasthan and 86% in Bihar.

- While about 42% of boys in the age-group of 6-14 years at an all-India level are not attending schools, almost 62% of the girls in the same age group do not go to schools. This gender disparity is further accentuated if one views the rural population separately. About 47% of the rural boys in this age group do not attend school. In contrast, the proportion of rural girls outside the ambit of formal education is as high as 70%. Even in the urban areas, more than one-third of the girls are outside the school system.

- While 70% of non-enrolled children are girls, the majority come from rural areas. Enrolment rates are poorest among girl children who belong to communities which suffer from social and economic discrimination i.e., the Scheduled Castes, Scheduled Tribes and other educationally backward communities.

- Although precise data are not available, it is widely acknowledged that the percentage of girls belonging to certain minority communities going to schools may be as low, as in the case of SC/ST girls, if not lower.

- While the drop out rate of both male and female, school, children increases with the stage of education, it is more acute among girls at each stage. Here again, dimensions such as the urban- rural, socioeconomic status and ethnic background are important.

- The representation of women in higher education is as low as 31%. Data show that, of all the women enrolled in higher education, 55% are in arts courses and only 20% in

science courses. Women also tend to join lower professional courses as compared to higher professional, courses. For example only 6% of students enrolled for engineering courses are women.

- The proportion of women amongst teachers engaged at Primary, Middle and High/Higher Secondary levels in 1987-88 was as low as 26.3%, 32.2% and 31.2% respectively.

- It is recognised that women are poorly represented at higher levels of the decision-making process in the education system, though information on this issue is yet to be compiled.

The Status of Women in Indian Society - Implications for Education

4.1.3 Research available on the education of women in India points to a number of socio-cultural and economic factors that influence the participation of women in the system of education and have a bearing on the above-mentioned trends.

4.1.4 The prevailing cultural norms of gender behaviour and the perceived 'domestic' and reproductive roles of women tend to adversely affect the education of girls. Negative attitudes towards sending girls to school, prejudices against retaining them in school, restrictions on mobility especially after puberty, early marriage, pressures to enter womanly' courses etc. are known to affect the nature of participation of women in education. These are reflections of the patriarchal values and attitudes which are dominant in society. The effect of gender bias varies in different social and economic groups and is particularly harsh on communities which suffer discrimination and those in certain minority groups. Among poor families, the economic role of the girl child and her responsibilities in the household are obstacles to schooling. The gender bias existing in society has a direct bearing on many aspects of the education system. These include inadequate facilities for girls' education at different stages, unequal access to non-traditional' courses, gender stereo-types in both the official' and 'hidden' curriculum, negative attitudes of teachers and administrators, and poor representation of women in positions of authority and decision-making. Education policy must, therefore, address itself to the larger socioeconomic and cultural context that affects education of girls.

4.1.5 At the same time, it must be recognised that poor enrolments and large drop-out rates among girl children are not a result of social, economic and cultural factors alone, but are also the product of the policy and its priorities. For example, it is policy which determines the nature of the available ,educational facilities, their coverage and quality. This, in the above context can either accentuate existing problems of girls' education or facilitate their participation.

NPE/POA Stipulations

4.1.6 Referring to women's education, the NPE clearly states that education will 'play a positive, interventionist role in the empowerment of women.... foster the development of

new values through redesigned curricula, textbooks, the training and orientation of teachers, decision-makers and administrators ... '. The thrust of the policy lies in intervening within the education system, as is also evident from the policy parameters listed in the POA. The socioeconomic and cultural constraints that lie outside the school system and have a direct bearing on girls, education are not adequately addressed. The larger context of the nature of development and the scant economic opportunities available to poorer and socially discriminated sections of society among whom girls enrolment is the lowest, do not seem to have informed strategy enunciation. The NPE seemingly construes education alone as 'an agent of basic change in the status of women'. The concern for 'support services', such as water, fuel, fodder, child-care and hostel facilities, has not been adequately operationalised in the POA. This is also reflected in the POA's acceptance (without question) of the official norms regarding the distance at which schooling should be available in rural areas. For instance, the official norms of 1 km. and 3 km. as 'walking distance', at which primary and middle schools respectively are to be made available may still not be suitable for girls.

4.1.7 Further, even if education is to play an interventionist role, it is crucial that a gender perspective is reflected throughout the policy*. This implies that all dimensions of the education policy should reflect a 'well-conceived edge in favour of women' in order to neutralise the accumulated distortions of the past'. There is, however, a gap between the policy statement and the POA. Other than the part where the focus is on 'Education for Women's Equality', the education of the, 'female half' of the population receives only scattered references in the POA. The POA as a whole does not reflect a holistic treatment of women's education in all its aspects.

4.1.8 In the discussion that follows, the Committee reviews the NPE and POA in the context of women's education and makes recommendations with regards to the following dimensions* :

- Access to education and quality of learning,

- Content of education and gender bias,

- Vocational education,

- Training of teachers and other educational personnel

- Research and development of Women's Studies,

- Representation of women in the educational hierarchy,

- Empowerment of women,

- Adult education,

- Resources, and

- Management.

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* By this we mean that education ".. . must address the structures & attitudes that have prevented women's equality till now, and have perpetuated and strengthened patriarchal values and institutions that subordinate women". Education must also play " ... an active role in promoting the new values of equality in the division of roles, rights and responsibilities between men and women in every sphere".

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* Many of these concerns are relevant for school children in general. However, this chapter focuses specifically on the education of girls.

Access to Education and Quality of Learning

4.1.9 The education of children in general and the girl child in particular, has to be viewed within the larger context of development. In addition to the socioeconomic and cultural factors referred to earlier, the education of girls is in a very real sense linked to the availability of water, fuel, fodder and child-care facilities to individual families. As much as 29 per cent of the entire time of a girl-child in rural areas is spent in the collection of fuel and 20% in fetching water. Care of siblings also accounts for a significant proportion of a girl's time. This is particularly so in poor rural families. For instance, it was observed that in eastern UP, 30% of the household burden and 20% of the agricultural work is shared by girl children.

a) Water, Fuel, and Fodder

4.1.10 The release of the girl-child for schooling thus requires an improvement in the access of house-holds to water, fuel and fodder, and this should invariably inform the Policy. Further, it should also stress that efforts in the direction of social forestry, drinking water supply and greening of village common lands should be viewed not merely as I eliminating drudgery from women's lives' (POA, Para 12) but as necessary inputs to improve girls' access to and retention in schools. In the POA, the mention of support services appears to have no operational link with the Primary School.

Recommendations

i) There is a crucial link between the easy access to water, fuel and fodder and schooling of girls. This understanding needs to be explicitly reflected in the policy of Government and be concretised in operational designs.

ii) 'Local Area Planning', as envisaged in the 'Approach to the Eighth Five Year Plan' document, must take into account the above linkage while planning for programmes relating to forestry, drinking water and greening of common lands.

iii) The Department of Education should coordinate with the other concerned departments and secure adequate resource allocation for the above mentioned programmes based on parameters which indicate the status of girls' education in a given habitation/village. For instance, priority needs to be given to the habitations/villages having enrolment and retention rates for girls in schools below the average rates of the States.

iv) To achieve the above purpose, planning for educational development of any given region would have to be necessarily conducted at the Block or sub-Block level. This task would be facilitated if it is undertaken through the proposed Educational Complexes in which there will be Block-level representatives of the various agencies/departments concerned with social welfare and development, along with teachers, Anganwadi workers, and representatives of poor women's groups and Panchayati Raj institutions.

v) Teachers, Anganwadi workers, village-level functionaries of other departments, and representatives of women's groups and community-level organisations should play an important role in making micro-level information available to the Educational Complex for prioritisation of action in this regard.

b) Early Childhood Care and Education (ECCE)

4.1.11 As already emphasised in the chapter on ECCE, easy access to organised and holistic early child care is crucial if families, especially among the under-privileged, are expected to relieve girl children of this responsibility and spare them for schooling. Without providing full-fledged day care services, particularly for the 0-3 age group, no school programme can hope to become accessible to older girls in the 6-14 age group. Although both the NPE and POA' do mention the need for early child-care facilities, the crititicality of the link between this support service and the access and retention of girls 'in schools is not adequately stressed. The POA chapter on 'Education for Women's Equality' makes no specific reference to its link with the need for child care for the 0-3 age group. While a passing reference is made to early childhood education as a support service, no attempt is made at strategy enunciation in this regard. In the POA on ECCE, this matter receives a hesitant reference, "Girls in these groups (under-privileged) may require support services like child care, sometimes in very small units" (Para 7).

4.1.12 Apart from older siblings, women teachers may also require child-care facilities to enable them to attend schools regularly. The POA doesn't refer to this aspect.

4.1.13 Detailed recommendations for providing ECCE services, especially to the under-privileged sections of society, have already been discussed (see the chapter on ECCE). In the context of women's education, the Committee re-emphasises the following aspects:

Recommendations

i) The policy framework on women's education must bring out the criticality of the link between ECCE and girls' accessibility to elementary education.

ii) Comprehensive and effective ECCE services should be provided in proximity to every primary and middle school and be programmatically linked with elementary education.

iii) Priority should be given to child-care programmes catering to the 0-3 age group, particularly among the underprivileged sections of society.

iv) The timings of the ECCE centres should include the school hours so that the girls in the 6-14 age group are relieved from the responsibility of sibling care.

v) While the Anganwadis (ICDS) should continue to be given importance, other models which are sensitive to local needs should also be encouraged.

vi) The management of Anganwadis and other ECCE programmes should be decentralised and be made participative, as recommended in the chapter on ECCE.

vii) In order that child-care facilities and pre- school and primary education of girls are prioritised in the village and the community, the Anganwadi workers and poor women's groups should be represented on the Village Education, Committees.

c) The Availability of Schooling

4.1.14 The POA states that there will. be a shift in emphasis from enrolment to retention in elementary education (Chapter II, Para 13) While retention in schools needs to be emphasised, concerted drives aimed at increasing enrolment of girls, especially those from under- privileged social groups, must continue.

4.1.15 The availability of facilities for schooling within easy reach is crucial for access to and retention of girls in schools. At present, 48.6% of the habitations representing about one-fifth of the country's rural population do not have Primary Schools. These include habitations which have population of more than 300 persons and hence according to the official norms should have already been provided with primary schooling. Although almost 95% of the rural population according to official figures are served by a primary school either within or up to a walking distance' of 1 km., this should not give rise to grounds for complacency as far as girls' education is concerned. It is necessary to recognise that the involvement of girls in sibling care and domestic chores and other socio-cultural constraints may make even 1 km. beyond 'walking distance' for them. These factors become more important when it comes to middle schooling where access to education is poorer than at the primary stage. Only 13.3% of habitations have middle schools. The poor availability of middle schooling may be a major constraint in the

retention of girls in schools. Parental fears at sending girls outside the village particularly with the approach of puberty cannot be dismissed. Girls belonging to SC, ST and other discriminated social groups are particularly vulnerable. In other words the 'socio cultural threshold' beyond which girls have to venture to receive education makes easy availability of schooling of critical importance. The official target of providing a middle school within 3 kms of the habitation, hence, will not ensure accessibility of upper primary education to all girl children. (see Table 1).

TABLE 1

Girls' Access to Education : An overview

Factors which will facilitate girls' education	Reasons	Recommendations
I. LINKING EARLY CHILD-HOOD CARE AND EDUCATI-ON (ECCE)	o Prepares girls in in the 0-6 age group for Primary Schools.	i) Locate ECCE centres in proximity to the Primary School and adjust their timings to include school hours.
	o Relieves older girls from the responsibility of sibling care.	ii) Teacher Training programmes and redesigning of curri-cula for Classes I-III should incorporate ECCE approaches.
	o Positive impact ` of ECCE's child-centred approaches on the learning environment in school.	iii) Co-ordination between Anganwadi worker and school teacher.
	o Enables women teacher also to avail of day care facilities for their children and attend school regularly.	(see chapter on ECCE for further details)
II. PROVIDING EASIER ACC-ESS TO WAT-	o Relieves girl children from the responsibi-	Make water, fuel and fodder easily accessible, on a priority basis,

ER, FUEL AND FODDER	lity of gathering fodder and fuel and fetching water form distant sources.	to those habitations or communities whose enrolment and retention rates for girls in schools are below the state average
III. PRIMARY SCHOOLS	o The 1 km. official norm for walking distance' is inappropriate form the standpoint of girls due to their involvement in activities of the household within and outside the home. o Primary School within easy access may enable parents to spare children for schooling. o Security for very small girls	i) Provide each habitation with a population of 300 or more with at least one Primary School by the year 2000 (this implies an additional 1.22 lakh schools as per 1986 data). In the meantime, each of these unserved habitation may be linked to the nearest Primary School through a para-school' (see the chapter on Universalisation for details). ii) A network of para-school's linked to the nearest Primary School should be started such that all unserved habitations with population of less than 300 would be served by at least one para-school' by the end of the Eighth Plan. iii) Habitations having enrolment and retention rates for girls below the State average must be given

| IV. MIDDLE SCHOOLS (especially for - girls) WITHIN WASY ACCESS, i.e., within 1 km. | o The present norm of 3 kms. for `walking distance' places the Middle School beyond the reach of rural girls who carry heavy household responsibilities at this age. Hence, proximity of the school is important for girls.

o Very real problem of security and apprehension of parents in this regard*

o Restrictions relating to puberty regarding mobility, interaction with men. | i) Provide each habitation with a population of 500 or more with at least one Middle School by the year 2000 (about 2.5 lakh additional schools as per 1986 data). In the meantime, each such habitation may be served, by a `para-school', linked to the nearest Middle School.<br><br>ii) For unserved habitations with a population of less than 500 each, a network or `para-school' linked to the nearest Middle School, should be started, such that every child has access to a `para-Middle School' within 1 km. of residence by the end of the Eighth Plan.

iii) Priority should be given to habitations where enrolment and retention rates for girls are below the State average. |
| V. NON-FORM-ALISING THE SCHOOL o Making the formal school less rigid | o The rigidity of the formal school in terms of the school hours and the school calender is a deterrent to the enrolment and | i) Shortening and staggering of school hours, particularly for girls and working children.

ii) Flexible timings of the school and matching the school |

* The CWDS document states that even 3 kms. is a distance that makes parents apprehensive of sending girls in this age group to schools.

o Involvement of Village Education Committees formalising the school.

retention of girls involved in acti-activities within and outside the home.

o The rigidity of the curricula and the formal learning environ-ment discourages children from the school.

o Children who shift place of residence during seasonal migration cannot avail of formal schooling.

calender with the local agricultural seasons and cultural festivals would be necessary.

iii) Recruit `para-teachers' (e.g., Shiksha Karmis) from within the habitation to organise `para-schools' (linked to the Primary/Middle School), thereby enabling the school to 'reach out'*

iv) In the context of the above, local educational needs will have to be identified. The Educational Complex and the Village Education Committees will be in the best position to decide how to effectively `open up the school', to recruit `para-teachers' and to identify teachers who can be persuaded to help in this process*

v) To meet the needs of working children, drop- outs, children of

seasonal migrants,
street children etc.,
creative and non-
formal methods,
e.g. the ECCE
approach,
should be designed.

* See the chapter on Universalisation of Elementary Education for details regarding `par teachers'.

		vi) Legal measures be adopted to make employers send their child workers to schools to be especially set up for the purpose*.
VI. OTHER MEASURES TO ATTRACT GIRLS TO SCHOOLS	o Girls engaged in wage labour may require `opportunity cost' in order to be able to attend school regularly.	i) Provide scholarships to deserving girls from under-privileged groups. ii) Provide uniforms, textbooks etc. to all girls.
	o Older girls and their parents are often uncomfortable with male teachers.	iii) Increase the number of women teachers. iv) Complaints regarding sexual abuse of girls in school should be taken seriously.
VII. SECONDARY and Higher SECONDARY SCHOOLS o Better transport facilities. o Increase in the number of schools	o Poor transport facilities, parti- cularly in rural areas, contribute to inaccessibility of schools. This is especially true for girls who are discour- aged, to use the bicycle or return late in the evening.	i) Educational Complexes should mobilise, on rental, public bus transport facility or private transport (tempo, mini buses, rickshaws, etc.). Rental should be paid by the parents. Bus timings in rural areas should be coordinated, as far as possible, with school hours. This will benefit

for girls.

o Parents are often

students as well as
teachers. Innovative
methods need to be
evolved to

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* In the view of the Committee the practice of child labour is a product of the inequitous economic system and should be discontinued. However, as long as the practice continues these children cannot be denied the basic right to education.

o Residential
facilities
for girls
near Seco-
ndary and
Higher
Secondary
Schools.

hesitant to educate
older girl children
if schools are co-
educational or
teachers are male.   `

o Some parents may
be prepared to send
girls for schooling
if hostel facili-
ties are avail-
lable. The element
of security is
important.

o Women teachers will
find it convenient,
if hostel faci-
lities are
available.

enable girl children
to attend schools at
greater distances. (A
suggestion of having
`school mothers' as
escorts has been made
in the CWDS document)

ii) Increase the number
of single sex schools.
The possiblity of
having two shifts in a
school, one for girls
and the other for boys
can be explored.

iii) Increase the number
of women teachers in
co-educational schools
and in general.

iv) Hostel facilities must
be made available for
girls at all levels
and women teachers (with
one woman teacher as
warden). Existing
accommodation in a
village/town can be
hired for this purpose
to increase the
facility at minimum
cost. Free residen-
tial facility should be
made available for SC,

		ST and other under-privileged groups.
VIII. HIGHER EDUCATION	o There is need to expand facilities for higher education, especially in subject streams and geographical regions where the representation of women is poor.	i) Increase in facilities for higher education for women, particularly in the technical professions, in streams and regions reflecting gender disparity with respect to the representation of women.
o Increasing opportunities for women in higher and professional education.	o Special incentives such as scholarships, will encourage women to enter streams such as medicine, veterinary sciences, engineering, law etc.	ii) Scholarships should be given to encourage women to enter non-traditional', high technology courses.
o Incentives for women to pursue further studies, especially in areas that are `non-traditional'	o Women from poorer families will require freeships, free textbooks, and other such incentives to pursue their studies.	iii) Special financial incentives in the form of freeships, free textbooks etc. should be provided for women from under-privileged sections.
	o Creches, hostels and such other support services will enable women to continue their education.	iv) Creches and hostel facilities should be provided to facilitatae women to continue education.
		v) Relaxation of age-limit and the possibility of continuing education and re-entry into the mainstream, after a break, especially for women who have left

studies due to various reasons (see provision for multiple-entry and exit points, as envisaged for Secondary and Higher Education).

d) Regional Disparities

4.1.16 In addition to state-level disparities in education, district and block-level disparities are also critical dimensions of planning and resource allocation in education. It is observed that districts with the lowest rural female literacy rates, also report poor participation of girls in primary schools. There are 123 districts where the enrolment ratio for girls in primary schools is less than 50% and literacy rate are below 10%. (See Table 2); 87% of these districts are concentrated in the five States of Andhra Pradesh, Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. This dimension has not been taken into account in the strategies enunciated by the POA.

Recommendations@

i) The issue of regional disparities needs to be incorporated into the operational design for universalising girls' access to elementary education.

ii) Any effective strategy for raising the educational status of women in India would have to give priority to the educationally backward districts.

iii) Educational planning at the level of Educational Complexes will depend on block-level or sub-block-level profiles. These profiles should be based on micro-level information collected from habitations/villages. Teachers, Anganwadi workers, other village-level functionaries and representatives of poor women and other community level organisations should be involved in making such information available.

iv) Decentralised and participative mode of planning and management offers an effective basis for responding to the challenge of regional disparities in education, including girls' education. Diverse strategies and disaggregated time-frames, worked out locally, constitute the twin instrumentalities to achieve the goal of universalisation.

@ These terms have also been dealt with in general terms in the chapter on Decentralisation and Participative Management'.

TABLE 2

Distribution of Districts Having Combined for all levels) Gross
Enrolment Ratios for Girls Less Than 50 Per cent and Rural Female
Literacy Rates Less Than 10 Per Cent

States	Number of Districts
Andhra Pradesh	8
Arunachal Pradesh	4
Bihar	14
Haryana	1
Jammu & Kashmir	8
Karnataka	1
Madhya Pradesh	29
Orissa	2
Rajasthan	25
Uttar Pradesh	31
TOTAL	123

Note: Computed from figures provided in GOI/MHRD, 1989, Report of the Working Group on Early Childhood Education and Elementary Education Set Up for Formulation of Eighth Five Year Plan and Census of India, 1981.

Source: Kurrien, J., October, 1990.

Content of Education and the Gender Bias
a) The Curriculum

4.1.17 Serious thought needs to be given to the restructuring of the curriculum so that the objective of women's equality in education is facilitated. While there can be a women's component in the curriculum to begin with, the larger goal should be to bring a gender perspective into the entire curriculum, whatever, be the latter's components. The POA however does not reflect such an approach. There is no reference to women or gender in the entire chapter on 'Content and Process of School Education', except for a mention that 'Equality of Sexes' is to be one among the ten core curriculum areas (Para 6). While the

chapter on Education for Women's Equality', mentions the 'incorporation of values commensurate with the new status of women' in the core curriculum it does not present any framework reflecting a gender perspective.

4.1.18 The POA however, recommends that the NCERT Women's Cell will be 'given the responsibility for preparing the component of the core curriculum relating to women's equality' (Para 5g). The POA also mentions that this Cell should 'accelerate its work of eliminating sexist bias and sex stereo-types from school textbooks'. In the view of the Committee, a gender perspective in the content of education means more than the elimination of sexist bias and sex stereo-types' from text-books. A study of NCERT text-books commissioned by the Review Committee showed a distinct gender bias, a greater visibility of male as compared to female characters, portrayal of women as passive and mainly in domestic roles and men in positions of power and authority. The study also observes that Such textbook examples cannot be viewed in isolation of the larger context of social reality which gives rise to such stereotypes. Indeed, the mere creation of a Women's Cell in NCERT does not necessarily imply that gender bias will be removed.

4.1.19 The task of bringing a gender perspective into the curriculum is a complex one and requires research input, discussion and debate. Some suggestions made by CWDS in 1985, need to be deliberated upon. These recommendations are modified and given below:

Recommendation

The curriculum in schools should include :

- Increase in the visibility of women and projection of a positive image of the role of women in history, their contribution to society in general and the Indian context in particular. For instance, social history should project the contribution that women have made in the national movement. All such issues should be carefully incorporated in the training and orientation of teachers, educators and administrators.

- Special efforts should be made to strengthen mathematics and science education among girls. Girls' schools should give greater importance to mathematics and science than at present.

- Undifferentiated curriculum for boys and girls.

- Elimination of negative stereotypes and biological and social concepts which have a sexist bias. This has been dealt with in greater detail in the Section that follows.

- Outmoded traditions and myths that hinder positive development of women and their role in national life should be objectively discussed in the classroom in a gender perspective. Similarly, the portrayal of women in our epics and mythology needs to be critically examined in the classroom.

- Basic legal information including protective laws regarding women and children and extracts from the Constitution to make the children aware of the fundamental rights and other basic concepts therein.

- Specific measures to improve the participation of girls in physical training and sports should be undertaken.

b) Stereotypes in Textbooks and the 'Hidden Curriculum'

4.1.20 Given the everyday social reality in which children continuously imbibe gender-biased messages, the school further reinforces these in terms of both the 'hidden curriculum, (teachers' attitudes, daily activities, peer influence, etc.) and the 'official curriculum'. Examples of the 'hidden curriculum' in a primary school

(a) "Boys, you must study, the girls will get, married anyway."

(b) "Chattan (a boy), if you continue to trouble, you will be made to sit with the girls".

The above examples reflect a gender-bias rooted within the attitudes and behaviour of teachers (this will be dealt within the Section on the training of teachers).

4.1.21 Several examples of sex stereo-types' even in :recent NCERT textbooks have been reported. Reflecting on the image of women that the education system is projecting through textbooks, the Shramshakti Report observes that girls and women are rarely portrayed in roles associated with economic activity. By and large, even mere references to women are minimal, and poor women projected even less. Although the POA affirmatively states that the NCERT Women's Cell should 'take active help of all persons', the role of Women's Studies Centres and women activist groups in eliminating sexist bias in school textbooks is left vague and undefined. Many educational institutes are not even aware of their possible role.

4.1.22 It is important to introduce a note of caution regarding recommendations that give institutions a blanket 'responsibility for preparing the component of the core curriculum relating to women's equality (POA, Para 5 g). It would be useful to review the work done by such institutions in the area of elimination of gender bias in text-books. In 1982, for instance, NCERT designed Teacher's Handbooks entitled Status of Women Through Curriculum'. An example from one handbook given in Table III suggests that mere mechanical changes infact reinforce existing gender roles in 'sophiscated' ways.

TABLE   3

MIDDLE SCHOOL : CLASS VI-VII
STATUS OF WOMEN THROUGH CURRICULUM ELEMENTARY TEACHERS'
HANDBOOK NCERT
1982 p.66(10)

Value	Topic	Ideas to be Projected	How to Project it
Basic know-ledge & skill is equally required and applied by men and women	Motion, Force & Pressure	The laws of motion, force & pressure are equally applicable to all. the basic knowledge & skills pertaining to these principles are required by both men and women in their daily life......	Some examples@ of motion, force and pressure in the household are listed below : o Motion : Churning of milk by churner is an example in which the hands move in linear motion whereas the wheel moves in rotational motion. In sewing machine the rotational motion of wheel is converted to translatory motion of sewing-needle. Grinding-wheel & the swing (jhoola) are examples of vibratio-nal motion. o Force : For frictio-nal force the examples of scrubbing, striking match, sharpening knife and cleaning vessels should be cited. o Pressure: Cooking by pressure, use of knife & cutters, syringe,

handpump, cycle pump
& grinding stone, etc.,
should be used as
illustrations.

@ These examples are from household work traditionally associated with women. The guide book could as well as have given alternative examples concerning work common to man and women.

Recommendations

i) It is recommended that all school text-books, both by NCERT/SCERTs and other publishers, be reviewed to eliminate the invisibility of women and gender stereotypes, and also for the proper incorporation of a women's perspective in the teaching of all subjects. This review should also cover all the supplementary reading material and library books being recommended for schools, particularly those supplied by operation Blackboard.

ii) As an immediate step such an exercise should seek the active participation of different groups and individuals, such as Women's Studies experts, Women's Studies Centres of the universities and Research Institutes, and women's organisations working at grass- root level, rather than exclusive dependence on NCERT/SCERTs.

iii) A similar exercise should be undertaken for the university curriculum and text-books in all disciplines. This should be initiated by University-based Women's Studies Centres and individuals already working on these issues.

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c) The Role of the Media

4.1.23 The powerful role that the media plays in reflecting and perpetuating dominant societal values, such as gender inequality, is well known. Hence efforts by the education system to incorporate a gender perspective and promote women's equality need to be accompanied by intervention in the domain of media as well. To the extent that the media continues to project women in subordinate and exploited roles, and ignores their very. presence as well as contribution towards economic activity, . it 'will be difficult to achieve values of gender equality through the educational system alone. While the POA states that " ... clear policy guidelines should be developed by radio and TV in 1986-87 and measures taken to persuade films and other media on these lines" (Para 5e), it fails to establish media's crucial link with the larger objective of creating gender equality. Although it is not known that such guidelines were ever prepared in accordance with the suggestions of the POA, no impact is visible in the projected images of women through the media.

Recommendations

i) All media channels, both in the public and private sectors should take serious note of the crucial role that the media can play in promoting gender equality and empowerment of women as enunciated in NPE.

ii) In the specific context of gender, advertisements displaying women as sex symbols and using them for sales promotion should be seriously dealt with.

iii) Media should project positive images of women. Women should also be shown in professional roles, for instance as doctors, engineers and scientists, so that they can serve as role models.

iv) An awareness of the need for women's education, especially elementary and vocational education, should also be spread.

v) The Information and Broadcasting Ministry should evolve a network to monitor the projection of women, and evolve a code of ethics with regard to the presentation of women in all types of media (similar recommendations are also made in the Shramshakti Report, 1988)

vi) An Inter-Ministerial Committee, comprising of representatives of the Departments of Education, Women and Child Development, Culture, and Information & Broadcasting, should be constituted to monitor and ensure that the policy guidelines emerging from NPE and POA are being supported, rather than being violated, by the media, particularly Radio and TV. Representatives of women's organisations and Women's Study Centres may also be included in this Committee.

vii) A National Policy on Communication, giving a gender perspective to all forms and processes of mass communication, should be formulated urgently. The National commission on women should play an active role in this exercise.

Vocational Education

4.1.24 Even though the policy makes a positive statement on the elimination of 'sex stereotyping in vocational and professional courses and to promote women's participation in non-traditional occupations ... ', the POA in fact makes a negative statement in this regard. It states that....... while girls will continue to receive preferential treatment in trades/occupations, for which they are particularly well-suited (e.g. teaching and nursing), this will not become a barrier for their participation in technical and professional courses of higher level .... POA, para 18(i)].

4.1.25 In practice it has been observed that options for scientific and technical professions are rarely available to women. Existing polytechnics for women offer only traditional women-oriented' courses, such as fashion designing, cookery, nursery

teachers' training, beautician, interior decoration, steno-typing etc., thus reinforcing the sex-stenotypes.

4.1.26 Given the present low educational status of women, and high drop-out rates, it is desirable to develop a wide range of vocational courses at the 'Plus Class VIII' (i.e. secondary stage) level so that such opportunities would be available to a larger segment of girls than would be the case if such courses were available only at +2 level. Such courses should be linked with placement opportunities and entrepreneurship.

4.1.27 In this context, POA's emphasis on exposing girls to a variety of vocational training activities' at each stage in school education itself, is particularly welcome. POA also suggested that skill development amongst girls and women would be a continuous process starting from the NFE and AE centres and carried further by the Continuing Education Centres. There is no evidence that these positive aspects of NPE for promoting gender equality have been implemented during the post policy period.

Recommendations

i) Vocational Training for women should be planned and implemented at the State level, partly through the proposed Educational Complexes.

ii) Vocational Training for women should be encouraged in non- traditional occupations, following an undifferentiated curriculum.

iii) Concerted efforts should be made towards discouraging the existing biases in vocational courses for women.

iv) Vocational training courses for girls at Plus Class VIII' level (i.e.secondary stage) in order to expand the* social base of vocational education. Opportunities should be especially given to dropouts after middle school.

v) Diversification of courses and trades to match with the job potential at local level is important. For encouraging access to technical or craft-and-skill- training institutions, increased stipends, fellowships, and a system of placement is recommended. There should be at least one women's polytechnic in each District.

Training of Teachers and Other Educational Personnel

4.1.28 Teachers, themselves being products of society, bring with them gender-biased stereo-types and images which they communicate (often unconsciously) to students within and outside the classroom. An awareness of gender discrimination, stereotypes and biases, both in the 'official' and 'hidden' curriculum, can help the teacher to consciously attempt to practise gender equality within the constraints of the class-room situation. In this context the Committee has in. mind the concrete teaching context where teachers (especially in elementary rural schools), working under trying conditions, are

extremely vulnerable, have little autonomy and are bound by a rigid curriculum. However, since the pedagogical relationship does give the teacher a position of authority vis-a-vis the student in the class- room, and the fact that teachers can and do wield influence over children and their parents, gives rise to possibilities for intervention in education. Although this interventionist potential of teacher, as also of decision-makers and educational administrators, is implied in NPE/POA, it needs to be explicitly stated and incorporated in strategies. It is here that the training of teachers becomes crucial. In the context of gender, training implies a re-orientation of the content and practice of teaching towards a perspective of women's equality. This pertains not only to the 'official' curriculum but also includes an understanding of how gender bias is communicated and reinforced within the school through the 'hidden' curriculum, an aspect not mentioned by the POA.

4.1.29 The implementation of measures suggested by POA (Paras 5b, c & h) regarding training and sensitisation of educational personnel at all levels has hardly received attention so far. While there is no evidence that NIEPA has taken any step in organising programmes for administrators and planners on women's issues, the work reportedly being undertaken by NCERT/SCERTs/DIETs has yet to become visible. This lack of priority may itself reflect a gender bias.

4.1.30 Training and sensitisation has been viewed by the POA as a highly centralised activity, with too much expectation from NCERT's Women's Cell, NIEPA and UGC. No concrete participatory role has been envisaged for the Women's Study Centres or women's organisations in decentralising training, sensitisation and curriculum evaluation programmes.

Recommendations

i) Teacher training programmes in general require a critical evaluation and re-orientation within which the incorporation of the women's perspective should be a key dimension. This would include sensitivity to women's issues and awareness of the problems in the education of girls.

ii) Teacher educators, Women's Studies researchers in universities and institutes including those in the Women's Cells, as well as representatives of women's organisations and development groups, and not just a handful of Central or State level agencies, should be involved in this process of evaluation and re- orientation of teacher training programmes.

iii) The 'core' elements of a restructured teachers' training programme should emerge from the above exercises. Subsequently at the level of the State (or region), the DIETs and Educational Complexes along with educational institutions, Women's Study Centres, educators and grass root-level organisations should participate in evolving the actual curriculum of the teacher's training programme. This kind of decentralisation in

curriculum planning, and later even in its implementation, allows for greater flexibility and meaningfulness.

iv) Teachers' training institutes should adopt the revised curriculum so that all teacher trainees, male and female, are exposed to the restructured training programme.

v) A separate training and sensitisation programme for the teacher educators would have to be undertaken on a priority basis.

vi) Simultaneously in-service training programmes should be conducted to sensitize teachers who are already in schools. The DIETs in consultation with the Education Complexes should take the initiative in organising these in-service programmes.

vii) The actual form that the in-service training programmes will take, should be left to the DIETs in consultation with the Education Complexes. For instance, one school can serve as the 'training school' where teachers' training will include practice teaching. The internship model' referred to elsewhere can be explored.

viii) Administrators and planners in education (including Heads of institutions) can be sensitised to women's issues through the diffusion of information, holding of workshops and frequent interaction with resource persons in the area of Women's Studies. This is particularly crucial when exercises involving decision making in education are undertaken.

Research & Development of Women's Studies

4.1.31 Recent developments in research and the teaching of Women's Studies offer a method and an instrument in transforming the role of the educational system in active promotion of new values.

4.1.32 Although the POA refers to four dimensions of the Women's Studies programme in terms of teaching, research, training and extension (Para 6), it essentially views it in the limited context of higher education and specific non-formal approaches to women's development. Research on Women's Studies makes available rich sources of data that can be incorporated into the very structure and process of education. Such research can be a major input in incorporating women's issues, concerns and perspectives at all stages of education. Concrete inputs should be in the areas of curriculum development and training and sensitisation of teachers and other educational personnel. Data collection and monitoring, particularly on the progress of girls' education, as part of Women's Studies, can provide a continuous link between research and educational practice. Women's Study Centres should involve women's organizations in their programmes so that concrete issues affecting the lives of women can be discussed, researched and analysed within the centres. This can pave the way for action research as well.

Recommendations

i) Women's Study Centres should be organised in all the Universities and recognised social science- research institutions within the Eighth Plan.

ii) Women's Studies research findings should be incorporated into curriculum revision and development, and teacher training programmes at all levels of education. At the university level, representatives of the Women's Study Centres should be included in all official bodies concerned with curriculum and syllabus development in all disciplines.

iii) A close linkage in the work of the University- based Women's Study Centres and Educational Complexes should be encouraged with a view to widen participation, decentralise and diversify training, sensitisation and curriculum evaluation. This-will also enrich the work of the Women's Study Centres themselves through feedback from the field. The Women's Study Centres of a university should play a key role in introducing a gender perspective in school education within the Education Complexes of the region that they serve.

Women's Studies Courses

4.1.33 Although the POA refers to the incorporation of issues relating to women's status and role in the foundation course proposed to be introduced by University Grants Commission for all under- graduate students' and incorporation of the women's dimension into courses in different disciplines' (Para 6), it is not known what steps have been taken to concretise these recommendations.

Recommendations

i) The foundation courses introduced by the UGC should be reviewed and revised to incorporate women's dimensions. This should be part of the students' overall assessment at the undergraduate level. The course should be carefully structured with the active involvement of Women's Studies research and development organisations and women's organisations working at the grass-roots level. Adequate representation of women's issues, from all sections of society, their concerns and living conditions should be incorporated.

ii) Existing courses should also incorporate the gender perspective, as suggested in the POA. This must apply to all courses, including science and technology, medicine, law, agriculture and veterinary sciences.

iii) All issues related to curricular revision and development on Women's Studies should be extended to the orientation of teachers as well.

Extension services

4.1.34. Developing an adequate gender perspective and building it into the entire educational system would also require the implementation of women's programmes such as legal literacy, awareness building etc., as also suggested in the POA (Para 10). For this purpose., special measures are needed in both universities and colleges.

Recommendations

i) Women's Development Centres, such as the ones existing in some University Colleges should be extended to all colleges and higher educational institutions.

ii) These Centres should also be given funds to conduct awareness workshops/seminars etc. at both the school and community levels.

Representation of Women in the Educational hierarchy

4.1.35 The available data show that there are fewer women teachers at all levels of education, compared to men. Also, the number of women teachers declines as the level of education increases. The POA recommends that women may be given preference in recruitment of teachers up to school level' (Para 5f), but it does not look into the problems of accommodation, security, child care etc. which constrain women teachers, particularly in rural areas. The experience of Operation Blackboard shows that the emphasis on posting at least one woman teacher was only partially successful as the newly posted women teachers often sought transfer out of the rural areas due to lack of accommodation, security and creche facilities.

4.1.36 While much has been said of the need to empower women through awareness programmes in the POA, little attention has been given to the fact that few women are represented in educational decision-making bodies.

Recommendations

i) The proportion of women teachers in Primary, Middle and High Schools should be increased to at least 50 per cent. For the success of this measure it would be desirable if the woman teacher is selected from within or near the habitation where she is to teach. In case a local woman teacher cannot be found, it would then be necessary to -

a) provide living quarters with certain minimum amenities to women teachers on a priority basis,

b) locate the living quarters within the habitation in order to ensure security, and

c) wherever possible, provide living quarters to all women functionaries, apart from women teachers, in close proximity to each other.

ii) While an increasing number of women should be recruited at different levels of education, there should be promotional avenues also within the educational hierarchy. Special measures would have to be devised to ensure that woman are fairly represented in decision-making bodies in teaching and educational administration.

iii) special provisions to take care of women's needs should be built into the recruitment and service procedures, evaluation criteria, guidelines for promotion, etc. An example of such procedures is association of women in Selection Committees and Departmental Promotions Committees. This will ensure that woman are not prevented by socio-cultural factors from rising in educational hierarchy.

iv) women and men in positions of planning and decision-making within the educational hierarchy and public administration should be sensitised to women's issues so as to adequately discharge their leadership roles.

Empowerment of Women

4.1.37 The parameters for the empowerment of women, outlined in the POA (Para 4), acknowledge some of the factors that lie outside the education sector, and have a critical bearing on women's status. Here, the POA appears to have taken cognizance of the patriarchal system which continues to constrain the role of women in society and their participation in education. However, the POA seems to be guided by the policy statement that education can be used as an agent of basic change in the status of woman'. Hence, it formulates a set of measures within the narrow framework of education (training, re-designing curriculum, preference in teacher recruitment etc.) to achieve the parameters for empowering women (Para 5). It is to the credit of the Ministry therefore, that, in April 1989, it launched Mahila Samakhya, a programme for empowering rural poor women. This programme makes an attempt to address the factors that lie outside the education sector. It assumes that the empowered group of women in a village will try and seek solutions to their problems by initiating action, and pressuring sic the block and district structure to respond and thereby lead to, among other things, enhanced women's participation in education'.

4.1.38 It must be recognised however, that the Mahila Samakhya programme is still in its infancy (i.e., still only in parts of Gujarat, U.P. and Karnataka). While reports from Karnataka are encouraging, the Gujarat and U.P. units need to be observed and evaluated objectively over a longer period of time.

4.1.39 What emerges from the Mahila Samakhya programme is the importance of local level initiative by the women's groups and the need to guard against centralised planning mode. In this context, it may be noted that, unlike in other Centrally Sponsored Schemes,

Mahila Samakhya has recently taken a step towards setting up an autonomous state-level Board for management.

4.1.40 The POA concept of women's empowerment has the following

4.1.40 The POA concept of women's empowerment has the following two lacunae -

a) It presents the concept of empowerment of women as a process confined to women only and to be organised in isolation of men in the same community.

b) It does not 'refer to the critical role of raising, through education, awareness regarding the issues of women's health, including reproductive health and sexuality in the larger dimension of empowerment of women.

Recommendations

i) Develop Mahila Samakhya in a decentralised and participative mode of management, with the decision-making powers devolved to the district or block-level, and ultimately to the poor women's groups themselves.

ii) Implement Mahila Samakhya in such a way as to establish organic linkages with the ECCE programme and the efforts towards universalisation of girls' elementary educatin.

iii) Build a component of closely working with men in the community also, as part of the process of women's empowerment.

iv) Along with the means for economic independence for women, the issues of women's health, including reproductive health and sexuality, should be included in the parameters for empowerment of women.

Adult Education

4.1.41. The POA envisaged a mass-scale adult education programme to 'Eradicate illiteracy amongst women by 19951. Even at the time of mounting the Naional Literacy Mission for the purpose, awareness clearly was there that literacy might not be felt as a priority need by the women, as reflected by para 14 of POA which says "As majority of women in this age group (i.e. 15-35) are workers literacy may not have any relevance for them". Therefore, adult education programme for women should be designed with specific reference to this ground truth.

Recommendations

For imparting adult education to women and thereby empower them, the Mahila Samakhya model should be tried out. (In fact this is being suggested as the basic strategy for adult education programme as a whole).

Resources

4.1.42 Many of the measures suggested here to ensure the success of the policy for giving 'a well-conceived edge' to educaion in favour of women would require a significant increase in allocation of resources in both the Plan and Non-Plan sectors. While a detailed exercise would have to be undertaken, certain guiding principles may be enunciated here.

Recommendations

i) Earmarking 50 per cent of the elementary sector allocation for measures to increase girls, participation and making this allocation non- divertible;

ii) Earmarking a share of all developmental allocations for secondary, vocational and higher education for measures to improve girls' access thereto and improving the quality of education in these sectors;

iii) Special earmarking for girls within the special component plan for Scheduled Castes and Tribal sub-plan.

Management

4.1.43. Unlike what is claimed by POA in Para 3, there is no evidence that any move has been envisaged to 'create dynamic managerial structure to cope with the targets' set out for women's education. The POA seemingly stresses centralisation of planning, co-ordination, monitoring and evaluation, as is evident from the following statements (Para 19) :

- "Women's Cell in the NCERT will be revived and strengthened";

- "NIEPA and Directorate of Adult Education will have strong cells to plan and administer women's training programmes"; and

- "Women's Cell in the UGC will be strengthened........"

4.1.44 In line with this centralised modality of management, the POA assigns major role to the above-named and other central agencies in training of teachers and NFE/AE

instructors (Para 5 b), preparation of core curriculum component relating to women's equality (Para 5g), sensitisation of educational planners and administrators (Para 5h), formulation of programmes for support services (Para 12), and vocational training (Para 18v). For good measure, the POA makes a passing reference in the last paragraph to the setting up of a Women's Cell at the State level too. Even this reference is left vague as no clear role is assigned to this state level Cell in a management structure where all major initiatives have been concentrated in the central agencies. The POA does not even assign any special role in the training of teachers and NFE/AE instructors on women's issues to DIETs, a centrally-aided district-level network. In the framework of this centralised style of management, the Government of India have also introduced a number of Centrally Sponsored Schemes which have vital relevance to women's education (as to education in general). In the context of this centralised planning and management style, reference to community involvement made in the POA (Para 11) seems incongruous.

Recommendations

i) Continuance of all Centrally Sponsored Schemes relating, in part or in full, to women's education may be treated in terms of the detailed recommendation given by the Committee in regard to Centrally Sponsored Schemes as a whole in the chapter on Decentralisation and Participative Management.

ii) The responsibility for planning, implementing and internal monitoring of all school-based programmes for women's education be handed over to the Educational Complexes in the Panchayati Raj framework. At the institutional level, the Head of the institution (Primary/Middle/Higher Secondary Schools) should be made fully responsible for micro-level planning and ensuring universalisation (not just enrolment) of girls' education and their access to high school or vocational education, according to disaggregated strategies and time- frames.

Section B: Education for the Scheduled Castes, Scheduled Tribes and other educationally backward sections.

NPE/POA Stipulations

4.2.1 NPE has viewed education for equality in two dimensions, namely, removal of disparity and equalisation of educational opportunities'. The strategy advised in regard to the educational development of scheduled castes (para 4.4) is their equalisation with the non-scheduled caste population at all stages and levels of education in all areas and in all the four dimensions, rural male, rural female, urban male and urban female. In the case of scheduled tribes, their equalisation with non-scheduled tribes has not been explicitly so spelt out as a strategy. This is true of the other educationally backward sections also. In the case of minority groups, the policy does not speak of any strategy as such but generally of securing their constitutional guarantees and of their languages and culture. Irrespective of whether they are SCs/STs or those belonging to backward sections, the Policy speaks of a series of administrative measures in terms of incentives, scholarships, remedial coaching, recruitment of teachers, hostel facilities, residential schools etc.

4.2.2 The POA spells out in further detail, the various administrative measures.

Committee's perspective

4.2.3 The concern for removal of disparities in education by State intervention is manifested in the Constitution on considerations of -

* Equality of opportunities (quantitative terms); and equity in terms of social justice.

* Article 46 of the Constitution, providing for social justice in promotion of education reads : "The State shall promote with special care <u>the educational and economic interests of the weaker sections of the people</u>, and, in particular, of the Scheduled Castes and the Scheduled Tribes, <u>and shall protect them from social injustice</u> and all forms of exploitation".

- It is this <u>package</u> for promotion of educational and economic interests which form the basis of the Committee's perspective on education for the Scheduled Castes, tribes and other backward sections.

- The Committee has already brought out in the chapter on Approach that educational development should not be considered autonomously outside the other basic national policies concerning equity, social justice and economic development. This is particularly relevant in regard to programmes designed for the educational development of the Scheduled Castes, Scheduled Tribes and other backward sections. For these disadvantaged sections access to, and retention in, educational system are functions of these policies. Unless they are put in possession of means of production and livelihood through measures such as land reforms; are meaningfully provided the essentials of life such as food, fuel and fodder; and are assured of fair wages for their labour, their

participation in education will be a far cry whatever may be the nature of the educational programmes evolved and implemented for their benefit.

- The Committee would also give a rather broad connotation for the concepts or equality of opportunities and equity in education. "The concept of equality of opportunity in education started with provision for 'equal access'. Later on equal input'was considered necessary for equalising educational opportunities. Today, along with equal access and equal input, equal output' is considered necessary criteria. (sic). The last one calls for measures of protective discrimination in favour of the disadvantaged sections of the society". (Journal of Educational Planning and Administration : April, 1987).

- The Policy, then, should be one of providing equity package of educational and economic measures in terms of protective discrimination in favour of the disadvantaged sections of the society.

- In the opinion of the Committee, while the administrative measures mentioned in NPE/POA are indeed important, basically there is a need for predicating the choice of strategies on the need profiles of different communities. Compilation of need profiles alone would facilitate formulation of disaggregated strategies within practical time-frames.

- Most of the NPE/POA measures are those which have been under implementation even from before the formulation of NPE, in one form or the other. Moreover, many of them are being provided for delivery of education to other sect-ions as well, though the Policy apparently treats them as "attending to the specific needs of those who have been denied equality so far". An impact study of the various measures taken over the years has to be made.

Literacy level

4.2.4 An analysis of the growth rates of literacy levels would be worthwhile (see Table 4 and Fig.1). On the surface, the continuous rise in the literacy rates during 1961-81 period of both SCs and STs may give a hopeful picture. A similar rise can be noticed even amongst SC/ST women, though their absolute levels continue to be dismally low. One can feel further encouraged by the increase in the growth rate of literacy in both the communities by comparing the rates of growth during 1961-71 and 1971-81 periods respectively. A deeper examination of the situation however, reveals that the actual gap between the literacy levels of SCs/STs and those of the non SC/ST population is consistently widening as brought out by figure 1.

Table 4

GROWTH RATES IN LITERACY

Sl. No.	Category	Literacy Rates 1961	1971	(in percent) 1981	Growth Rates 1961-71	1971-81
1.	General	24.00	29.45	36.23	22.72	23.02
2.	SCs (Total)	10.27	14.67	21.38	42.84	45.74
3.	SCs (Women)	-	6.44	10.93	-	69.72
4.	STs (Total)	8.54	11.29	16.35	32.20	44.82
5.	STs (Women)	-	4.85	8.04	-	65.72
6.	All Communities excluding SCs and STs (Total)	27.91	33.80	41.30	21.00	22.19
7.	All Communities excluding SCs and STs (Women)	-	22.25	29.43	-	32.27

[Source: 28th Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1986-87, Government of India - Table Nos. 1 & 4, Chapter IV)
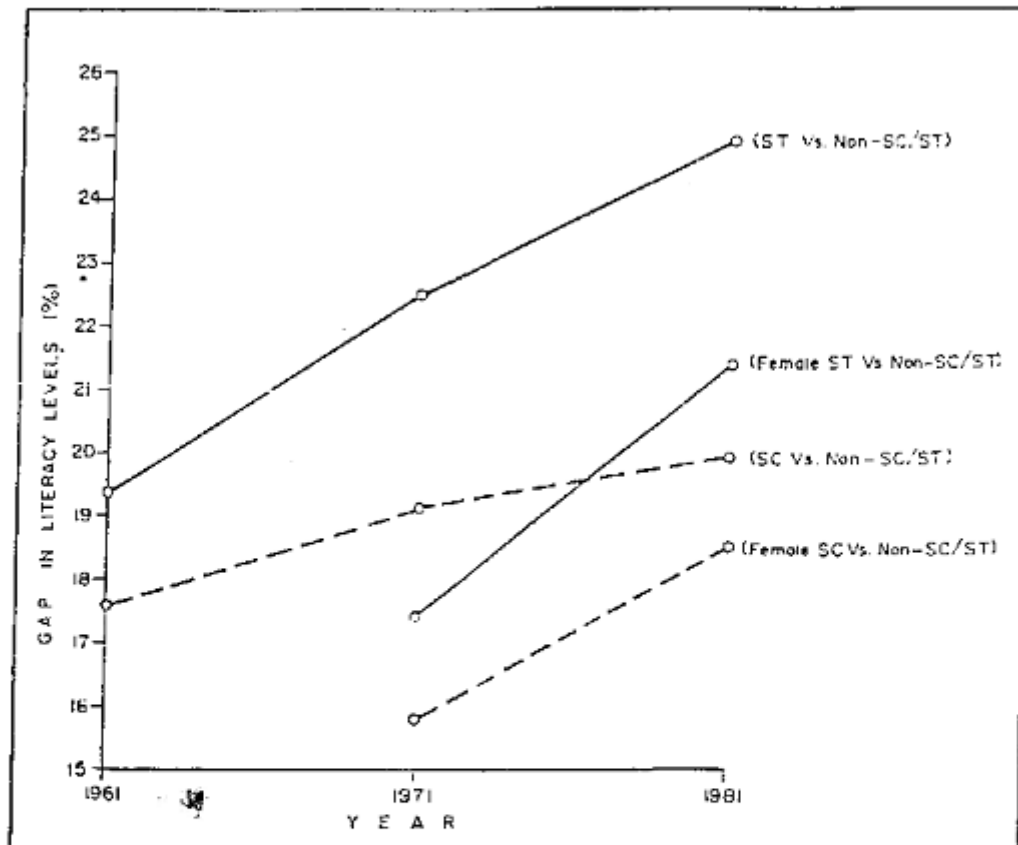
Fig. 1 : Gaps in Literacy Levels (%) Between SC/ST and Non-SC/ST
Communities.

Source : Data taken from the 28th Report of the Commissioner for
Scheduled Castes and Scheduled Tribes, Government of
India, 1986-87.

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It is seen that the literacy percentage among the SCs is low in Andhra Pradesh (17.6%), Bihar (10.4%), Madhya Pradesh (19.0%), Rajasthan (14.0%) and Uttar Pradesh (15.0%), when compared to the all-India Scheduled Castes literacy percentage. However, compared with all communities excluding SCs and STs, the literacy levels of SCs are fairly poor in most States and almost deplorable in the five States listed above. Even in Karnataka and Pondicherry, known as educationally advanced regions, SCs have only half the literacy rates compared to the rest. The literacy rates among STs in comparison with the all-India Scheduled Tribes' literacy percentage is low in Andhra Pradesh (7.8%), Madhya Pradesh (10.7%), Orissa (14.0%), Rajasthan (10.3), West Bengal (13.2%) and Arunachal Pradesh (14.0%). On comparing the ST literacy rates with column 6 it could be observed that these are extremely poor in the above six States, being one-third to one-third to one-fourth (or even less) of the levels achieved by the rest of the communities. In terms of literacy levels of the STs, even the educationally advanced States/UTs present a fairly poor picture, with the literacy levels of the tribal people in Kerala, Karnataka and Maharashtra being less than half of that of the rest.

Female Literacy level: As is evident from Table 4, the literacy levels among SC/ST women are dismal, with the all-India percentage being as low as 10.9% for SCs and only 8.0% for STs. The 28th Report of the Commissioner for Scheduled Castes and Scheduled Tribes makes the following observation: "Even among the different Scheduled Castes and Scheduled Tribes there are significant variations with regard to female literacy. In some of the tribal communities the level of literacy amongst the males and females in the North-East is almost the same but in the case of Rajasthan the tribal women can be said to be still at a preliterate level with just 1.2% amongst them being literate. Similarly the position of literacy amongst females belonging to Scheduled Castes in Bihar is abysmally low (2.5%). The low literacy generally for SCs and STs in certain States and other Scheduled Castes and Scheduled Tribes women in particular shows that the members of SCs and STs in these areas have not only received much benefit from educational inputs but also continue to face deprivation of the most serious kind" [p.294]

Disagrregated Literacy Levels: The global figures of literacy rates that are normally reported hide more than they reveal. The Office of the Registrar General of India has published individual caste-wise/tribe-wise data for literacy rates for certain States/UTs on the basis of the 1981 Census. Based upon these data, special Tables constructed by the 28th Report of the Commissioner for Scheduled Castes and Scheduled Tribes show the wide gaps that characterise different casts or tribes even within the same State/UT. These Tables are reproduced here (Tables

5 and 6). It may be observed that the literacy rate for certain castes/tribes falls even below 1% level. These data emphasis the need for adopting disaggregated strategies based upon micro-economic and cultural information, with both planning and implementation being decentralised to the level of Educational Complexes and individual schools and Village Education Committees.

Table 5

GAPS IN LITERACY RATES AMONG DIFFERENT SC COMMUNITIES

Sl. No.	State/UT	Non-SC/ ST Commu- nities	Sche- duled Castes	Name of the SC having maximum literacy rate	Name of the SC having minimum literacy rate
1.	Haryana	30.90	20.14	Pasi (33.6)	Deha, Dheya, Dhea (2.3)
2.	Himachal Pradesh	47.37	31.50	Kamoh,Dagoli (61.9)	Barar, Burar, Bear (14.4)
3.	Jammu & Kashmir	27.05	22.44	Basith (29.1)	Dhyar (11.6)
4.	Manipur	42.11	33.63	Dhupi, Dhobi (58.1)	Yaithibi (21.2)
5.	Meghalaya	44.97	25.78	Kaibaratta, Jaliya (59.2)	Bansphor (7.1)
6.	Orissa	44.22	22.41	Mediga (50.2)	Mundapotta (3.9)
7.	Sikkim	34.84	28.06	Damai (Nepali) (31.0)	Sarki (Nepali) (16.6)
8.	Tripura	53.93	33.89	Mahisyadas (42.0)	Chamar, Muchi (2.1)
9.	Arunachal Pradesh	36.39	37.14	Sutradhar (48.0)	Dhupi, Dhobi (19.4)
10.	Chandigarh	69.33	37.07	Ad Dharmi (66.2)	Sirkiband (0.6)
11.	Dadra Nagar Haveli	64.41	51.20	Mahyavanshi,Dhed (61.1)	Chamar (40.5)
12.	Delhi	66.44	39.30	Adi-Dharmai (70.0)	Singiwala, Kalbelia (3.1)

| 13. | Goa, Daman & Diu | 57.38 | 38.38 | Mahyavanshi (59.2) | Mahar (25.6) |
| 14. | Pondicherry | 60.32 | 32.36 | Valluvan (49.2) | Vetan (3.9) |

Notes :1. This table is based upon special tables published by the office of the Registrar General, Govt. of India for SCs of 15 States/UTs from 1981 Census.

2. Cols. 3 and 4 are taken from Selected Statistics on Scheduled Castes, Ministry of Home Affairs, June, 1986.

3. Communities having population of less then 100 have been ignored for the purpose of this Table. Hence Mizoram has been omitted.

[Source: 28th Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1986-87, Govt. of India, Table 2, Chapter IV]

Table 6

CAPS IN LITERACY RATES AMONG DIFFERENT ST COMMUNITIES

Sl. No.	State/UT	Non-SC/ ST Commu- nities	Sche- duled Tribes	Name of the ST having maximum literacy rate	Name of the ST having minimum literacy rate
1.	Himachal Pradesh	47.37	25.93	Bhot, Bodh (56.3)	Gujjar (18.9)
2.	Manipur	42.11	39.74	Koirao (64.2)	Maram (14.6)
3.	Meghalaya	44.97	31.55	Naga tribes (81.9)	Mikir (13.1)
4.	Orissa	44.22	13.96	Kulis (36.4)	Mankirdia (1.1)
5.	Sikkim	34.84	33.13	Bhutia (32.6)	Lepcha (30.2)

6.	Tripura	53.31	23.07	Lushai (68.1)	Munda, Kaur (8.0)
7.	A & N Islands	54.31	31.11	Nicobarese (31.5)	Shompen (2.7)
8.	Arunachal Pradesh	36.39	14.04	Khamiyang (57.9)	Panchen Monpa (0.8)
9.	Dadra & Nagar Haveli	64.41	16.86	Dhodia (38.8)	Kholi Dhor including Kolgha (8.7)
10.	Goa Daman Diu	57.38	26.48	Siddi (40.6)	Varli (12.5)
11.	Mizoram	63.53	59.63	Mizo tribes (67.8)	Chakma (14.7)

Note: 1. This Table is based upon special tables published by the Office of the Registrar General, Government of India for STs of 11 States/UTs from 1981 Census.

2. Cols. 3 & 4 are taken from Selected Statistics on Scheduled Tribes, Ministry of Home Affairs, June, 1984.

3. Communities having population of less than 100 have been ignored for the purpose of this Table.

[Source: 28th Report of the Commissioner for Scheduled Castes Scheduled Tribes, 1986-87, Government of India, Table 3, Chapter IV].

Enrolment at different stages: Although the enrolment figures at the primary stage, particularly in rural and tribal areas do not necessarily reflect the reality and are often inflated, these can be taken as some kind of rough indicators. The enrolment ratios of SC and ST children in the primary schools are reported to have reached the level of 95.5% and 91.6% respectively in 1985-86, compared to 93.4% for general population. Inspite of the tendency to inflate enrolment figures, it is noteworthy that there are wide gaps in enrolment ratios in different States/UTs, with the levels falling down to 55-65% (30-40% in the case of girls) in some States. Available data on district-wise disparities in the enrolment ratios call for the need to undertake Local Area Planning' in order to tackle this situation.

Table 7 shows that the relative percentage of SC and ST children enrolled at different school stages falls more sharply than that of the rest of the communities. Although the enrolment at the primary stage of SC and ST children reflects their percentage

representation in the population, this comes down at the High School Stage to 11.4% of the total enrolment for the SC children and only 3.9% of the total enrolment for the ST children.

Table 7

ENROLMENT AT VARIOUS STAGES IN SCHOOL (1989)

(in lakhs)

State	Total No.of Students	SC No.	Students %	ST No.	Students %
Primary/junior Basic (Class I-V)	957.0	152.02	15.9	75.96	7.9
Middle/Senior Basic (Class VI-VIII)	309.0	38.40	12.4	15.03	4.9
High/Post Basic (Class IX and above)	185.0	21.02	11.4	7.16	3.9

[Source: Compiled from Selected Educational Statistics, 1988-89, Ministry of Human Resource Development, Government of India).

School Drop-out Rates: Table 8 shows that rates of SC & ST- school children are higher than those of the rest of the communities at all the three stages, i.e. Primary, Middle and High School.

Table 8
DROP-OUT RATES (1986-87)

(in percentage)

S.No.	Level	Non-SC/ST	SC	ST
1.	Class I to V	48.9	50.8	66.1
2.	Class VI to VIII	60.7	69.2	80.2
3.	Class IX to X	73.8	79.9	87.3

[Source: Agenda Item No.18, Education for SCs/STs/ Minorities and other Disadvantaged Sections, Conference of Central Advisory Board of Education, Scheduled for November, 1990, New Delhi, M/o HRD, Government of India].

Enrolment in Higher/Technical Education: Data Presented in Table 9 below show that:

- the percentage of SC/ST students out of total enrolment in various higher/technical education courses is significantly lower than their respective representation in population;

- the percentage of SC/ST students in total enrolment falls with advance in the stage of education.

- at the undergraduate level, the proportion ;of SC/ST students in total enrolment is two to three time lower in science and commerce streams than in arts courses; and

- the percentage of SC/ST students out of total enrolment has not increased in respect of many courses during the period from 1978-79 to 1988-89. (In fact, this has often come down).

Table 9

PERCENTAGE OF SCs/STs OUT OF TOTAL ENROLMENT IN
DIFFERENT COURSES OF HIGHER/TECHNICAL EDUCATION

S. No.	Course	S C (%)		ST (%)	
		1978-79	1988-89	1978-79	1988-89
Undergraduate					
1.	Arts	9.9	9.8	2.5	2.9
2.	Science	4.4	5.8	0.8	0.8
3.	Commerce	4.8	4.4	1.3	1.0
Post-graduate					
4.	Arts	10.5	10.1	1.9	2.0
5.	Science	2.9	4.9	0.8	0.8
6.	Commerce	5.4	6.5	1.3	1.2
Education					
7.	Undergraduate	6.2	-	1.3	-
8.	Postgraduate	3.4	-	0.7	-
Engineering/Technology					
9.	Undergraduate	6.2	5.9	1.2	1.3
10.	Postgraduate	1.9	-	0.2	-
Medicine					
11.	Undergraduate	10.0	8.9	1.8	2.6
12.	Postgraduate	3.7	-	0.5	-

Agriculture

| 13. | Undergraduate | 8.4 | - | 0.7 | - |
| 14. | Postgraduate | 4.5 | - | 0.9 | - |

Veterinary Science

| 15. | Undergraduate | 7.0 | - | 1.1 | - |
| 16. | Postgraduate | 1.4 | - | - | - |

Law

| 17. | Undergraduate | 7.5 | - | 1.3 | - |
| 18. | Postgraduate | 4.0 | - | 0.2 | - |

Other

19.	Undergraduate	5.9	-	0.4	-
20.	Postgraduate	3.6	-	0.6	-
21.	Ph.D/D.Phil/D.Sc.	-	2.9	-	0.6

Source : Compiled and computed from :

1. Selected Educational Statistics, 1988-89, Ministry of Human Resource Development, Government of India.

2. 28th Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1986-87, Govt. of India - Table 9, Chapter IV.

Admission in IITs: As shown in Table 10, the percentage of ST candidates registered for the Joint Entrance Examinations for admission into the IITs has been over the years three to five fold lower in the case of SCs and almost ten-times lower in the case of STs, than their respective representations in population. During the years 1979-80 and 1982-83, this percentage has risen only marginally (for SCs) or not at all (for STs). In Table 11 information is presented on the number of seats reserved for SCs/STs and those filled over the years. It is clear that the percentage of seats which could not be filled up, in spite of relaxation of admission criteria, ranged between 36% (IIT Bombay) and 70% (IIT Madras). Tables 10 and 11 jointly draw attention to the extent of educational disability persisting among SCs/STs and lack of any noticeable improvement over the years in their status compared to the rest.

Table 10

PERCENTAGE OF SC/ST CANDIDATES REGISTERED FOR JOINT ENTRANCE EXAMINATION FOR ADMISSION INTO INDIAN INSTITUTES OF TECHNOLOGY

S.No.	Year	Total	SC(%)	ST(%)
1.	1979-80	51536	3.2	0.7
2.	1980-81	59621	3.5	0.8
3.	1981-82	49403	4.2	0.9
4.	1982-83	54344	4.3	0.8

Source: Computed from the Report of IIT Review Committee, 1986, Table 4.8.4A]

Table 11

SEATS RESERVED FOR SC/ST CANDIDATES FOR ADMISSION TO UNDERGRADUATE PROGRAMMES AT IITs

Year	IIT Kharagpur			IIT Bombay			IIT Madras			IIT Kanpur			IIT Delhi		
	R	F	(%)	R	F	(%)	R	F	(%)	R	F	(%)	R	F	(%)
1974	84	81	96	72	37	51	NA	34	-	50	45	90	52	41	79
1975	71	63	89	58	28	48	NA	34	-	50	43	86	52	39	75
1976	95	71	75	49	27	55	NA	38	-	50	37	74	53	32	60
1977	61	58	95	60	42	70	NA	42	-	50	28	56	53	28	53
1978	41	37	90	54	20	37	NA	29	-	55	24	44	53	21	40
1979	38	36	95	50	11	22	48	5	10	55	26	47	53	14	26
1980	80	56	70	54	23	43	50	17	34	48	28	58	53	24	45
1981	78	23	29	62	10	17	54	8	15	45	10	22	45	5	11
1982	84	24	29	69	8	12	51	7	14	64	6	9	51	13	25
1983	88	41	47	71	14	20	81	20	25	64	26	41	57	27	47
1984	93	37	40	71	20	28	68	12	18	64	20	31	57	20	35
Total	813	527	65	670	240	36	352	246	70	595	293	49	579	26	446

R - Seats reserved for SC/ST   F - Filled by SC/ST
% - Percentage of seats filled by SC/ST

[Source   Report of IIT Review Committee, 1986, Table 4.8.4D]

Regime of incentives

4.2.5 The concept of providing incentives to bring children into schools is based on the premise that children cannot come to school as they are engaged in economic activities both in and outside the home. Scholarships would hopefully offset the opportunity cost while free uniforms, textbooks etc. would relieve the parents from this additional burden. Often, incentives do not have the envisaged impact. In an exhaustive .study of the impact of mid-day meals in District Madurai (Tamil Nadu) the researchers have reported that children in remote rural areas tend not to stay in schools after taking their mid- day meals. While there is a significant increase in enrolment ratio, attendance and retention, it has not been possible to relate mid-day meals with increased learning.

The Working Group on Early Childhood Education and Elementary Education for the Eighth Five Year Plan opines that, "it is difficult to establish any clear correlation between the present distribution of these incentives and the relative position of different States in regard to progress towards UEE." The report of the Backward Classes Commission observes, "Whereas several States are extending a number of ad hoc concessions to backward class students, few serious attempts have been made to integrate these facilities into a comprehensive scheme for a qualitative upgradation of educational environment".

The kind of community life and production workbased education envisaged in the Gandhian model of Ashram-shalas are significantly missing in the Government founded Ashram schools run for the benefit of the scheduled tribes. often, the latter do have high drop out rates according to certain studies. Inter-alia, this is due to the students from poor socio economic backgrounds being withdrawn from the schools to help the parents.

Recommendation:

A series of studies should be instituted to investigate into the impact that the various incentive schemes implemented in different States have had on enrolment and retention of SC/ST children in the schools. (The evidence of overall relative deterioration of literary levels of Scheduled Castes and tribes reflected in Table 4 and figure 1 would further underscore the need for these impact studies). Community profiles of educationally backward communities should also be prepared based on study of their current educational status. With reference to these profiles and the findings of the impact studies, on a disaggregated basis, appropriate and logical strategies should be established for the educational development of the backward communities.

Status of access to education

4.2.6 The Fifth All India Education Survey shows that a large number of habitations predominantly populated by SC and ST are not served by schools within walking distance (1 km in the case of primary and 3 kms in the case of middle schools).

During the year 1989-90 the Department of Education brought under implementation a scheme to provide financial assistance to various States to start non-formal education centres in habitations predominantly occupied by SC/ST. This scheme did not make much headway excepting in a very few States. Implementation of this scheme has come to a standstill during the year 1990-91.

Recommendation:

There should be a programme for the coverage of these unserved habitations with schools as per norms before the end of the Eighth Five Year Plan.

Improvement of capability and educational environment

4.2.7 Remedial coaching is proposed by NPE/POA as a special measure to improve the prospects of SC/ST students for further education and employment. While the basic idea behind this proposal is welcome and needs full support, there are aspects which demand attention. Inspite of a long experience in organising remedial courses at +2 and even higher stages, the policy formulation does not seem to be based upon any evaluation of the outcome. There are limits to what remedial coaching can achieve. The impoverished learning environment in the educationally backward regions and the economic deprivation in the homes of SC/ST children can irreparably limit the learning skills of these students. Such barriers to growth in the capabilities for acquiring knowledge are inherent in the inequitous social system in which SC/ST children live. The impact of these limitations, set in early childhood and later in the primary stage can become the chief determinants of what is accepted as notion of merit and talent as brought out elsewhere. In this narrow definition, while the affective domain is totally ignored, even the cognitive domain of learning is only partially looked into. While dealing with education of the students belonging to the 'Fourth World', the affective domain has a critical role. In this sense, offering remedial coaching as a strategy is a restrictive approach. Indeed, it is reported that remedial coaching organised at IITs did not make a significant difference for the SC/ST students, leading to much frustration NPE's brief reference to the need to remove psychosocial' impediments in the context of remedial teaching (para 4.6

v) does not find any reflection in the POA.

Remedial coaching is now offered to the SCs/STs in the States from class IX onwards. The objective is to equip the SC/ST students to fare comparatively better in the public

examinations. Even this scheme is implemented in a rather disorganised and ad hoc manner. Coaching is given only for about 2-3 months prior to the examinations in most cases. Not all the schools undertake this programme either. The Government of India implements a scheme for remedial coaching in about fifty residential schools. Under this scheme, assistance is given to the States to meet the cost of remedial coaching but the coverage of SC/ST students in just fifty schools does not touch even a fringe of the problem.

Recommendation:

(i) The scheme of remedial coaching should be re-organised such that on a phased basis, majority of the schools introduce the same. Instead of coaching being confined to two or three months of pre-examination periods, the same should be offered in a sustained way throughout the academic session in the concerned classes.

(ii) A strategy to enrich learning environment and the socioeconomic conditions in the tribal regions as distinct from mere remedial coaching should be evolved and brought under implementation.

(iii) In the backward area including SC, ST habitats, a network of school linked libraries should be established. For reaching out to smaller habitations without schools, a dynamic programme of bicycle-borne mobile libraries or para-school-based libraries should be brought under implementation. These libraries need to be enriched with creative children's literature. While the children's literature would be primarily in the regional languages, efforts should be made to increase the availability of children's books in the local dialects or languages spoken in educationally backward areas.

(iv) In order to nurture all kinds of talents and aptitudes in children, ranging from academic subjects to co-curricular and socio-cultural spheres as may be identifiable. Educational Complexes should organise a wide-ranging programme of specific theme-based workshops/work camps, using the best available resource persons in the area. This programme should encourage school drop-outs as well to join and contribute in this collective endeavour towards excellence.

(v) In the curriculum of the educationally backward the following should be emphasised at all stages of education:

a) Science and Mathematics;

b) Expression, both oral and written, and creative writing;

c) History and sociology of the Scheduled Castes, the Scheduled Tribes and other backward sections of society;

d) Contribution of these communities to national life and development, including the freedom struggle; and

e) Role played by women belonging to these communities in national life and development.

(In fact, matters covering under (c) , (d) and (e) should also be included in the National Core Curriculum)

(vi) Above all else, in order to bring about universalisation of Elementary education among girls in backward areas, including those belonging to SC/ST communities, a network of. ECCE centres should be established on a priority basis, with linkage to primary schools. (This has also been dealt with in the Chapter on ECCE).

4.2.8 Recruitment of SC/ST teachers

According to the Fifth All India Education Survey, as on 30.09.86, the percentage of SC/ST teachers in the schools has been as follows:

Level	SC	ST
Primary	11.22	5.99
Upper Primary	8.6	4.61
Secondary	5.84	2.51
Higher Secondary	`4.82	`1.32

No doubt, POA envisages execution of a crash programme for the recruitment of teachers from SC/ST communities even by relaxing the educational qualifications but the Department of Education does not have any feedback regarding the progress achieved in the recruitment of SC/ST teachers though the present level of their representation amongst the teachers in the school system is rather low.

Recommendation:

It should be ensured that in Government and Government aided schools teachers from SC/ST communities are, invariably in the order of 15% and 7.5% respectively. Recruitment to reach these levels should also be closely monitored.

Core curriculum and tribal centre

According to NPE, educational programmes for the ST children should be so designed as to preserve their rich cultural identity and make them aware of the same. Tribal cultural identities are relevant not only to the tribals but all the school going children.

Recommendation:

The rich diversity of the tribal cultural identities should be included in the common cultural heritage which is one of the elements of the Core Curriculum envisaged in NPE/POA.

4.2.9 Special Component Plan and Tribal Sub-Plan

Every year, along with Annual Plan, the Department of Education submits to the Planning Commission Special Component Plan for Scheduled Castes (SCP) and Tribal Sub-Plan (TSP) for the Scheduled Tribes in respect of education programmes coming under the Central sector. Presented in the Table below is a statement of outlays for the years 1986-87 to 1989-90 presented' to the Planning Commission by the Department of Education concerning SCP and TSP.

(Rs. in lakhs)

Sl. No.	Name of the Scheme	1986-87			1987-88			1988-89			1989-90 (Proposed)		
		Divisible Outlay	Outlay under SCP	Outlay under TSP	Divisible Outlay	Outlay under SCP	Outlay under TSP	Divisible Outlay	Outlay under SCP	Outlay under TSP	Divisible Outlay	Outlay under SCP	Outlay under TSP
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1.	School Education	2225.00	516.25	416.30	17570.00	3127.17	1940.74	39835.00	5491.97	2734.33	82772.51	11893.53	6037.47
2.	Adult Education	4210.00	1363.00	631.50	3500.00	800.00	500.00	4000.00	833.30	583.30	8000.00	1780.00	595.00
3.	Scholarships	150.00	38.33	12.67	105.00	73.33	7.87	160.00	117.80	42.15	175.00	80.75	31.25
4.	Languages	15.50	-	15.50	16.50	-	16.50	10.00	-	10.00	170.00	-	23.00
5.	Technical Education	1120.00	215.50	170.75	900.00	165.00	82.00	390.00	65.50	33.05	800.00	140.00	70.00
6.	University and Higher Education	3925.00	307.00	166.00	578.00	415.00	163.00	587.00	403.00	184.00	663.00	475.00	188.00
	Grand Total	11645.00 @	2340.08 (20.09)	1349.72 (11.59)	22669.50	4580.50 (20.20)	2710.11 (11.95)	44982.00	6911.57 (15.36)	3586.83 (7.97)	92580.51	14369.28 (15.52)	6944.72 (7.50)

@ Figures in brackets are percentages to divisible outlays.

The above intra-sectorwise outlays are infact presented to the Planning Commission every year schemewise.

The preparation of SCP and TSP, in practical terms has been a paper exercise for the following reasons:

- They are not included in the budget document. Consequently, the discipline which goes with the implementation of budget provisions does not exist i.e. the, Expenditure of allocations for the specific purposes for which they are given is not ensured.

- The Bureau Heads of the Department of Education to whom the copies of SCP and TSP are provided every year for follow up in implementation, are unable to ensure their implementation on ground though they issue general instructions/guidelines under the respective schemes. (For example, when funds are released under 'Operation Blackboard' to the States, general instructions are given that special care should be taken to

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concentrate on educational institutions located in areas of concentration of scheduled castes and scheduled tribes).

- The present system of monitoring, of implementation of SCP and TSP by the Ministry of Welfare is not also effective. Most of the inter- ministerial meetings organised by the Ministry of Welfare end up with reasons given by the officers incharge of implementation of schemes as to why they are not in a position to implement the SCP and TSP.

Recommendations:

i) Special Component Plan and Tribal Sub-Plan should be specifically exhibited in the budget document, schemewise.

ii) To the extent feasible, schemes meant exclusively for the Scheduled Castes and Scheduled Tribes should be prepared and included under SCP/TSP.

iii) Wherever exclusive schemes cannot be formulated, specific physical targets for coverage of Scheduled Castes/Scheduled Tribes under the schemes generally applicable to all should be indicated.

iv) A more effective monitoring mechanism should be established in the Department of Education itself for the purpose of periodically following up the progress of implementation of SCP/TSP.

4.2.10 Intensive area approach

Implementation of educational programmes for Scheduled Castes and Scheduled Tribes should appropriately be based on a careful identification of their habitats and convergence therein or concurrent, collateral and complementory activities. At present this is not happening. The Department of Education does not also have feedback regarding the actual number of blocks with concentration of Scheduled Castes and Tribes covered under important programmes like operation Blackboard, Non-Formal Education and Adult Education.

Recommendations:

(i) The Ministry of Welfare, according to the Business Rules is expected to do coordination in the implementation of programmes relating to SCs/STs. While they have given a list of blocks identified as tribal blocks they have not given, with reference to 1981 census,' a list of blocks identified as those of Scheduled Caste concentration. This Ministry should, therefore, provide lists, of blocks with SC concentration. With reference

to such lists the Department of Education should get feedback from the States regarding their coverage under the various educational programmes.

(ii) All the educational programmes should be implemented to the extent feasible conveniently in the same blocks of SC concentration/tribal blocks so that impact of educational development is felt in a demonstrable and balanced way in the respective areas.

4.2.11 Monitoring

As early as in May, 1987, after the formulation of NPE/POA communications were addressed to all the States to report on the overall status of implementation of NPE/POA so far as they would relate to SC/ST and minorities. After 1988, no reports have been received from the State Governments regarding this. For coordinated monitoring of all the educational programmes meant for the benefit of the Scheduled Castes, Scheduled Tribes and minorities, through inter- departmental exercises done by the Department of Education, Ministry of Welfare and the Planning Commission, detailed Proformae have been got prepared but receipt of information from the various Ministries of the Government of India as well as the State Governments has been quite uneven and erratic, apart from being out-dated and incomplete most often. This situation, inter-alia, is due to the fact that educational programmes relating to SCs/STs and minorities are implemented in a fragmented way by different agencies and departments at the Central and State levels. (of particular interest is the fact that information is furnished by different directorates/secretariats within the State Departments of Education)

Recommendation:

A single focal agency in each State should be identified for the purpose of reporting to the Government of India comprehensively on all the educational programmes.

4.2.12 Minorities

NPE calls for attention being paid to the minority groups which are educationally deprived or backward. It also mentions about attention being paid to the constitutional guarantees given to minorities to establish and administer educational institutions.

The implications of constitutional guarantees for the minorities to establish and administer educational institutions have been elaborately gone into and brought out in rulings of several courts of law over the years. These rulings clearly establish that it would be within the powers of the respective States to bring into force regulations that would ensure the quality of education through measures such as prescription of proper qualifications for the teaching staff, fair and reasonable remuneration for them, conditions' of service based on principles of natural justice etc. The Government of India

formulated policy norms and principles for recognition of minority managed educational institutions in the light of these rulings and circulated them to the various State Governments, finding that not all of them had issued necessary guidelines and that the guidelines that had been issued by some States were varying in nature. Based on the policy norms circulated by the Government of India the State Governments have been requested to issue detailed guidelines, so that side by side with protection of constitutional guarantees to the minorities, the standard in their educational institutions would also be uniformly maintained. With reference to inquiries from the Government of India regarding the issue of detailed guidelines, responses from the State Governments have been quite inadequate.

Recommendation:

Government of India should establish a standing machinery to closely monitor issue of detailed guidelines by the States for the purpose of granting recognition to minority managed educational institutions; to review the pace of disposal of applications for recognition of these institutions; and thereby to secure quality of education in institutions so recognised.

The POA has identified forty-one districts as being as minority concentration. This should be a sound base for implementing education programmes on compact area approach.

Recommendation:

All the educational programmes that are now under implementation should be concurrently implemented, to the extent feasible, in these districts on a priority basis after conduct of bench mark surveys as envisaged in POA. (There is no evidence of implementation of education programmes in these districts based on initial bench mark surveys to assess the status of literacy therein and to build programmes thereon for further improvements.)

Community Polytechnics, as brought out elsewhere, is an innovative programme which helps in the use of the existing infrastructure of polytechnics for the purpose of imparting technical skills amongst the rural people. Already twenty community polytechnics have been established in areas of minority concentration but they do not cover all the forty-one districts of minority concentration identified in the POA and only sixteen districts have been covered.

Recommendation:

The 25 districts which have not yet been covered under the community polytechnics should also be brought under their coverage before the end of the Eighth Five Year Plan.

The NCERT has, been organising orientation and training programmes' for Principals/Managers and teachers of minority managed educational institutions. The objective of these programmes is to provide appropriate career guidance for these professionals. They are also meant for training of teachers in teaching of English, science, mathematics etc. NCERT having started these programmes in 1987, it has so far been able to train only 467 Principals/Managers and 947 teachers. This is a very small number and this size of NCERT programmes is inadequate to meet the training needs of vast numbers of Managers, Principals and teachers.

Recommendation:

The orientation programmes for the Principals/Managers and teachers of minority managed educational institutions. should be organised on a decentralised basis through SCERTs at the State level and DIETs, CTEs & IASEs at the sub-State levels.

The UGC has been organising special coaching courses for minorities in order to enhance their capabilities for successfully competing in recruitment for public services. In this programme, twenty universities and twenty-eight colleges participate. The progress achieved under this scheme having been found to be inadequate, the UGC itself received the scheme and came out with recommendations for modifications in implementation. These modifications included opening of more resource centres and additional coaching centres, regular interaction between Advisory Committees of coaching centres with UGC, improved monitoring system etc. Nonetheless not much progress is in evidence in terms of number of those given special coaching.

Recommendations:

i) Special coaching should be organised through reputed and progressive voluntary organisations, particularly those operating for the benefit and welfare of the minority communities.

ii) Open universities including the IGNOU should establish distance education programmes for imparting special coaching.

Section C : Education of the Handicapped

NPE/POA Stipulations

4.3.1 NPE advocates the policy of integrating the physically and mentally handicapped with the general community as equal partners as the objective of their education. Specific measures suggested are common education along with normal children for those who have motor handicaps; provision of special schools and hostels for the severely handicapped, vocational education for the disabled, teachers' training and encouragement of voluntary efforts.

4.3.2 The POA mentions, about the detailed measures to be taken, important amongst them being massive in-service training for teachers, orientation programmes for the administrators, development of supervisory expertise in the resource institutions like the SCERT and DIET etc. It also calls for provision of incentives like supply of aids, appliances, text books and free uniforms.

The present scenario

4.3.3 The population of the educatable handicapped in the 5-14 year age group has been estimated as follows:

Locomotor	12.20 lakhs
Visual disability	1.27 lakhs
Hearing disability	5.35 lakhs
Speech disability	7.44 lakhs
Mentally Retarded	(No reliable estimates)

- As of now, there are about 280 schools for the deaf covering 28,000 students, the earliest one having been started in 1885. The majority of the special schools teach upto the primary level while some teach upto middle level. There are also schools which teach upto the high school level mostly for children with residual hearing capacity. There are about 200 schools for the visually handicapped covering about 15,000 students.

- The percentage of enrolment of the handicapped children to total children at the elementary stage at present is 0.07%. This reflects a serious neglect of education of the handicapped over the last four decades.

- The reasons for the low coverage of handicapped children in education are the following:

* Education of the handicapped is viewed as a social welfare activity.

* Child to child help leading to sensitizasion of the future generation, child to parent help for community sensitizasion and special and general pedagogy reinforcement were missed out.

* Most of the special centres for the handicapped are located in metropolitan cities and urban centres. The non-government organisations barring a few exceptions have not significantly come to operate at district or sub-district levels. Reportedly, 215 districts in the country do not have special schools for any disability though there are over 1000 documented special schools.

* The scheme of Integrated Education for Disabled Children which was conceptualised by the Department of Social Welfare in 1974 was implemented for several years in terms of running 'Mini Special Schools' within general schools. The reason was that there was no provision for sensitization and involvement of all the teachers.

Committee's perspective

4.3.4 It should be stated to the credit of NPE 1986 that provision for education of the handicapped was mentioned under the part relating to equal educational opportunities. For the first time, because of this Policy stipulation, education departments were put in the right perspective of having to treat education of the handicapped as their legitimate function. It is also to the credit of the Policy that it mentioned about the mainstreaming of the education of the handicapped and about teacher training. The forthright statement of NPE regarding involvement of voluntary agencies, significantly opened up implementation of integrated education of the disabled children to non-government organisations. However, the NPE, so far as it relates to education of the handicapped, is inadequate in the following respects:

* It has not stressed the mobilisation of the total general education system for the education of the handicapped.

* Special schools have been treated in isolation from other educational institutions from the point of view of providing the educational supervisory infrastructure, leaving it to the Ministries of Welfare and HRD to co- operatively develop the same.

The merit of the POA is in its call for establishment of special schools at district and sub-district levels; curriculum development apart from provision of infrastructural facilities; and specific target setting for universal primary education of the handicapped. While special schools for the education of those with severe handicaps are rightly emphasised by the POA, they have not laid emphasis on multiple delivery of services in special schools. While single disability mode is required for research, development and

rehabilitation work, for delivery of educational services, multi- service mode in special schools should be given importance. This is particularly so because doctors, dispensaries, public health centres and development functionaries are multi-purpose in nature. The POA has not also called for redefinition of the role of the special schools. Alternative modes of educational provision have not been mentioned.

Post - policy implementation

4.3.5 The Department of Education has been implementing a scheme for the integrated education of the disabled under which 100% assistance is given to the States. The scheme is at present being implemented in nineteen States and UTs. The annual provision under the scheme is of the order of Rs. 2 crores and as of now 20,000 children are being covered. Assistance provided to the States under the scheme is expected to be utilised to provide for salaries and incentives for teachers, setting up resource rooms, carrying out assessment of handicapped children, training of teachers, provision of instructional material, etc.

Future strategy

4.3.6 Having comprehensively taken into account, the problems faced in providing education for the handicapped with reference to their special and diversified needs, and having studied the history of implementation of the educational programmes for the handicapped, the Committee would give the following recommendations:

Recommendations

(i) People should be made aware of the problems of the handicapped, in terms of the magnitude and types of handicaps. The media should be effectively used for this purpose.

(ii) Every family with a handicapped child should be provided support through incentives, dialogue and periodic training and evaluation. Parents' groups and community education groups should be formed.

(iii) The educational system for the handicapped should be flexible. It should offer a range of education provisions - special schools for those who cannot be educated in general schools, special classes in general schools, and integrated education for the disabled of the type already in existence. Education should be through different options formal, non-formal, open schools, home day schools, vocational centres etc.

(iv) Educational packages should be offered for hearing impaired children in a differentiated way -

* Pure orally oriented programmes for profoundly deaf children.

* Combined oral-manual programmes for some of the profoundly deaf children for the education of whom pure oral programmes will not be adequate.

* Segregated programmes for those children for whom such programmes are essential.

* Integrated programmes for those whom this modality promises better emotive, cognitive, social and linguistic development.

(v) For making the boys and girls of impaired hearing economically independent, vocational training has to be specially organised. Vocational training which is job-oriented and matched to the abilities and aptitudes of the hearing impaired, should be organised in a significantly diversified way making a departure from the earlier practice of confining to a limited number of vocational training programmes like in drawing, painting, tailoring, knitting, embroidery, book-binding, etc. These diversified courses also relate to industrial operations such as sheet metal works, printing, turning, fitting, welding, electrician's trade, carpentry, etc.

(vi) Bharati Braille has been developed, thanks, inter alia, to the special effort made by the National Institute for the Visually Handicapped. Based on ,this, teacher training and book production programmes have also been launched. These production programmes should be intensified by their scales of operation being enlarged and diversified to cover wide range of subjects and in-school and out-of school needs.

(vii) While work has been initiated for development of Braille notations for mathematics and science, not much progress has been made. On account of the growing emphasis on science and mathematics teaching, a comprehensive and effective code for use in the area of mathematics and science should be developed.

(viii) For the moderately mentally retarded, special curricula should be developed and standardised not merely for the purpose of basic education in 3 R's but for, training in self-care skills like motor integration, perceptual and motor skills, language, communication and conceptual skills. It should be clearly understood that for the mentally handicapped, academic achievements are relatively unimportant in comparison to social adaptation and vocational training.

(ix) Vocational schools for the mentally retarded adults are not too many. For their benefit jobs in sheltered workshops, farms and industries should be provided as they are not capable of receiving open employment. The idea is that after receiving training they can work on sub-contract basis.

(x) In pre-service teacher training programme, education of the handicapped should be made part and parcel of the pedagogy and methodology.

(xi) A programme of sensitization should be implemented for in-service teachers as well. This should include various components, namely, Non-Formal Education, vocationalisation of education and distance education.

(xii) Teachers' training colleges should have special courses for teaching the handicapped children; a special component on the education of the handicapped should be included in the B.Ed courses as well.

(xiii) At least one resource faculty should be provided in each DIET to provide teacher training inputs in the context of education for the handicapped.

(xiv) The role of the special schools should be clearly redefined as spelt out below:

i) Early identification of children with handicaps and formulation of stimulation programmes for them and the community in their catchment areas;

ii) Education of the handicapped children who cannot be educated in general schools upto the point when they can be integrated thus cannot be educated in general schools upto the point when they can be integrated - thus breaking the insulation between the general and special schools.

iii) Service as resource agencies for implementing the integrated education programmes in general schools so that they feel as a part and parcel of the educational system.

iv) Bringing about mutual reinforcement of the pedagogies of special and general education.

(xv) A lot of development is taking place in the application of technology for the benefit of the handicapped. Several technological aids are already available like for example, Brailleix produced by Federal Republic of Germany which facilitates recording of whole encyclopedia on cassettes, printing conversion devices like 'tactacon' which facilitates presentation of printed material in vibro-tactile form so as to enable the blind persons to read, devices facilitating mobility of the blind persons etc. The technologies and techno-aids available for meeting the special needs of the handicapped children should be reviewed and measures for dissemination of information should be formulated.

(xvi) Sustained researches should be undertaken to determine the needs of the physically handicapped and produce technological aids capable of helping in overcoming handicaps. The Indian institute of Technology and other technological institutions in the area of higher education should be given specific responsibilities for undertaking these researches.

The Three 'C' model

The Three 'C' model has been developed in Kerala by the Central Institute & Information Centre of Mental Retardation, Trivandrum, for the education of the disabled. The features of this model are:

- Imparting education through a sense for shapes (rectangle, circle, triangle etc.)

- An understanding that recognition of shapes is a pre- alphabet experience (for a child which sees the mother, the forehead is a rectangle, eyes are circles and nose is a triangle).

- Motor, psycho-social, language and cognitive skills are developed through the medium of shapes. (For this purpose, instruction is imparted on building figures with shapes; e.g. a triangle placed over a square will signify a house).

- Use of equipment/materials like scissors, paper, spanners etc. for exercises in building shapes. (This facilitates development of coordination skills and skills for recognition of articles).

- Development of skills through seeing, perceiving and smelling.

The whole system of education of the handicapped through this modality ultimately results in building up of comprehension, competency and creativity. Hence the nomenclature 'Three C Model'.

This model has been applied in Kerala since 1980 in about 50 centres for the education of the handicapped; 2000 children have been benefited, 400 teachers oriented and 10,000 families reached.

Section D : Common School System

4.4.1 In the context of establishing the National System of Education, the NPE states that effective measures will be taken in the direction of the Common School System recommended in the 1968 Policy. The implication of having the Common School System has been stated by the Policy to be gaining of access to education of a comparable quality by all students irrespective of caste, creed, location or sex.

4.4.2 The POA, however, does not spell out any modalities or action programme for bringing the Common School System into existence.

4.4.3 The CABE Committee on Common School System under the Chairmanship of Prof. D.S. Kothari, however, has examined the matter and given a report. This report calls for promotion of neighbourhood schools, qualitative improvement of education in the public sector, identification of target areas and establishment of a National Council for common schools with State Education Ministers, educationists, voluntary organisations, Planning Commission and Directors of NIEPA & NCERT and M.Ps.

4.4.4 According to the Education Commission, 1964-66 which originally advocated the concept, the Common School System of public education has the following features:

- It will be open to all children irrespective of social, economic and other differences.

- Access to education will depend on talent.

- Adequate standards would be maintained.

- No tuition fee would be charged.

- The average parent would not ordinarily feel the need of sending his children to expensive schools outside the system.

4.4.5 The National Policy on Education 1968 had accepted the recommendation of the Education Commission for bringing about the Common School System.

4.4.6 Common School System of education has been prevalent in the USSR, the USA and certain European countries in some form or the other.

4.4.7 The reasons why the Common School System has not gained ground so far are the following;

- Economic and social disparities; the well-to- do communities send their children to schools with better infrastructure, teachers and teaching standards, ordinary schools are not sought after; and in turn, results in low investments in them.

- The constitutional protection given to the minorities to establish and administer their own educational institutions etc. does not go with the concept of the Common School System.

- In Government schools, the quality of education has remained poor.

- Lack of political will.

- Public schools, privately managed English medium schools charging capitation fees and those having expensive coaching classes have proliferated.

- Growth of institutions in the Government sector like the Sainik Schools and Kendriya Vidyalayas meant for separate categories of students.

4.4.8 The first step in securing equity and social justice in education is the building up of a Common School System. Specific actions required in this context are the following:

Recommendations

- Provision of significantly increased outlay for elementary (particularly primary) education. This would help in the building up of the required levels of infrastructure and quality of education, thereby transforming Government, local-body and aided schools into genuine Neighbourhood Schools.

- Provision of special allocations for improvement of school system in backward areas, urban slums, tribal areas, hilly tracts, desert and marshy areas, drought and flood-prone zones, coastal belts and islands.

- Ensuring instruction for all in the medium of mother tongue at the primary level, particularly for linguistic minorities; active encouragement of teaching in the regional languages at the secondary level; and discontinuance of State aid to the schools imparting education otherwise than in the medium of mother tongue/regional languages.

- Phased implementation of the Common School System within a ten year time frame; and essential minimum legislation, :particularly to dispense with early selection process, tuition fee, capitation fee etc.

- Exploring ways of including the expensive private schools into the Common School System through a combination of incentives, disincentives and legislation.

Section E Navodaya Vidyalayas

4.5.1 Navodaya Vidyalaya Scheme is based on the mandate reflected in para 5.14 and 5.15 of NPE, 1986 which had as follows:

"PACE-SETTING SCHOOLS

5.14 It is universally accepted that children with special talent or aptitude should be provided opportunities to proceed at a faster pace, by making good quality education available to them, irrespective of their capacity to pay for it.

5.15 Pace-setting schools intended to serve this purpose will be established in various parts of the country on a given pattern, but with full scope for innovation and experimentation. Their broad aims will be to serve the objective of excellence, coupled with equity and social justice (with reservation for SCs and STs) , to promote national integration by providing opportunities to talented children largely rural, from different parts of the country to live and learn together, to develop their full potential, and, most importantly, to become catalysts of a nation-wide programme of school improvement. The schools will be residential and free of charge."

4.5.2 The Programme of Action spells out the details of the scheme of Navodaya Vidyalayas in the following words:

"The programme for bright children has two parts - one is for potentially high achievers particularly in the areas who are substantially left uncovered by the present system......

Under the scheme of Navodaya Vidyalayas for catering to the category of high achievers one such Vidyalaya will be set up in each district during the Seventh Five Year Plan period. These schools will make available good quality education irrespective of the parents' capacity to pay and their socio-economic background. In these schools there will be 75% reservation for children from rural areas. There will be reservation for SC and ST as per their actual population in the district subject to a minimum of nationally prescribed figure of 15 and 7.5 (sic) for SC and ST respectively. An effort will be made to cover girls to the extent of 1/3 in a school. Education will be free including boarding and lodging in these schools. These schools will be affiliated to the Central Board of Secondary Education."

4.5.3 So far, 261 Navodaya Vidyalayas have been established in 29 States. Since inception of the Scheme, the total amount provided to the Samiti is Rs.249.08 crores. Particulars of the Statewise expenditure for the years 1987-88 to 1989-90 are presented in the following Table:

Table 13

STATEWISE EXPENDITURE ON RUNNING
NAVODAYA VIDYALAYAS

(Ruppes in Lakhs)

Sl. No.	Name of State/ Union Territory	Amount Released			
		1987-88	1988-89	1989-90@	Total
1.	Andhra Pradesh	115.80	227.90	272.77	616.47
2.	Arunachal Pradesh	19.12	42.48	56.61	118.21
3.	Bihar	159.94	296.13	356.34	809.41
4.	Goa	10.61	17.99	26.51	55.11
5.	Gujarat	32.72	73.27	87.98	193.97
6.	Haryana	50.87	94.18	130.58	275.63
7.	Himachal Pradesh	71.16	109.65	133.90	314.71
8.	Jammu & Kashmir	88.13	125.46	180.55	394.14
9.	Karnataka	110.23	223.88	299.77	633.88
10.	Kerala	75.09	140.47	155.16	370.72
11.	Madhya Pradesh	161.18	285.10	374.63	820.91
12.	Maharashtra	128.35	211.99	308.17	648.51
13.	Manipur	17.29	67.88	82.83	168.51
14.	Meghalaya	28.66	29.20	43.39	101.25
15.	Mizoram	11.73	18.85	22.66	53.24
16.	Nagaland	1.31	3.34	12.23	27.88
17.	Orissa	97.06	155.21	191.44	443.71
18.	Punjab	45.71	67.56	103.33	216.60
19.	Rajasthan	86.08	201.19	279.75	567.02
20.	Sikkim	7.99	7.04	11.06	26.09
21.	Tripura	—	4.08	10.19	14.27
22.	Uttar Pradesh	171.72	307.60	394.05	873.37
23.	Andaman & Nicobar Islands	12.83	18.30	26.30	57.43
24.	Chandigarh	4.04	5.77	11.33	21.14
25.	Delhi	—	8.79	10.63	19.42
26.	Daman & Diu	4.35	10.46	21.20	36.01
27.	Dadra & Nagar Haveli	15.27	11.25	16.71	43.23
28.	Lakshadweep	—	16.34	9.52	25.86
29.	Pondicherry	28.21	45.26	63.15	136.62
	Total	1,552.45	2,836.62	3,693.74	8,082.81

* Capital Expenditure incurred on construction of school buildings is not included.

@ Expenditure anticipated by 31.03. 1990.

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4.5.4 It may be seen from the above Table that on running expenses alone, an amount of Rs.80.83 crores has been spent on the scheme during the period 1987-88 to 1989-90.

4.5.5 Director, NVS made a presentation before the Committee regarding the status of the implementation of the scheme. Some of the salient aspects of the implementation of the scheme brought out in this presentation are the following:

(i) Out of 454 districts in the country, 261 districts have been covered by the Vidyalayas the percentage of coverage being 65%.

(ii) At 1987 prices, the estimated cost of a Navodaya Vidyalaya complex is Rs.2.3 crores - Rs.1.43 crores for phase I and Rs. 0.85 crores for phase II.

(iii) For construction work, the amount released during the Seventh Plan period was Rs.249.08 crores as against Rs.368.49 crores asked for by the Samiti and Rs.500 crores of Seventh Plan outlay.

(iv) Zero phase construction is going on in respect of 61 schools and phase I construction in respect of 130 schools. 75 vidyalayas have already been shifted to their own newly constructed buildings.

(v) There are 3,057 teachers as against the sanctioned strength of 3,917.

(vi) There are 48,940 students as per the following break-up:

Boys - 35,886 (73.33%)

Girls - 13,054 (26.67% against the target of 30%)

Children from rural areas 37,942 (77.53% against the target of 75%)

Students from urban areas 10,998 (22.47%).

SCs - 9,510 (19.43%) { The norm stipulated in the { scheme is proportion of the

STc - 5,493 (11.22%) { population of the { respective communities to

{ the total population in the { district.

(vii) 41% of the students admitted in the Vidyalayas are from families below poverty line and 63% from families with an income less than Rs.12,000/- per annum.

 (v) 16% of the children are first generation learners and 70% of them from families with no college education.

(ix) Per capita expenditure for providing education to the students of the Vidyalayas in 1988-89 was Rs.9582.

(x) For the existing 261 Vidyalayas the estimated requirement of funds for the Eighth Plan period (1590-91 - 1994-95) is Rs. 983.64 crores (Rs.483.08 crores for recurring expenditure and Rs.500.56 crores for non- recurring expenditure including capital works).

(xi) As envisaged in the Scheme, there has been migration of students at the level of class IX from Hindi speaking districts to non-Hindi speaking districts and vice versa. The students who have so migrated are 912 in number (472 who migrated to Hindi speaking states and 440 who migrated from Hindi speaking States.) The proposal for 1990-91 is to effect migration of 1125.

4.5.6 No doubt, the scheme as such has made a lot of progress on ground as evidenced by the figures presented above in terms of number of students admitted, teachers appointed, school buildings constructed etc. Overall, the targets in respect of admission of girls, SCs and STs have also been by and large achieved.

4.5.7 However, the NVS has not been able to make progress as originally envisaged for the following reasons:

- Funds have not been made available for the implementation of the scheme as per the infrastructure requirements originally planned. As against an amount of Rs.417.6 crores required for completion of phase I construction in all the 261 schools only an amount of Rs.160 crores was provided. Therefore, the NVS has had to scale down the development of infrastructure, going in for zero phase construction for 131 vidyalayas. (Construction in this phase is limited to multi-purpose hall which serves the purpose of assembly hall, class room space, dormitories etc.)

- Because of initial government insistence that only deputationists should be taken as teachers in the schools, a large number of posts of teachers remain vacant. Presented below are particulars of teachers in position as against the sanctioned strength during the respective years:

	1986-87	1987-88	1988-89	1989-90	1990-91*
Sanctioned strength	747	2179	3034	3917	4142
Achieved strength	510	1238	2005	3057	3296

* upto 1st July, 1990

4.5.8 of course, during the year recruitment rules were relaxed to provide for direct recruitment of teachers to the extent of 50%. Even this has not been adequate for the purpose of achieving full strength of teaching and non-teaching staff. Right now, a proposal is under consideration for direct recruitment of teaching staff upto 75% and non-teaching staff upto 15%.

4.5. 9 This is a scheme about which there have been sharp differences amongst the Committee members as well as those who responded to the Perspective Paper circulated by the Committee in regard to the justification for its continuance. Those members of the Committee who have commented adversely on the scheme have had the following points to make:

(i) The Scheme itself is very costly with high capital expenditure and high per student expenditure; government support for this high cost education for a selected few, while lakhs of children are denied their legitimate claims for provision of moderately good education is discriminatory and inconsistent with the principles for which a democratic republic committed to equity and social justice stands.

(ii) The Scheme caters only to a microscopic minority of the total school population.

(iii) It is an exclusive system inconsistent with the long-cherished common school system of public education.

(iv) A matter for investigation is whether majority of those who have received admission in the Navodaya Vidyalayas do really come from families of agricultural workers, share-croppers, rural artisans, the poor, marginal farmers etc.

(v) Teaching of Science through English and Social Sciences through Hindi is pedagogically unsound.

(vi) The operational design of Navodaya Vidyalayas fail to fulfil the origional policy mandate of NPE in the light of the points made below:-

a) It is true that 'children with special talent or aptitude should be provided opportunities to proceed at a faster pace, by making quality education available to them'. However, in operational terms, it does not necessarily mean that such children need be separated from the rest in special residential schools in order to be nurtured.

b) There can be varying perceptions of what constitutes 'special talent or aptitude'.* According to POA, this would mean potentially high achievers' who are to be identified on the basis of an entrance test designed and executed by NPERC. This definition of 'special talent or aptitude' can be questioned at various levels. Are these tests free of

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* There is a question of equity and social justice involved in this since a majority of rural children grow under the constraint of impoverished conditions and poor schooling which limit the development of talent, aptitude or merit.

cultural, social and class bias? Do these tests evaluate 'special talent or aptitude' in all its dimensions - cognitive, Affective and psycho- motor skills? Even within the cognitive domain, do these tests evaluate all attributes or are these restricted to only certain specific ones? Would these tests also identify potential 'special talent or aptitude' which could not be expressed due to impoverished conditions and/or poor quality of school education? Clearly, due to these severe limitations, such entrance tests cannot be accepted as fair tools for identification of special talent or aptitude' in a culturally diverse and stratified society like ours.

c) A large majority of children, if not most of them, do have 'special talent or aptitude' in one or the other dimensions of life ranging from academic disciplines to co-curricular and socio-cultural spheres. In view of this, the narrow and restrictive definition adopted by the NV Scheme does not appear to be fair to most of the rural children, particularly the SCs/STs. An average NV selects only 80 children per year for admission from a whole district. This approach would exclude a vast potential of talented rural children in different walks of life from special nurturing they deserve. The damaging consequence of this exclusion on the full expression of national potential for excellence need not be over-emphasised. Thus the policy directive of servicing the objective of excellence coupled with equity and social justice is not fulfilled.

d) Section 5.15 of NPE refers to 'pace-setting schools' that are established to nurture special talent or aptitude' in various parts of the country. What is a 'pace-setting school ?Section 5.15 provides an answer. it says these schools are to become catalysts of a nation-wide programme of school improvement'.

e) What do we understand by pace-setting? Pace- setting is a process of setting a faster pace among those who are relatively equal. The Navodaya Vidyalaya, with its huge infrastructure and an expenditure of over Rs.9,000 per student 'per year, obviously cannot be considered equal amongst the Government-run village schools around it. Can it, therefore, perform the role of pacesetting at all? (The field observations showed that none of the NVs visited were in a position to perform this role; most of them were totally alienated not only from the surrounding schools but from the neighbouring villages as well.)

(vii) A study of 28 Navodaya Vidyalayas in the States of Gujarat, Jammu & Kashmir, Madhya Pradesh, Punjab, Rajasthan and UP was conducted by investigators specially engaged for the purpose-by Sub-Committee I of the Committee. This study was conducted with reference to rural talent, infrastructure, pace setting roles, staff matters, examinations and community reaction. This study has brought out the following aspects

* The constructions are generally very huge and of mixed quality; dormitories are often inconvenient; students tend to feel the shortage of space to keep their personal belongings; libraries and laboratories facilities are inhibited on grounds of space limitations.

* The percentages of admissions show a declining trend.

* Many children are unhappy and many teachers a resentful lot, apart from being of limited experience;

* Local community has limited awareness of the process of admission; awareness about admission is particularly lacking among the tribals; there are also complaints of malpractices in production of certificates for establishing rural background of the children to secure admissions. There are complaints of corruption too.

* The admission tests are anti-rural and anti- child; nor are the test designs conducive to selection of talent; the tests are not culture-free or training free; success in the tests would be dependent upon the special coaching provided by the parents of the children. Such coaching would be feasible only for the comparatively privileged parents.

* Seats in the schools are not getting filled fully; often 20% of the seats are vacant; the norm of 30% admission for girls is mostly unfulfilled.

* A high percentage of children seem to belong to middle income groups; they are largely of parents who are engaged in individual professions; and children of workers contributed to a comparatively low percentage of admissions; and many schools are not significantly better than normal schools but are just of the same quality or even worse.

* Children often tend to be withdrawn and alienated from the village community; local village children are not getting admitted.

* There are situations of conflict between school community and the local community.

4.5.10 Those members of the Committee who have responded favourably to the scheme have made the following points:

- It will be inappropriate to arrive at a decision about the Navodaya Vidyalayas on grounds of philosophical aversion to elitism.

- While some of the schools which were investigated may not be doing well, some others are doing well and those associated with them are enthusiastic about the same.

- If the existing Navodaya Vidyalayas are biased towards the richer sections of the country side, they can be remedied with insisting on a proper representation of 'unfair admissions of the rich, if any.

- The argument that the existence of residential schools for the talented children militates against the concept of the neighbourhood schools is not entirely just. Any system of residential schools will only cover a small fraction of the total population; nor are one or two Navodaya Vidyalayas in a district likely to deplete the number of talented students in

non-residential schools; and no great harm will be done if a small number of village children who do well have the opportunity to go to good residential schools.

- While the priority of priorities is to broaden the pace of educational parameters in terms of quality, there is need for initiatives at different levels to improve present standards of educational attainments. With proper development and fund support, Navodaya Vidyalayas can become outstanding learning resource centres.

- The Navodaya Vidyalayas should continue and similar schools should be established at least one per district in the uncovered districts of the country.

- The Navodaya Vidyalayas should be improved by proper linkages with DIETs, SCERTs and other institutions; academic programmes should be instituted for both updating education as well as the on-going training of in-service teachers; sports, culture, arts and crafts, music, theatre etc. should come under the umbrella of the future Navodaya Vidyalayas. If the scheme has not performed well, it is significantly due to inadequate provision of financial and academic resources.

- Nor is it fair to evaluate the scheme so shortly after its commencement.

- With reference to the official records relating to the formulation of the Navodaya Vidyalaya Scheme, the Committee also took note of the fact that the Government decision to go ahead with the scheme was taken in spite of objections and words of caution from eminent educationists and official experts. These objections were to the effect that the principle of nurturing a small number of children on high per capita cost would not be appropriate; that entrance tests were not capable of being designed in a class neutral or culture- free way and the selection system itself was likely to discriminate against the children from under- privileged backgrounds. Further the Committee also took note of the fact that three major States, Assam, Tamil Nadu and West Bengal had declined to accept the scheme on the following grounds: i) The scheme with its heavy per capita expenditure and coverage of a small number of children was too elitist' to be accepted.

ii) The insistence in the scheme to switch over after Class VIII from the respective State language to English for Science, and Hindi for Social Sciences was not acceptable on educational grounds as it would have an adverse impact on the development of the students.

iii) Being a Centrally Sponsored Scheme it entered an arena which legitimately belonged to the States.

Recommendations

The Committee, having considered the strong views expressed by the members for and against the Navodaya Vidyalaya Scheme and after taking into account all aspects of the scheme in terms of the concept, philosophy, design, its implementation and future, recommends that the Government may decide from out of the following three alternatives:

(i) NO FURTHER NAVODAYA VIDYALAYA NEED BE OPENED. The existing 261 Navodaya Vidyalayas may be restructured and continued with provision of adequate resources. The scheme may also be reviewed at the end of 1992-93. The terms of reference for this review may be - - Whether the objectives for which the scheme was established have been achieved in terms of nurturing of talents, reservations for the SCs/STs, girls, representation for rural children, pace setting functions and national integration through migration of children.

- If the objectives have not been achieved what are the reasons for the same?

- Restructuring, if any, of the scheme with reference to :

- re-definition of the concept of special talent or aptitude such that the selection takes into account the entire cognitive and affective domain as well as the psychomotor skills;

- broadening the process and canvas of selection with a view to make provision for the vast potential of talent in different attributes of life that exists among rural children, but is not identifiable by conventional academic tools;

- changing the present life style and value orientation of the Navodaya Vidyalayas such that the alienation of the campuses from rural life, particularly that of the under privileged sections, is guarded against.

(ii) All the existing 261 Navodaya Vidyalayas may be transferred to the State Sector for the States to run them as residential centres on the Andhra Pradesh model.

(iii) The Navodaya Vidyalaya scheme may be transformed into a Navodaya Vidyalaya programme of broad based talent nurturing and pace-setting. (A day-school each under the Common School system can function in the premises of the Navodaya Vidyalayas).

Implications of the three alternatives
First alternative

4.5.11 Restructuring is to be on the following basis -

(a) At present no income limit is prescribed to ensure that admissions are confined to students from economically weaker sections. The existing pattern of admissions shows

that 31.5% of the children admitted in the Navodya Vidyalayas are of parents engaged in private or public services. So, an appropriate income limit may be fixed for the purpose of permitting students for admission so that the beneficiaries are from the really deserving economically weaker sections.

(b) The existing vidyalayas in the respective States may provide for admission of students from districts where Navodaya Vidyalayas have not so far been established. This will facilitate draft of students into the Navodaya Vidyalayas from a much larger geographical area and from a much larger social base. In this context, the following Table may be seen which gives particulars of coverage of districts in the respective States by Navodaya Vidyalayas.

Table 14

NUMBER OF DISTRICTS COVERED AND PERCENTAGE COVERAGE OF NAVODAYA VIDYALAYA

Sl. No.	Name of the State/UT	Total No. of districts	No. of districts covered	Percentage of coverage
1.	Andhra Pradesh	23	20	87%
2.	Arunachal Pradesh	11	5	45%
3.	Bihar	39	24	61%
4.	Goa	2	2	100%
5.	Gujarat	19	7	37%
6.	Haryana	12	9	75%
7.	Himachal Pradesh	12	8	66%
8.	Jammu & Kashmir	14	14	100%
9.	Kerala	14	10	71%
10.	Karnataka	20	18	90%
11.	Madhya Pradesh	45	28	62%
12.	Maharashtra	30	19	63%
13.	Manipur	8	7	88%
14.	Meghalaya	5	3	60%
15.	Mizoram	3	2	66%
16.	Orissa	13	12	92%
17.	Punjab	12	7	76%
18.	Rajasthan	27	21	74%
19.	Sikkim	4	1	25%
20.	Nagaland	7	1	14%
21.	Tripura	4	1	75%
22.	Uttar Pradesh	62	30	48%
23.	Andaman & Nicobar	2	2	100%
24.	Chandigarh	1	1	100%
25.	Dadra & Nagar Haveli	1	1	100%

26. Daman & Diu	2	2	100%
27. Delhi	3	1	33%
28. Lakshadweep	1	1	100%
29. Pondicherry	4	4	100%
Total	454	261	65%*

No doubt, additional area coverage by existing Navodaya Vidyalayas may vary from State to State as per this proposal, consequent on the existing coverage itself being quite uneven. But this cannot be helped in the circumstances.

(c) Full freedom should be given to the Samiti for recruiting 100% of its teaching and non-teaching staff on direct recruitment basis because experience has shown that deputationists are reluctant to join the service of the NVS. (All along Government have been advising the NVS not to go in for direct recruitment. This is essentially a function on which the Samiti is to decide and it is not appropriate for the Government to make stipulations in this regard as it inhibits the academic freedom of the Samiti).

(d) The Vidyalayas are to be used as Learning Resource Centres for the entire district for children and teachers alike.

Second alternative

4.5.12 The second alternative refers to the residential schools run by the Andhra Pradesh Residential Education Society (APRES). In these schools, fees are charged at rates progressively proportionate to the income of the parents of the children, no fee being charged on students of parents with income of Rs.12,000/- or less per annum. In these schools, there is also no stipulation for migration of students as under the currently implemented NV Scheme.

Third alternative

4.5.13 A two-pronged strategy for this purpose is suggested below:

For Talent Development * Organise frequent collective activities (work-camps/workshops/bal melas/quizes etc.) for children of different age groups from all over the district on specific themes ranging from academic disciplines and co-curricular activities to socio-cultural sphere and sports coaching. Some examples of possible themes are problem solving in physics, creative writing, folk singing, gymnastics, swimming, toy making and so on. These inter-actions among children from different schools should go on throughout the year, being open to batches of children. Priority attention should be given for nurturing talent among girls and children of SC/ST and other educationally backward communities. The Educational Complex would encourage children in its area with different talents and aptitudes to opt for any of these activities. The responsibility for

the district- wise programme may be given to DIETs which may use the physical facilities of the Navodaya Vidyalaya campus if one exists in the district. Resource persons for this may be drawn from anywhere, including the school staff and the local villages. Financial support for organising such activities would be required, besides of course information on themes and resource persons for which SCERT could act as a consultation agency through the DIETs. The DIETs, in consultation with the Educational Complexes and SCERTs, should plan for ways for further nurturing of talents among those children who show excellence in the district-level programme. Special arrangements should be made to send such children to leading institutions in their respective fields within or outside the district. A particular feature of the programme would be to welcome even school drop-outs and those children who never went to school with a view to broaden the social base for talent identification and nurturing the entire human potential to its maximum.

Re-organise the teacher training programmes with a view to equipping the teachers with an understanding of how to identify and nurture children with special talent or aptitude within the same classroom. A special emphasis would need to be given to enable talented children to develop at a faster pace in scholastic and non- scholastic domains in every classroom in ways that encourage non-competitive environment.

For pace-setting -

* An average school at each stage of education (Primary, Middle, Higher Secondary) may be selected in each Educational Complex with a view to initiating a process of innovation and experimentation coupled with quality improvement. The pace-setting activities would also focus on innovating and experimenting with the strategies of 'non-formalization' and 'reaching out' in the context of UEE. The principle of replicability should inform all aspects of this programme.

* In order to support the above pace-setting activities, one relatively better equipped High School in each Educational Complex may be selected as a 'lead school' as was also envisaged by the Education Commission (1964- 66). This 'lead school', with some additional facilities and re-orientation of its teachers, would act as a resource institution for the pace-setting processes going on in the schools of the Complexes. For this additional responsibility, the 'lead school' would be provided with extra resource persons and administrative assistance. The 'lead school' may also facilitate communication between the pace-setting schools of the Complex and DIETs.

Eighth Plan requirements (at current level)

4.6.0 Full funds required for constructing the Navodaya Vidyalaya complexes for all the 261 schools and running them have to be made available during the Eighth Five Year Plan period. Requirement of funds projected by the Director, NVS and presented before the Committee is exhibited in the following Table:

Table 15
YEAR-WISE REQUIREMENT OF FUNDS DURING VIII PLAN PERIOD.
(for existing 261 Vidyalayas)

(Rupees in crores)

Sl. No.	Item of Expenditure	1990-91	1991-92	1992-93	1993-94	1994-95	Total
1.	Recurring	70.99	87.02	101.69	110.38	113.00	483.08
2.	Non-Recurring	8.94	8.95	10.11	9.12	8.44	45.56
3.	Capital Works	95.00	90.00	90.00	90.00	90.00	455.00
	Total	174.93	185.97	201.80	209.50	211.44	983.64

The Director, NVS on being requested to let know whether further cost reduction in the provision of infrastructure facilities for the Navodaya Vidyalayas is feasible, has reported that it is feasible provided the space requirements for each complex are reduced and certain design modifications are made. He has also quantified the physical and financial requirements on the scaled-down basis as per the following Table:

Table 16

Estimate of fund requirements for Navodaya School buildings as per scaled down norms proposed

Area (in square metres)
Unit Cost (in Rupees)
Total cost (Rupees in lakhs)

	ZERO PHASE (Part of I phase)		:	I PHASE		:	II PHASE		:	TOTAL AREA	
	Original	Revision proposed	:	Original	Revision proposed	:	Original	Revision proposed	:	Original	Revision proposed
Area	1768 m2	1625 m2	:	6474 m2	5290 m2	:	4882 m2	3510 m2	:	11360 m2	8800 m2
Unit Cost	Rs.2035	Rs.1825	:	Rs.2035	Rs.1825	:Rs.2025	Rs.1825	:	:Rs.2025	Rs.1825
Total Cost	Rs.35.8	Rs.26.00 lakhs	:	Rs.131.0	Rs.96.5 lakhs	:Rs.98.0	Rs.64.5 lakhs	:Rs.229.0	Rs.161 lakhs

		(Rs. in crores)
(i)	For taking up phase I & II construction in respect of 61 schools for which no building work has been taken up so far @ Rs.161.00 lakhs per school.	98.21
(ii)	For completing 130 phase II buildings @ Rs.64.50 lakhs per school	83.85
(iii)	For completing phase I & II construction in respect of 70 schools where zero phase construction has already been taken up @ Rs.125.20 lakhs per school	87.64
(iv)	Add funds required during 1990-91 for works already on hand	80.00
	Total..	349.80*

* This estimate does not include cost escalations or agency changes; anticipated cost escalation is 30%; and agency change is 10%.

III

CHAPTER 5

EARLY CHILDHOOD CARE AND EDUCATION

The Rationale

5.1.1 The activities which foster and promote the all-round balanced development of the child in the age group of 0-6 years in all dimensions - physical, mental, social, emotional and moral have been collectively described in NPE 1986 as Early Childhood Care and Education (ECCE). Both these components, care and education, are essential, since either by itself is inadequate. In this sense of a means to promote balanced human development, ECCE is the birthright of every child.

5.1.2 The Constitution, in Article 45, lays down, as a directive principle that every child up to the age of 14 shall receive free and compulsory education. Articles 39 f, 46 and 47 respectively lend further support to this Constitutional directive. The founding fathers of the Constitution clearly intended to ensure that every child, irrespective of social or economic status of his/her parents, received care and education from birth up to the age of 14 years. This goal was to have been achieved 'within a period of ten years from the commencement of this Constitution' (Article 45)! But all along this directive has been interpreted narrowly as applicable only to the education of children from the age of five or six upwards. It is, however, never too late to acknowledge that, since care and education must begin at birth, ECCE is part of the provision originally envisaged under the Constitution for the development of 'all children until they complete the age of fourteen years.

5.1.3 ECCE is also of immense significance from two other standpoints - universalisation of elementary education and equality of opportunity for women. ECCE is linked both directly and indirectly to universalisation of elementary education. Directly, it helps to prepare the young child for school. Further, its child-centered approach and play way and other non formal methods can help to prepare the school to receive children. Indirectly, yet powerfully ECCE, particularly for infants in the age-group of 0-3 years, can enable girls, engaged in taking' care of younger siblings, to attend school since older girls' involvement in child care is one of the major reasons for their non-attendance, child care services, in close proximity to and co-ordination with school, offer an effective strategy for the enrolment and retention of girls in primary schools.

5.1.4 ECCE is equally vital in promoting women's opportunities for participation in work, education and social development. Since child care forms the major portion of the 'triple burden' borne by crores of poor women (i.e. as workers, homemakers and mothers), child care services would be significant in redressing this inequity and in promoting women's development. ECCE, therefore, is a cross-sectoral programme addressing the intersecting needs of women, children and girls.

5.1.5 The Education Commission (1964-66), clearly recognised the significance of pre-primary education in child development .and of its critical link with enrolment, retention

and learning outcome in primary schools. Yet, the National Policy on Education (1968), despite its concern for 'early fulfilment of the Directive Principle of Article 45' and for reducing the 'prevailing wastage and stagnation in schools', preferred to ignore the commission's recommendations on pre-primary education. Years later, presumably as a consequence of the National Policy for Children (1974), the Fifth Five Year Plan made a beginning by formulating a comprehensive project in the form of the Integrated Child Development Services (ICDS) for the under-privileged and educationally backward sections of society.

5.1.6 Although ICDS made rapid strides in the late seventies and early eighties, the Government's commitment towards universalisation of early childhood education remained ambiguous, as there was still no clear policy declaration. It is for this reason that the NPE 1986 is a historic document in that it boldly recognises the importance of ECCE and lays down the 'holistic' principles on which the programme is to be developed. The policy declaration views ECCE as an essential component in children's development and as a support service for universalisation of elementary education and women's development. However, the NPE does not refer to the Constitutional imperative to provide ECCE to all children.

Recommendation

The scope of the Constitutional directive (Article 45) of providing, within a specified time-frame, free and compulsory education for 'all children until they complete the age of fourteen years', should be enlarged to include ECCE.

Operational Design - A Fragmented Approach

5.2.0 The POA does not reflect an adequate appreciation of the inter-linked and inter-dependent roles of ECCE in other dimensions and stages of education. Although the role of ECCE in universalisation of elementary education and women's development has been recognised, the operational implications of the policy are spelt out, only in the chapter on ECCE. For instance, the role of ECCE in offering strategies needed to make schools better prepared to receive children is neither acknowledged nor spelt out in the chapters on 'Elementary Education' and 'Content and Process of School Education'. The chapter on 'Education for Women's Equality' makes only a passing reference to the link between ECCE and girls' access to elementary education (Para 12). ECCE has the potential of becoming a significant generator of skilled employment for women, but the chapter on 'Vocationalisation of Education' in POA contains no reference to ECCE. Likewise, the chapter on 'Teachers and their Training' is silent on the issue of the-preparation of personnel for ECCE and also on latter's linkage with the training of teachers for elementary education.

Recommendation

Since ECCE is a cross-sectoral programme, addressing the intersecting needs of children, women and girls, ECCE as a component should receive due attention in all dimensions and stages of education, such as women's education, education of Scheduled Castes and Tribes, elementary education, vocational education, content and process, teacher training, higher education etc.

The Gap Between Need and Provision

5.3.0 It is estimated that children below six number about 14 crores (17% of the population). Of these, it may be conservatively estimated that about 5.6 crores (40% of the target age group) fall below the poverty line whose very survival and development are threatened by neglect and lack of essential child care services. And there are many more above the poverty line whose need for ECCE is only a little less acute. Yet, the recent estimates, (see Table 1) indicate that 1.43 crore children in the 0-6 age-group, i.e. only 10% of the target group or one fourth of the vulnerable segment, receive some elements of child care services. only some of these may receive an integrated package including health care, nutrition and early childhood education, and very few receive day care. While most of those receiving some services fall in the age-group of 3-6 years, it is the children in the age-group of 0-3 years who may need more attention, in the context of girls' education and working women's needs. Table 2 shows that only about 15% of the children in the 3-6 age-group receive pre-school education. This is thus the extent of the gap between the need and the provision, though the POA's target of establishing a minimum of 2.5 lakh centres by 1990 has been crossed.

Recommendation

ECCE should be included in the Minimum Needs Programme.

Implementation - Divided Responsibility

5.4.1 With the exception of the expansion of ICDS and other schemes, as envisaged in the Seventh Plan well before the inception of NPE, implementation of the ECCE Chapter in the POA has hardly begun. The obvious financial constraint is not , however, the main reason for non-implementation, which appears to be more a consequence of fragmentation responsibility between two Departments of the Union Government. While the NPE and POA were conceptualised and developed by the Department of Education in the Ministry of HRD, the responsibility for actual implementation of the ECCE programmes in the POA has been transferred to the Department of Women and Child Development in the same Ministry (or the Dept. of Social Welfare at the State level). The internalisation of policy directives and their translation into action is apparently taking a considerable time, as several actions have not yet begun. For example, no steps have yet

been taken to convert a certain percentage of ICDS Anganwadis into day-care centres (cf. POA - Chapter 1, Para 9 (a)). Likewise, there is lack of either awareness or interest in implementing certain important measures/strategies recommended in the POA, such as reaching out to specific under-privileged or unserved groups (Para 7) , teacher education, personnel training and accreditation (Para 11), or experimentation with and encouragement of alternative models of early childhood education and day-care centres (Para 10).

5.4.2 Besides implementation of the schemes, the Department of Women and Child Development is expected to play the role of the nodal Department as regards ECCE - stimulating, coordinating and monitoring the efforts of other Departments and agencies, such as Labour, Tribal Welfare, Agriculture, Works and Housing, Irrigation, Rural Development, Forest, etc., which are likely to be increasingly involved in programme implementation in ECCE, as they employ women in large numbers. There is no demonstrable evidence that this role has so far been performed, though the, nodal role is clearly implied in the strategies suggested in POA.

5.4.3 Even greater is the need for close co-ordination between the Department of Women and Child Development (and its counterparts in the States) on the one hand and the Departments of Education, on the other, both in the Centre and the States/UTs. The Review Committee found little evidence of this co-ordination.

5.4.4 While the decision to transfer the responsibility for implementing ECCE to the Department of Women and Child Development may have a valid and pragmatic basis, the Department of Education cannot give up its basic responsibility for early childhood education under Article 45. One major justification for the Department of Education to continue to be concerned about ECCE is its linkage with universalisation of elementary education and the possibility of ECCE's positive impact on primary school's learning environment. The Department of Education also has a responsibility for teacher education including for ECCE workers.

Recommendations

i) The Department of Women and Child Development in the Ministry of HRD at the Centre (and the Departments of Social Welfare in the States) should be held accountable for the implementation of ECCE in all aspects of its operational design, as recommended in the POA.

ii) This Department must also accept the nodal role of stimulating, coordinating and monitoring the ECCE work undertaken by other agencies/departments, such as Labour, Works & Housing, Tribal Welfare, Agriculture, Irrigation, Rural Development, Forest etc.

iii) The Department of Women and Child Development (and its counterparts in the States) should seek the setting up of an Inter-Ministerial Committee (and its equivalent in

the States), comprising of representatives of the Departments of Labour, Health and Education to assist it in planning, coordinating and monitoring the ECCE programmes.

iv) At the same time, the Department of Education cannot, under Article 45, give up its basic responsibility for the education of children from birth, to six years, and must ensure that this continuing concern is reflected in action in all dimensions and stages of education

Strategies and Models

5.5.1 ECCE need not be narrowly understood as an institutional programme confined to the four walls of a classroom or the framework of a centrally worked out scheme, such as ICDS. it could be in the home or in the community, family-based or institution-based, linked to school or linked to farms, factories or construction sites, State- funded, employer-funded or parent-funded or any mix of these, half-day or full-day, according to the needs and resources of each community. There is scope f or immense variety in strategies, models and structures, responding to the vast diversity and complexity of our pluralistic society. For example, ECCE for infants (below three) must preferably be home-based, small-scale and attuned to the specific socio-cultural or geographical settings, and to women's work-styles and timings.

5.5.2 It is reported that not all children in a given habitation, not even from the vulnerable sections, respond to an Anganwadi; on an average one-fourth may not be covered. A recent study revealed that, while 80% of the organisations operating Early Childhood Education (ECE) Centres reported an average attendance of over 60%, 20% of the organisations had an attendance range of 41-60%. It is expected that this limitation of access or coverage could be broken by incorporating the principle of diversity and flexibility in ECCE. This would be especially true in the case of specific under-privileged communities listed in Para 7 of POA for priority action. For instance, mobile day-care units are needed for migrant and shifting workers to be run by a voluntary organisation/workers' cooperative, but funded by the employer. This principle of diversity and flexibility in ECCE, essential for widening coverage and improving retention, has not found a place in NPE 1986.

5. 5. 3 However, the POA does make a provision for alternative strategies and models, though this still falls far short of the concept of a pluralistic approach. In practice, there is little evidence that measures were taken to promote even this limited diversity and flexibility. Indeed, the centrally-planned and centrally-managed character of ICDS itself discourages and even suppresses experimentation and innovation.

5.5.4 An important omission in POA is with regard to Statutory Creches and Day Care Centres for both the organised and unorganised sectors, as recommended by the Shramshakti Report and several women's groups.

Recommendations

i) The principles of diversity, flexibility and decentralised funding and management must be incorporated into the policy framework, with a view to widen coverage and improve retention, especially with reference to remote habitations and most underprivileged or migrant communities.

ii) These principles must be reflected in the operational design for developing a country-wide network of ECCE programmes, linking a rich diversity of models and strategies.

iii) Provision should be made for Statutory Creches and Day Care Centres for both the organised and unorganised sectors and for strict implementation of all labour laws dealing with child care services. These laws should also be reviewed to facilitate easier implementation.

iv) Wherever possible, ECCE centres should be linked physically as well as programmatically with the primary school.

ICDS - A Monolithic Model

5.6.1 The NPE emphasises ICDS, a Centrally Sponsored Scheme, as the major vehicle for the achievement of ECCE's goals and POA views ICDS as a monolithic model. Expectedly, a recent study of child care services in seven States shows that the rigid and top heavy ICDS programme is weak in content and quality, costly, limited in access and is often poorly implemented, thereby succeeding only partially to address the needs of women and girls However, within ICDS, in principle, there is scope for a wide variety of models and flexibility of approaches to the vast diversity and complexity of situations it is required to respond to. ICDS should function in a decentralised and localised manner, encouraging local women groups to develop models and structures suited to their needs. The ICDS' chief role should eventually be to offer support through essential funding (may be, on a per child basis), conditional on minimum programme, training, professional guidance, extension, co-ordination with other agencies etc. Such an approach will not only ensure community involvement and minimize costs by building up on existing foundations and indigenous socio-cultural forms, but in the long run is the only way of ensuring widest possible access to the most vulnerable groups such as those listed in POA (Para 7).

5.6.2 As far as infants in the 0-3 age group are concerned, only such a participatory process that elicits mothers' involvement and responds to their needs, can succeed. Yet no time-bound steps have been spelt out in the POA or elsewhere to move in this direction. The uniform monolithic model of ICDS, applicable across the country, continues to hold sway.

Recommendation

In order to broaden access and improve quality, ICDS should move in the direction of becoming a participatory network of decentralised ECCE centres managed by local groups, preferably poor women's groups, under the umbrella of Panchayati Raj institutions, with the Government providing support through essential funding (may be, on a per child basis), training, monitoring and guidance.

Other Models and Strategies

5.7.1 The POA identifies several models and strategies other than ICDS (Para 2). These ongoing programmes either attempt to be holistic or are single-dimensional (feeding, education etc.). Steps necessary to upgrade and strengthen all programmes towards a holistic, approach have been worked out (Para 9), but no provision has been made for its promotion.

5.7.2 Some alternative models for small-scale experimentation have been described in POA and more could be worked out. But no provision has been made to promote these. Such efforts should be supported (see Box). Some of these models, such as NCERT's home-based model in Orissa, were launched well before NPE and continue at their original locations and level of operation.

A successful small-scale effort is the preschools run for the children of the palmyratappers of Kanya Kumari District in Tamil Nadu by a voluntary agency in response to the expressed need of the community. This is a school-preparation class which is helping in the enrolment, retention, performance at school and self- confidence of these children of an oppressed group.

5.7.3 A number of underprivileged communities have been described in POA (Para 7) and more could be identified for special attention, but again no provision has been made for priority action for this purpose.

5.7.4 The POA talks in Para 12 of the need for media support for conveying messages to parents and community, for training of personnel and for stimulating programmes for children. There is, however, no information about the steps taken in this direction so far, except about some sporadic micro-level experiments.

Recommendation

Concrete provisions should be made in financial and programmatic terms for decentralised and community-based implementation of the various models and strategies mentioned in POA, such as -

i) Strengthening and upgrading all existing models,

ii) Promoting innovative and experimental models,

iii) Developing special programmes for specific underprivileged or migrant communities and for remote habitations, and

iv) Developing and promoting media support on a massive scale (as is being done at present for the adult literacy campaign) for generating public awareness and understanding regarding issue relating to care and education of children in the 0-6 age group.

Content and Quality

5.8.1 Recognising the holistic nature of child development, NPE rightly places emphasis on the comprehensive and integrated nature of ECCE. Its emphasis on a child-centred approach and on the primacy of play and activity as the core of curriculum, while also discouraging the early introduction of formal teaching methods and 3 R's, is specially welcome.It is, however, necessary to clarify that this special focus on individuality of the child is to be viewed as a means to battle against the prevailing pattern of conformity, uniformity and the authoritarian attitudes and relationships between adults and children, and is not intended to dilute the social, collective and co- operative dimension of child development. Further, neither the Policy nor the POA speaks about the need to translate basic curriculum principles into localised content appropriate to varying social, physical and cultural environments. In this regard the role of lullabies and word plays needs to be emphasised.

5.8.2 While the POA is unambiguous in cautioning against the dangers of using formal methods of teaching and early introduction of the 3 R's, no strategies for achieving this objective seem to have been worked out.,

5.8.3 Since the development of children proceeds through interaction with adults and amongst themselves the quality of ECCE is critically dependent on the quality of adult-child interaction, which in turn is intimately affected by factors like adult-child ratio, training, and the mental and social attitudes of the concerned adult. The link of the adult worker's response with wages, working conditions, job satisfaction, motivation, social status and recognition will be taken up in the next section.

5.8.4 Because of the nature of childhood, the adult-child ratio, which is so vital for development, has to be quite different from that in higher stages of education. For infants in the age group of 0-3 years, a ratio of one to three to five may be acceptable (in affluent countries this is as low as one to two, while even a very poor developing country like Vietnam lays down and maintains a ratio of one to seven). For children between three and six, a ratio of one to fifteen is ideal, but up to twenty-five may be accepted. While recognising the crucial importance of adult-child ratio, the POA in Para 5 shies away

from laying down desirable ratios, and there is no indication that any steps have been taken to improve the prevailing ratios, which tend to be fairly high in many cases. Acceptable adult- child ratios for different age-groups and for different models (e.g. family day-care would have different standards) must be suggested as goals.

Recommendations

i) The basic principles of curriculum and content of ECCE should be translated into localised content.

ii) Effective field strategies, buttressed by a systematic media campaign (as is going on at present for adult literacy), need to be urgently implemented in order to discourage formal teaching methods and early introduction of 3 R's in ECCE programmes, both in the private and the Government sectors.

iii) Appropriate and acceptable ratios of adults to children in ECCE programmes for different age-groups and models should be worked out as guidelines for agencies implementing ECCE and adequate provision be made to proportionately augment the staff of the centres.

Personnel and Training

5.9.1 The NPE is silent on the entire subject of training for ECCE and on the status of the child care worker. The skilled nature of ECCE work must be accorded its due social status in the policy framework itself. The POA, however, does recognise the links between motivation, wages and job satisfaction and unequivocally accepts both the long-term goal of bringing full time child care workers on par with primary teachers, and the short-term goal of raising their emoluments above the minimum wages earned by unskilled workers (Para 6). However, there are no indications that concrete steps have been initiated towards this end; while the Anganwadi worker barely manages to get minimum wages proportionate to the hours of work, her helper may be getting one-third to one-fourth of this! There is also an immediate need to bring creche workers (who work full-time) above the minimum wage level.

5.9.2 A major lacuna of the POA is the failure to locate the overall coordinating responsibility for training and preparation of ECCE personnel in any one agency. And even the steps which have been worked out in relation to training have not been implemented (Para 11). One reason for this may be lack of clarity as to who is to implement them.

5.9.3 The responsibility for teacher education and personnel training for ECCE must lie with the Departments of Education, both at the Centre and in the States/UTs, since it concerns professional and vocational education in a holistic framework. This calls for close co-ordination between the Department of Education and the Department of Women

and Child Development at the Centre (and their counterparts in the States/UTs) as well as all other user departments/agencies. Also, the content and methodology of early childhood education must be reflected in a concrete form in the training of elementary school teachers, an aspect ignored by the POA.

5.9.4 Training and development of ECCE personnel must be promoted at three levels:

- first level, i.e., grass root workers or para-professionals,

- second level, i.e., professionals, and

- third level, i.e, supervisors, trainers, managers and administrators.

5.9.5 The current training courses available in the country (see Table 3) should be reviewed from this perspective and become the starting points for developing a country-wide network of ECCE training programmes.

5.9.6 The content of training must be holistic and the methodology should become dynamic, interactive, participatory and related to real- life situations. An internship approach to training should be adopted at all levels and for all models with different mixes and degrees of field placement, with or without supervision, as appropriate to local conditions. These models should be closely related to the localised styles of management and supervision.

5.9.7 Training has to be visualised as a continuous, ongoing process linked to supervisory and management structures. In keeping with the basic principles of diversity, flexibility and decentralisation, a variety of training models and strategies should be the objective. Accreditation should be used as a tool to strengthen and upgrade training programmes, but not to promote uniformity.

5.9.8 Though the POA talks of creating a system of accreditation (Para 11) , no steps have been taken so far towards this end. Once accreditation is worked out, it should be possible to re-design recruitment rules/service conditions for employment in both the public and private sectors, and for local bodies undertaking ECCE. This should make it easier for other departments/agencies to organise ECCE programmes. It would further promote decentralisation, as the Panchayati Raj institutions and local women's groups would be able to draw upon the trained cadres from accredited institutions, without being dependent upon the bureaucratic machinery.

5.9.9 With the adoption of appropriate adult-child ratios, and the expansion of ECCE programmes, ECCE is likely to become a vast generator of skilled employment for women and as such should find a significant place in Vocational Education. Although referred to by the POA, there is no evidence of any action having been taken to develop vocational courses on ECCE, or to promote the existing CBSE course through accreditation and incorporation in recruitment rules. Keeping in mind the low level of female education in many parts of the country and the difficulty of finding suitable local

candidates at the +2 level, the feasibility of developing Vocational Education in ECCE after Class VIII itself, should also be seriously examined.

Recommendations

i) Recognising the skilled nature of work in ECCE and the links between programme quality on the one hand and wages, job satisfaction, social status and motivation on the other, the policy for remuneration of ECCE workers spelt out in POA must be implemented with immediate effect.

ii) The overall responsibility for teacher education and personnel training for ECCE at all levels must be accepted by the Departments of Education, both at the Centre and the States/UTs in close co-ordination with the Department of Women & Child Development at the Centres and their counterparts in the States, while developing mechanisms to respond to the needs and perceptions of the users and programme implementers, such as the Departments of Labour, Forest, Irrigation, Works and Housing, Rural Development etc. as well as the private sector. For the other components of ECCE (health, nutrition etc.) , a close coordination with the nodal and other related departments/agencies would be necessary.

iii) Working through Educational Complexes (as proposed elsewhere) , DIETs should assume responsibility for training in ECCE and establish a field-based networking relationship with ECCE programmes. For this purpose, DIETs should build up their own training capability.

iv) Building up on the base of available training pattern (Table 3), a network of modular training programmes for ECCE must be developed at all levels (grass roots, paraprofessional, professional and supervisory) through a diversity of models and strategies, with content to meet the holistic, goals of ECCE and a participatory methodology using the basic principle of internship with different degrees of field placement.

v) A system of accreditation of training programmes and agencies in ECCE must be developed as indicated in POA (this would also promote diversity and decentralisation).

vi) Action should be taken soon to develop Vocational Education of ECCE at the +2 level in all States/UTs. The feasibility of organising ECCE training following Class VIII should be examined on a priority basis with a view to widen the social base and availability of ECCE workers.

vii) Measures should be initiated to re-structure the training programmes of elementary school teachers all over the country to integrate and emphasise the child- centred and non-formal approaches of early childhood education in the primary schools, especially at the early stages, with a view to improve schools' capability to receive and retain children.

Decentralisation

5.10.1 The NPE states that the 'local community will be fully involved', but fails to spell out, in the POA or elsewhere, a strategy to decentralise management and institutionalise local community control. ICDS, the chief vehicle for ECCE, has come to acquire the characteristics of rigidity, bureaucratization, low performance, lack of community participation, and insensitivity to local needs, patterns and socio-cultural conditions. This also appears to the true of other Central Schemes of financial assistance to voluntary organisations and other agencies for ECCE.

5. 10.2 Interestingly, a major reason for Government's reluctance, besides the usual resource constraint, in upgrading the status and emoluments of ECCE workers seems to be the prospect of employing lakhs of additional workers. Thus ECCE is trapped on a vicious cycle. The low status and emoluments and lack of promotional avenues are constraining the motivation and performance of workers, but their status and service conditions cannot be rationalised as long as the Government continues to be the employer. The official rationale for low emoluments is the assumption that these workers are not employees, but only local volunteers. While this assumption obviously does not hold water when the Government becomes the recruiting agency, it may have validity if the workers are recruited and managed by local women's groups and/or village-level committees through village or Mandal Panchayats. Under the latter conditions, the ECCE workers may be willing to work with comparatively higher motivation even on relatively low emoluments (but not the pitiful levels prevailing now). It is time that we introduce a sense of realism in our management systems, instead of planning on the basis of the illusion of voluntarism that doesn't exist, and move in the direction of non- formalising ECCE institutional framework.

5.10.3 There is indeed no alternative to handing over of the management of ICDS and other ECCE programmes to local groups, preferably poor women's groups, through the Panchayati Raj framework. This would be consistent with what is being recommended by this Committee in the case of school education too. The principles of local community control along with accountability should be the touchstones of management system for ECCE. In order to establish operational linkages with elementary education, ECCE should be included in the charter of responsibilities of Educational Complexes being proposed for decentralising planning and management of school education.

Recommendations

i) The ICDS and other related Centrally Sponsored Schemes for ECCE may be shifted to the States/UTs following the completion of the present phase. The State/UT Plans should then be proportionately augmented with additional funds with conditionality of non-divertibility and accountability.

ii) The management of Anganwadis and other ECCE centres should be fully handed over to voluntary organisations and/or community groups, preferably poor women's groups, through the Panchayati Raj framework. Village-level and/or Mohalla-level Committees may be constituted by local bodies, with at least half of the members being poor women and with suitable representation of Anganwadi workers, for planning, co- ordinating and monitoring of a cluster of community- based centres in a village or town. Needless to add, the principle of community control over ECCE programme would carry with it the principle of full public accountability to the community.

iii) In order to ensure diversity, flexibility and responsiveness to local needs and socio-cultural conditions, the community groups and/or village or mohalla-level committees would be fully responsible for designing the model and strategy for the local ECCE centre, while being expected to ensure the minimum programme recommended by the State Government. Experimentation and innovation in approach to training, recruitment of personnel and management would be encouraged and be provided for.

iv) The Village or Mohalla-level Committee or the community group responsible for managing the ECCE centre would also be free to mobilise additional resources, in addition to the State resources, while subjecting itself to both financial and social audit.

v) ECCE should be included in the charter of responsibilities of the Educational Complexes proposed in the school education sector. Women and other community groups managing ECCE centres and Anganwadi workers may be suitably represented on the executive bodies of the Complexes.

vi) The role of the Educational Complex would be to develop a perspective plan for ECCE for the region covered by it and to assist the local committees and groups by arranging for training (through DIETs) , supplying educational and other materials (not locally available) guidance in budgeting, coordination, promoting mutual exchange of information and, most importantly, monitoring.

vii) Since the ECCE centre would be accountable to the community it is serving, the monitoring role of the Educational Complex as also of the State Government assumes special significance. While the Educaitonal Complex would make its report on individual centres available to the community/village as an input in the awareness-raising process, the State Government would monitor the Complex as a whole and release its report for public action at the Block or district level. In this framework, supervision as a means to control and improve performance becomes superfluous.

viii) The role of the State Government may be confined to:

(a) ensuring essential funding (may be, on a per child basis) for ECCE through the Panchayati Raj institutions/Educational Complexes;

(b) spelling out policy imperatives and broad guidelines;

(c) providing training through SCERT/DIETs;

(d) supplying materials not available locally;

(e) promoting lateral exchange and analysis of information and experiences amongst Educational Complexes;

(f) co-ordination;

(g) monitoring; and

(h) raising public awareness and giving media support.

ix) The State Government should also ensure that representatives of the user agencies and programme implementers (e.g. Departments of Labour, Irrigation, Forest, etc., and voluntary organisations) are included in the State-level structures set up for planning, programme formulation, designing curriculum, and development of training models and strategies, so that their needs and perceptions find adequate expression.

Resources

5.11.0 The' policy document is silent on both the magnitude of resources required and the manner in which these should be raised. The POA, therefore, does no more than depend on the Government resources available through the expansion of programmes in each Plan. .:A different and shared approach to funding of ECCE programme emerges from the, perspective of decentralised management and community control as presented in the previous section. As stated earlier, about 14 crore children are below the age of six years and about 5.6 crores out of these constitute the most vulnerable segment, requiring urgent attention. The Ministry's Working Group for the Eighth Plan has suggested that 80% of the vulnerable target population be covered by the end of the Plan period. As shown in Table 1 this would work-out to about 4.5 crore children in 1990 or 4.9 crore children by 1995. Even if this scaled down target is accepted, we would still need to achieve an annual minimum expenditure of about Rs.4, 900 crores (at 1989 prices)* for ECCE services by 1995, to be reached in a phased manner. Given the present set of socio-political constraints, the Government cannot conceivably be depended upon for making such vast resources available, though it would have to carry the primary responsibility for universalisation of ECCE under Article 45 of the Constitution.

Recommendations

i) A Central Fund for child care services should be set-up at the national level.

ii) The Government should provide a substantially higher allocation for ECCE, spelling it out as a percentage of GNP, keeping in view the estimated requirements of Rs.4900

crores per annum even for achieving the POA targets to be reached by the end of Eighth Plan in a phased manner.

iii) A 10-year action and resource allocation plan for building up a national network of child care services be prepared, such that at least 70% of the children below six would be covered by an essential package of services by 2000 AD, as suggested in POA.

iv) Funds for the national network may be drawn from five sources as given below: a) Government; As per Article 45 of the Constitution, the Central and State Governments would have to bear the major responsibility for funding the programme. These funds may be drawn by pooling together the provisions made in the respective budgets of the Departments of Education, Women & Child Development, Health and Labour for this purpose. To facilitate this, an <u>Inter- ministerial Committee</u> may be constituted. The Government Departments which employ labour (e.g. Irrigation, Rural Development, Forest, Works & Housing etc.) should henceforth be required to make a proportionate provision for expenses on child care services and contribute this money to the Central Fund.

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* Based upon an expert estimate of Rs.1, 000 per child per year (at 1989 prices) as submitted to the Planning Commission.

b) Employers: A special welfare cess for the Central Fund should be levied on all employers, whether in the private or in the public sector, regardless of the sex of the workers employed. No distinction need be made on the basis of the type of employment-salaried, daily wage or some other form.

c) Local Bodies: Panchayats, Municipalities and Corporations may be encouraged to raise additional funds for ECCE through special local cess/taxes.

d) Parents: With community control, it should become possible for the Village/Mohalla Committee to raise a certain fraction of the needed resources from the parents at the local level, as a voluntary contribution on a monthly basis. In the organised sector, this contribution could be collected through the trade unions.

e) Donations: Tax incentives may be given on contributions to the Central Fund. v) A special allocation of additional funds, say Rs.100 crores, be made for 1991-92 to undertake preparatory work consisting of an awareness-raising media campaign, upgradation of the existing ICDS and other centres, developing decentralised structures at the grass roots, building up training programmes and promoting action research in alternative models.

Monitoring and Evaluation

5.12.0 Unlike what is suggested in Para 13 of POA, the entire system of monitoring and evaluation has to be re-structured on the principles of participation, reflection and decentralised management.

Recommendations

i) DIETs and Educational Complexes, rather than any higher level structures, should have a major role in both planning and execution of the system of internal monitoring and evaluation.

ii) The State Government should also organise an independent system of monitoring and evaluation of the programme at the level of Educational Complexes only (i.e., not at the level of individual centres) and make its reports available for open and public consideration at the District or Block level. 129

iii) one major objective of these exercises should be to use the findings as a direct input for renewal/strengthening of the programme at the local level. For this, it would be necessary to foster lateral inter-action and exchange of findings (complex to complex or centre to centre or centre-complex), rather than the exclusive vertical and upwards flow indicated in the POA. The reports from monitoring and evaluation exercises should also be released for open interaction at both the formal and informal for a with a view to build up public pressure for programme efficiency.

iv) The Index of Human Development should be a dynamic concept and be made public as a means of monitoring as well as community intervention in the programmes.

TABLE 1

Schematic Coverage Under Early Childhood Care and Education (ECCE)

1.	Total Population (projected to March, 1990)*	82.2 crores
2.	Percentage of population in 0-6 age-group	17%
3.	Estimated No. of children in 0-6 age-group	14.0 crores
4.	Estimated No. of specially vulnerable children in 0-6 age group (based upon 40% of population being below poverty line)	5.6 crores
5.	Total No. of beneficiary children	

in the 0-6 age group covered by
various ECCE programmes (1989-90)**   1.43 crores

6. Total coverage under ECCE in 0-6
    age group (1989-90)   10.2%

7. Coverage under ECCE of vulnerable
     segment in 0-6 age group (1989-90)   25.5%

8. Eighth Plan target of covering 80%
of vulnerable children in 0-6 age
group by 1995 (Total population in
1995 - 89.8 crores)*   4.9 crores

9. POA's target of covering 70% of all
children in 0-6 age group by 2000
 (Total population in 2000 - 97.2
crores)*   11.6 crores

* Taken from the Report of Expert Committee on Population Projections, Office of the Registrar General, Govt. of India

Source: Department of Education and Department of Women and Child Development, Ministry of HRD (see Table 2 for details).

TABLE 2

Coverage Under Various Early Childhood Education Schemes
(1989-90)

Total population in the age group 3-6 years in March 1990 (estimated
on the basis of 7% of total population) - 575.4 lakhs

Programmes	Number of centres	Beneficiaries coverage (in lakhs)	Percentage of population in age-group 3-6
1) ICDS (Pre-school education age-group 3-6) (2424 Sanctioned Projects)*	2,03,386	65.78**	11.43
2) Early Childhood Education (ECE)	4,365	1.53	0.27
3) Creches and Day Care Centres - age group			

0-5(estimated coverage on the basis of 25 children per creche)	12,230	3.06	0.53
4) Balwadis - age-group 3-6(estimated coverage on the basis of 30 children per Balwadi)	5,641	1.69	0.29
5) Pre-primary Schools+	14,765	14.40	2.50
TOTAL	-	86.46	15.02

* Including 188 State Government Projects running on ICDS pattern. Out of the Sanctioned Projects, only 1,840 were reporting to the Ministry in September, 1990

** An additional 56.06 lakh children in the 0-3 age- group are covered under ICDS.

+ Selected Educational Statistics, 1988-89, Ministry of HRD (Dept. of Education), Govt. of India.

Note:Data on ICDS, ECE, Creches and Day Care Centres, and Balwadis were supplied by the Department of Women and Child Development in the Ministry of HRD, Govt. of India. The ICDS data are updated until September 1990.

TABLE 3

Current Status of Training for ECCE

Sl. No.	Name & Nature of Course	Minimum Qualifications for Entry	Duration
1.	Anganwadi workers' training (job training, para-professional) norm	Varies from State to State Class V-VIII the	3 Months
2.	Nursery Teachers' Training/Pre-primary Teachers' Training	Class X	One year
3.	Vocational Training in Child Care (+2) of CBSE	Class X	Two years
4.	Balsevika Training of	Class X	11 months

	Indian Council for Child Welfare		
5.	Montessori Training of Association of Montessori International	Class X	One year
6.	Integrated Pre-primary and Primary Teachers'. Training (Delhi)	Class XII	Two years
7.	Diploma in Early Child-hood Education	Graduate	One year/ distance education
8.	Middle Level Supervisors Training (job training)	Varies - graduate, post-graduate and promoted	3 months

Source: Department of Pre-school and Elementary Education, NCERT, 1990

CHAPTER 6

UNIVERSALISATION OF ELEMENTARY EDUCATION

Regaining School's Credibility

"That does not finish the picture. We have the education of this future state. I say without fear of .my figures being challenged successfully, that today India is more illiterate than it was fifty or a hundred years ago, and so is Burma, because the British administrators, when they came to India, instead of taking hold of things as they were, began to root them out. They scratched the soil and began to look at the root, and left the root like that, and the beautiful tree perished. The village schools were not good enough for the British administrator, so he came, out with his programme. Every school must have so much paraphernalia, building, and so forth. Well, there were no such schools at all. There are statistics left by a British administrator which show that, in places where they have carried out a survey, ancient schools have gone by the board, because there was no recognition for these schools, and the schools established after the European pattern were too expensive for the people, and therefore they could not possibly overtake the thing. I defy anybody to fulfil a programme of compulsory primary education of these masses inside of a century. This very poor country of mine is ill able to sustain such an expensive method of education. our state would revive the old village schoolmaster and dot every village with a school both for boys and girls."

- MAHATMA GANDHI AT CHATHAM HOUSE, LONDON, OCTOBER 20, 1931

The Elusive Goal

6.1.1 The Constitution has enunciated the following Directive Principle of State Policy regarding Universalisation of Elementary Education (UEE):-

"The State shall endeavour to provide within a period of 10 years from the commencement of the Constitution for free and compulsory education for all children until they complete the age of 14 years." (Article 45)

6.1.2 Universalisation was to have been achieved by 1960. In 1990, we are still nowhere near the goal of Universalisation of Elementary Education (i.e., upto class eighth), or for that matter even primary education (i.e., upto class fifth). According to varying estimates available now, almost one-half of all children and two- thirds of the girls in the age group of 6-14 either do not enter the school at all or drop out at an early stage or, to put it better, are 'pushed out' of the school system (see Table 2).

6.1.3 In contrast, 'Universal Declaration of Human Rights' declares that all individuals, irrespective of sex, caste and economic status, have the 'Right to Education'. India rightly subscribed to this famous declaration. Now, time has come to recognise 'Right to Education' as one of the fundamental rights of the Indian citizen for which necessary

amendments to the Constitution may have to be made and more importantly, conditions be created in society such that this right would become available for all children of India.

Recommendation

The Right to Education should be examined for inclusion amongst the fundamental rights guaranteed under the Constitution of India. All the socio-economic measures, without which realisation of this right will not be possible, should be taken.

Problems and Issues - An Overview

6.2.1 The continued failure since independence to fulfil the Constitutional directive of providing education to all children upto the age of 14 years is a teasing reality. Undoubtedly this problem qualifies for being ranked as the most fundamental problem of our educational system. It is only in recent years that the nation has come to acknowledge the magnitude of the problem. More than half of all children (and not one-third, as was often claimed for years) and two-thirds of the girls are outside the ambit of education. Whatever hesitation may still exist must now give way to a frank admission of these facts so that an honest analysis of the causes of the problem may begin. The degree of failure is further accentuated in the case of the children of SC/ST and other educationally backward sections of society. The focus of the various strategies adopted so far to bring all children into schools has been on the factors which lie within the educational system. This is equally true of the NPE/POA. The socioeconomic and cultural factors have played only a marginal role in educational planning. This approach to universalisation ignores the hard social realities. For instance, according to certain estimates, more than 4.5 crores of children, constituting one-fourth of the school going age-group, are engaged in child labour. Many of these children face brutal work conditions in both the organised and unorganised sectors. The issues of social justice with respect to educationally backward sections of society and the gender bias rooted in the patriarchal Indian society are some of the other significant factors that have a major bearing upon participation of children in education. We have also pointed out elsewhere that there is an inseparable. link between the development policy and the capability of vast segments of our society to benefit from school education. It is in this perspective that the Committee presents below an overview of the major issues relating to the problem of universalisation both from within and outside the education sector.

Enrolment

6.2.2 The official statistics on percentage of children enrolled in schools show a phenomenal rise form 42.6% in 1950-51 to 93.6% in 1986 at the primary level, and from 12.9% in 1950-51 to 48.5% in 1986 at the middle school level (see Table 1).

Table 1

GROSS ENROLMENT RATIO AT PRIMARY AND UPPER PRIMARY LEVEL

Year	Primary (I-V) in %age	Upper Primary (VI-VIII) in %age
1950-51	42.6	12.9
1955-56	52.8	16.5
1960-61	62.4	22.5
1965-66	76.7	30.9
1970-71	76.4	34.2
1975-76	79.3	35.6
1978	81.7	37.9
1986	93.6	48.5

[Source: Report of the Working group on Early Childhood Education and Elementary Education set up for formulation of 8th Five Year Plan, Govt. of India, Ministry of Human Resource Development, Department of Education, 1989].

These statistics are not normally accepted on their face value. A number of studies have revealed that the actual number of children attending schools even in Classes I and II is far less than what is claimed officially. For instance a recent micro-planning survey in Tikamgarh district, M.P. pointed out that the number of children actually attending schools in the 6-14 years age group in the rural areas was 42.7% of those on the official records. Spot studies in another instance have shown that many children whose names were enrolled in the school register had in fact not attended school for more than a few days'. It was pointed out that since teachers are under pressure to show better enrolment targets, they keep the names of these children alive in their registers'. In support of this presented below, are data on proportion of children in different age-groups attending schools.

Table 2

PROPORTION OF CHILDREN ATTENDING SCHOOL : 1981

(Percentage)

Population	6-11 years	11-14 years	6-14 years
All	47.15	51.96	48.72
Male	54.88	63.81	58.11
Female	38.45	38.67	38.52
Rural	41.27	45.69	42.69

Rural	male	50.57	59.52	53.50
Rural	female	31.28	30.12	30.93
Urban		68.83	72.93	70.26
Urban	male	72.70	78.32	74.66
Urban	female	64.71	66.98	65.52

Note The percentages given above do not correspond to enrolments in grades I to V and VI to VII.

(Source : Census of India, 1981, Computed and cited in Aggarwal, Y.P., Towards Education for All Children - Intent and Reality', J. Educational Planning and Administration, 2 (1&2), 1988].

6.2.3 It can be seen that almost 53% of children in 6-11 year age- group do not attend school and this proportion rises to 62% in the case of girls. This would mean that almost 4.6 crores children in this age group in 1986 were not attending school as opposed to the estimate of less than 60 lakhs based on published statistics. With the claim of Gross Enrolment Ratio in this age-group touching the level of 98% in 1987-88, the gulf between this claim and ground realities widens even further. While, according to estimates based upon Census of India figures, the number of children out of school in the age- group of 6-11 years in 1987-88 would be almost 5 crores, the Ministry's statistics on enrolment would place this number to about 20 lakh only.

6.2.4 The magnitude of the problem of universalisation can be seen in Table 3 where population of children in the two relevant age groups, 6-10 years and 11-14 years, is projected upto the end of the Eighth Five Year Plan period.

Table 3

PROJECTED POPULATION

(in Crores)

	Age Group 6-10 years			Age Group 11-14 years		
Year	Boys	Girls	Total	Boys	Girls	Total
1989-90	4.999	4.736	9.735	-	-	-
1990-91	-	-	-	3.715	3.528	7.243
1994-95	5.196	4.918	10.114	4.022	3.806	7.828

(Source: Report of the Working group on Early Childhood Education and Elementary Education set up for formulation of Eighth Five Year Plan, Govt. of India, Ministry of Human Resource Development, Department of Education, 1989].

Disparities in Enrolment

6.2.5 Notwithstanding the serious doubts raised above about the validity of the enrolment data, a close examination draws attention to some interesting problems. As Table 4 shows, only 41% of the students enrolled in Classes I-V and 35% in Classes VI-VIII were girls. In rural areas, this percentage falls down further.

Table 4

PERCENTAGE OF GIRLS' ENROLMENT TO TOTAL ENROLMENT (1986):

	Classes I-V (6-11 years)	Classes VI-VIII (11-14 years)
All India (Total)	41.16%	35.45%
Rural Areas	39.89%	32.05%

(Source Fifth All India Educational Survey (NCERT) 1986.]

6.2.6 Although the percentage of SC/ST children among all students enrolled at the primary level represents their respective proportions in the population, their participation at the middle and the high school level falls sharply in comparison to that of the other children (see Table 7, Chapter 4).

6.2.7 A district-wise analysis of the enrolment data has demonstrated that wide regional disparities exist in terms of the enrolment at both the primary and middle levels. These disparities are even more pronounced in the case of the enrolment of girls and children of SC/ST communities. The Committee have reported elsewhere that 123 districts can be identified which have a gross female primary level enrolment ratio of less than 50% and a rural female literacy rate of less than 10% (see Table 2, Chapter 4). Obviously these districts would need to be given priority in resource allocation. The need to conduct a similar analysis at block and sub-block levels can not be over emphasized.

Retention

6.2.8 As Table 5 shows, a large percentage of children drop out in the early stages of primary education, with 50% of them dropping out by Class V. At the middle school level, about 70% of the children who began education at Class I drop out before reaching Class VIII. This percentage can be as high as 75% in the case of girls at the middle school level. Similarly, the children of SC/ST communities drop out at a faster rate than those of the non-SC/ST communities (see Table 8, Chapter 4). The dimension of regional disparity is also reflected in state-wise analysis of drop out rates. at both the primary and

middle school levels (see Statement No.10, p.244, Annual Report, 1989-90, Part I, Ministry of HRD, Dept. of Education).

Table 5

DROP-OUT RATES AT PRIMARY AND MIDDLE SCHOOLS STAGES

Years	Classes I-V			Classes I-V		
	Boys	Girls	Total	Boys	Girls	Total
1981-82	51.10	57.30	53.50	68.50	77.70	72.10
1982-83	49.40	56.30	52.10	66.04	74.96	69.57
1983-84	47.83	53.96	50.26	66.10	75.27	69.76
1984-85	45.62	51.41	47.93	61.83	70.87	65.39
1985-86	45.84	50.27	47.61	60.70	70.04	64.42

(Source: Ministry of Human Resource Development, Department of Education, 1990.)

Physical Access to School

6.2.9 According to the Fifth All India Educational Survey in 1986, almost 20% of the rural population did not have access to a primary school within the habitation. The percentage of rural population without a Middle School within the habitation was as high as 63%. However, the same survey revealed that about 95% of the rural population had access to a primary school within 1 km.an official norm for 'walking distance' for primary schools. Similarly about 85% of the rural population had access to a middle school within 3 kms. again, an official -norm for 'walking distance' in the case of middle schools. These official norms may not be accepted on their face value as these may not be equivalent to 'walking- distance' for different sections of children. For instance, it has been shown in the section on Education and womens' equality how these norms may not be applicable in the case of girls who are engaged in work both within and outside the home. In such cases, the distance of 1 km. to the primary school and 3 km. to the middle school may be just beyond the threshold which children can cross.

6.2.10 As shown by Table 6, there are almost 49% of the rural habitations with a total population of 11.7 crore which do not have access to a primary school within the habitation. Any strategy towards UEE would have to take into account these hard realities.

TABLE 6

AVAILABILITY OF PRIMARY SCHOOLS IN RURAL AREAS

Year	Total rural pop. (mn.)	Total Habita- tions (000's)	% Habita- tions without a primary school	% population unserved by primary school	Total Rural population unserved (mn.)
1965	396.6	982	62.02	28.52	113
1973	465.4	953	55.67	23.88	111
1978	509.2	965	53.20	21.47	109
1986	594.5	979	48.64	19.66	117

[Source: All India Educational Surveys (NCERT), compiled and cited in Jalaluddin, A.K. et al, 'Basic Education and National Development', UNICEF Report, September, 1990]

6.2.11 There is also the issue of regional disparity involved with respect to accessibility of the schools. Tables 7 provides State-wise data on this matter. It shows that there is a wide fluctuation with respect to the percentage of rural population having access to a primary school within habitation. it fluctuates from 51% in Dadra and Nagar Haveli to almost 98% in Mizoram and Delhi.

Table 7

RURAL POPULATION WITH AND WITHOUT PRIMARY SCHOOLS/SECTIONS 1986

(Percentage)

	Population Served by Primary Schools/Sections at a distance of			
	Within Habitation	Upto 0.5 Km but not within Habitation	0.6 to 1.0 Km	Upto 1.0 Km
Andhra Pradesh	92.72	5.97	0.48	99.17
Assam	81.75	5.40	6.43	93.58
Bihar	78.53	8.99	8.34	95.86

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Gujarat	97.83	0.86	0.76	99.45
Haryana	96.68	1.62	1.07	99.37
Himachal Pradesh	46.51	11.39	18.74	76.64
Jammu & Kashmir	78.23	5.42	7.05	90.70
Karnataka	92.50	2.03	2.71	97.24
Kerala	87.67	2.59	4.13	94.39
Madhya Pradesh	81.51	5.26	6.15	92.92
Maharashtra	92.42	3.28	2.25	97.95
Manipur	89.97	3.47	3.95	97.39
Meghalaya	80.87	2.88	5.47	89.22
Nagaland	98.85	0.42	0.18	99.45
Orissa	77.08	8.82	6.93	92.83
Punjab	96.80	2.09	0.71	99.60
Rajasthan	86.84	1.49	4.57	92.90
Sikkim	72.13	3.80	7.17	83.10
Tamil Nadu	83.92	5.80	6.30	96.02
Tripura	57.04	12.85	14.22	84.11
Uttar Pradesh	55.96	14.05	18.82	88.56
West Bengal	79.71	11.47	6.20	97.38
A & N Islands	68.41	4.35	10.26	83.02
Chandigarh	96.92	2.75	0.00	99.67
Dadra & Nagar Haveli	50.74	14.10	20.35	85.19
Delhi	98.06	1.32	0.62	100.0
Goa Daman & Diu*	57.72	20.23	12.65	90.60
Lakshadweep	100.00	0.00	0.00	100.00
Mizoram	98.06	0.23	0.00	98.28
Pondicherry	88.54	7.92	3.56	99.02
India	80.34	7.04	7.22	94.60

Note: * Relates to Goa only

(Source : Fifth All India Educational Survey (NCERT), 1986.]

A similar picture is presented at the district level in the study released recently by Raza et al.

Availability of Schools and Teachers

6.2.12 Table 8 shows that, inspite of a rise in the total number of schools and teachers between 1965 and 1986, the number of schools and teachers per 10 thousand persons is declining continuously during this period. A comparison of the growth rates of the population with the growth rates respectively for the total number of primary schools and teachers reveals that population rose sharper than the number of both the schools and teachers per 10 thousand persons. This is a clear indication that the availability of the

schools and teachers in population would most probably decline, unless measures on war-footing are adopted to reverse the trend.

TABLE 8

EDUCATIONAL DEVELOPMENT : SOME KEY INDICATORS 1965-86

	Popula-tion (mn)	Primary Schools/ sections (000)	Teachers (000)	Per 10,000 persons	
				Schools	Teacher
1965	495.0	455	1196	9.23	24
1973	580.7	530	1218	9.13	21
1978	635.3	570	1287	8.97	20
1986	784.1	631	1493	8.05	19
Growth Rates					
1965-73	2.02	1.9	0.23		
1973-78	1.81	1.5	1.10		
1978-86	2.66	1.3	1.87		
1965-86	2.21	1.6	1.06		

[Source: All India Educational Surveys (NCERT), compiled and cited in Jalaluddin, A.K. et al, 'Basic Education and National Development', UNICEF Report, September, 1990]

TABLE 9

SCHOOLS BY NO. OF TEACHERS IN POSITION

Reference Year	% of Single-Teacher School		% of Two-Teacher School	
	Rural	Urban	Rural	Urban
1965	40.72	8.37	28.50	11.22
1973	30.76	7.90	27.57	10.84
1978	35.69	5.90	28.24	10.17
1986	31.27	6.29	34.07	11.92

[Source: All India Educational Surveys (NCERT), compiled and cited in Jalaluddin, A.K. et al, 'Basic Education and National Development', UNICEF Report, September, 1990]

6.2.13 Table 9 shows that almost one third of the primary schools in the rural areas continue to be single-teacher schools. Another one third of the rural schools have only two teachers each. Given this situation, the schools lack the essential precondition for introducing child-centred approach to education.

6.2.14 A State-wise study of teacher-pupil ratio in primary schools shows that it has infact increased in most States between 1971-72 and 1987-88 (see Table 10). The All India figure also shows that the teacher-pupil ratio during this peirod increased from 39 to 42. If this trend continues, all expectations of moving towards better quality of elementary education would be belied. Indeed, a high teacher-pupil ratio adversely affects quality of education. This also results in problems of class room discipline for maintenance of which teachers may feel to take recourse to undesirable practices including corporal punishment.

Table 10

TEACHER-PUPIL RATIO AT PRIMARY AND MIDDLE LEVEL OF EDUCATION

| | Primary | | Middle | |
	1971-72	1987-88	1971-72	1987-88
Andhra Pradesh	39	56	30	44
Assam	43	48	24	31
Bihar	38	50	32	31
Gujarat	37	39	36	41
Haryana	39	45	32	37
Himachal Pradesh	27	39	21	18
Jammu & Kashmir	28	30	22	23
Karnataka	39	111	33	21
Kerala	34	33	26	32
Madhya Pradesh	34	45	33	27
Maharashtra	22	39	21	38
Manipur	40	19	17	17
Meghalaya	43	32	39	17
Nagaland	25	24	18	22
Orissa	31	45	21	23
Punjab	38	40	30	18
Rajasthan	31	45	23	29
Sikkim	*	14	*	15
Tamil Nadu	34	45	32	46
Tripura	37	30	26	25
Uttar Pradesh	51	45	27	31
West Bengal	35	40	28	41
A & N Islands	20	21	19	21
Arunachal Pradesh	25	29	19	24
Chandigarh	29	27	29	20

Dadra & Nagar Haveli	31	41	25	32
Delhi	32	8	20	23
Goa, Daman & Diu	34	26	28	25
Lakshadweep	25	23	19	24
Mizoram	46	26	23	11
Pondicherry	35	29	31	28
INDIA	39	42	31	33

Note : * Not Applicable

[Source : Basic Educational Data, NIEPA, New Delhi, January, 90]

Facilities in Primary Schools

6.2.15 As shown by Table 11, the primary schools lack even basic infrastructural facilities necessary for better quality of education.

Table 11

AN OVERVIEW OF FACILITIES IN PRIMARY SCHOOLS SYSTEMS

S.No.	Particulars	% of schools out of the total
1.	Without buildings	13.5
2.	With kuchha buildings (Open spaces, tents, kuchha structures)	13.8
3.	With one instructional room	37.8
4.	With usable playground facilities	34.5
5.	With drinking water facilities	46.6
6.	With urinals	15.0
7.	With separate urinals for girls	4.9

[Source: Fifth All India Educational Survey (NCERT), 1986].

Child Labour

6.2.16 The problem of child labour is inextricably linked to the low participation rate of children in elementary education. There are several estimates regarding the magnitude of this problem, as is shown below :-

a)   Census of India, 1981   -   1.36 crores
b)   National Sample Survey,
       32nd round, 1977-78   -   1.63 crores
c)   Planning Commission, 1983   -   1.74 crores
d)   operations Research Group   -   4.4 crores
       Baroda, 1983

According to the 1981 census, 40% of the child workers were girls. Less than 7% of the child workers were found to live in Urban areas.

6.2.17 Table 12 shows the distribution of child workers upto the age of 15 years in different sectors of employment; 83% of the child workers are engaged in activities related to agriculture.

Table 12

DISTRIBUTION OF CHILD WORKERS (0-15 YEARS) : 1981

Industrial Group	Rural			Urban			All		
	Male	Female	All	Male	Female	All	Male	Female	All
Main Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cultivators	61.2	47.3	58.9	10.3	4.6	9.8	55.8	45.1	54.2
Agricultural labourars	26.8	43.0	29.5	13.0	15.1	13.2	25.4	41.6	27.9
Livestock etc.	0.8	0.7	0.8	1.2	0.4	1.2	0.9	0.7	0.8
Mining/ Quarrying	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
House-hold Industries	4.6	4.8	4.6	14.3	46.4	16.9	5.6	6.9	5.8
Non house-hold industries	3.9	2.3	3.6	29.0	15.9	27.9	6.5	3.0	5.9
Cosntruction	0.3	0.2	0.3	2.4	0.6	2.3	0.5	0.3	0.5
Trade/ Commerce	0.8	0.0	0.7	13.7	3.1	12.9	2.2	0.2	1.8
Transport etc.	0.1	0.0	0.1	2.6	0.6	2.4	0.4	0.0	0.3
Other services	1.4	1.4	1.4	13.0	13.1	13.0	2.6	2.0	2.5

[Source: Census of India, 1981, computed and cited in Aggarwal, Y.P.. Education and Human Resource Development, Commonwealth Publishers, New Delhi, Table 9.4, 1988]

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6.2.18 Table 13 presents data on single year age group-wise rate of workforce participation in both rural and urban areas for out of school children. It is seen that a rate of 66% exists for 14 year old rural male children but it never exceeds 10.5% for out of school rural female children. Further, the workforce participation rate rises sharply as the child attains the age of 10 years. This is presumably due to the child becoming useful at this age for certain types, of manual work.

Table 13

AGE SPECIFIC WORKFORCE PARTICIPATION RATE OF THE OUT OF SCHOOL CHILDREN : 1981

Age (incompleted Years)	Rural		Urban	
	Male	Female	Male	Female
6	0.25	0.09	0.16	0.04
7	0.53	0.20	0.39	0.03
8	1.32	0.48	1.15	0.16
9	2.78	1.04	2.43	0.31
10	9.31	2.56	7.15	0.86
11	22.01	4.84	13.42	1.14
12	37.35	7.47	21.64	2.37
13	50.86	9.34	31.49	2.90
14	66.00	10.49	43.85	3.23

(Source: Census of India, 1981, computed and cited in Aggarwal, Y.P. Education and Human Resource Development, Commonwealth Publishers, New Delhi, Table 9.3, 1988]

6.2.19 A study has shown that, between 1971 and 1981 census, there was a higher increase in the number of female working children in comparison to male working children. This trend can be explained on two grounds: (a) migration of the male children to urban areas in search of jobs, (b) the percentage of female working children rising in the villages to fill up the gaps.

6. 2 . 20 The above analysis suggests three categories of child workers as follows: (a) Out of school children between the age of 6 and 10 years, most of whom are not working on wages.

(b) out of school children in the 10 to 14 year age group who are in the labour market, and

(c) out of school children in the 10 to 14 year age group who are not in the labour market.

The strategies for UEE would have to view these three categories separately. The children in the 6 to 10 year age group can be brought into the school system with improvement in the quality of education. For the second group of children, the strategy would have to be based on the principle that the children can not be dissociated from their employment. Therefore, a programme to educationalise the work' would have to be devised such that it would promote skill formation, while the content is weaved into the local environment. For the third group of children, the strategy would promote skill formation and also aim at equipping the child with minimum level of knowledge. UEE would demand that a mix of strategies is implemented.

Out of School Children

6.2.21 There are wide inter-state variations in the proportion of children attending school in different States in the age groups 6-11, 11-14, and 6-14 (see Table 14). On the one extreme, we have Kerala with universal coverage. on the other extreme, there are States such as, Rajasthan, Uttar Pradesh, Madhya Pradesh and Bihar with about only one-third of their children in the 6-14 year age group attending school. The situation in these four States is much worse for the 6-11 year age group. This applies to all four segments of population, i.e. rural male, rural female, urban male and urban female. The position in the urban areas is much better as compared to the rural areas. Here, the male-female disparity is also low. The rural areas suffer not only in comparison to the urban areas but also reflect a pronounced male-female disparity. In Rajasthan, 8 out of 9 rural women are out of school. These disparities are diagrammatically shown in Fig. 1.

Table 14

PROPORTION OF CHILDREN ATTENDING SCHOOL : 1981

	6-11 years			11-14 years			6-14 years		
	Male	Female	All	Male	Female	All	Male	Female	All
Rural									
India	50.53	31.32	41.25	59.52	30.13	45.70	53.48	30.94	42.69
Uttar Pradesh*	41.16	17.53	30.34	59.05	19.72	41.69	46.69	18.18	33.78
Bihar*	40.22	18.54	29.89	54.92	20.04	39.16	44.62	18.96	32.57
Maharashtra	65.76	47.40	56.64	68.17	40.30	54.79	66.61	45.02	56.00
West Bengal*	45.65	34.40	40.10	57.39	39.53	48.66	49.60	36.10	42.96
Andhra Pradesh*	49.23	30.62	39.97	45.33	20.80	33.50	48.00	27.65	39.97
Madhya Pradesh*	42.79	18.62	30.97	50.79	16.30	34.64	45.42	17.90	32.14
Tamil Nadu	69.55	53.89	61.84	59.54	33.34	46.79	65.97	46.67	56.80
Karnataka	54.30	36.39	45.25	53.01	27.86	40.57	53.88	33.67	43.73
Rajasthan*	42.74	11.49	27.83	56.00	10.60	34.79	47.05	11.21	30.06
Gujarat	59.20	41.62	50.73	67.71	42.12	55.76	62.08	41.78	52.40
Orissa*	56.60	36.15	46.32	54.75	27.75	41.46	55.96	33.35	44.67
Kerala	89.55	88.58	89.07	88.62	84.87	86.76	89.18	87.12	88.16
Urban									
India	72.82	64.72	68.90	78.26	67.06	72.94	74.72	65.52	70.29
Uttar Pradesh*	56.71	46.89	52.07	66.90	53.86	60.89	60.08	49.12	54.94
Bihar*	67.37	54.71	61.36	78.39	61.72	70.76	70.97	56.90	64.36
Maharashtra	81.05	75.24	78.21	85.66	76.51	81.31	82.70	75.68	79.30
West Bengal*	70.31	63.40	67.02	78.48	69.93	74.37	73.28	65.81	69.71
Andhra Pradesh*	70.60	64.08	67.37	74.64	60.08	67.57	71.97	62.76	67.44
Madhya Pradesh*	71.38	61.02	66.31	80.36	65.19	73.17	74.57	62.44	68.70
Tamil Nadu	82.87	77.33	80.13	77.63	65.57	71.78	80.09	73.06	77.05
Karnataka	72.85	66.17	69.52	74.43	63.77	69.22	73.40	65.36	69.42
Rajasthan*	66.43	48.98	58.00	77.88	52.30	65.73	70.33	50.08	60.61
Gujarat	74.76	67.65	71.35	82.59	72.56	77.89	77.53	69.34	73.63
Orissa*	73.01	62.47	67.80	74.41	60.22	67.60	73.50	61.71	67.73
Kerala	92.84	92.62	92.73	90.72	89.58	90.16	92.00	91.40	91.71

* : Educationally Backward States

[Source : Census of India, 1981, computed and cited in Aggarwal Y.P., 'Towards Education for All Children - Intent and Reality', J. Educational Planning and Administration, 2 (1&2), 1988]
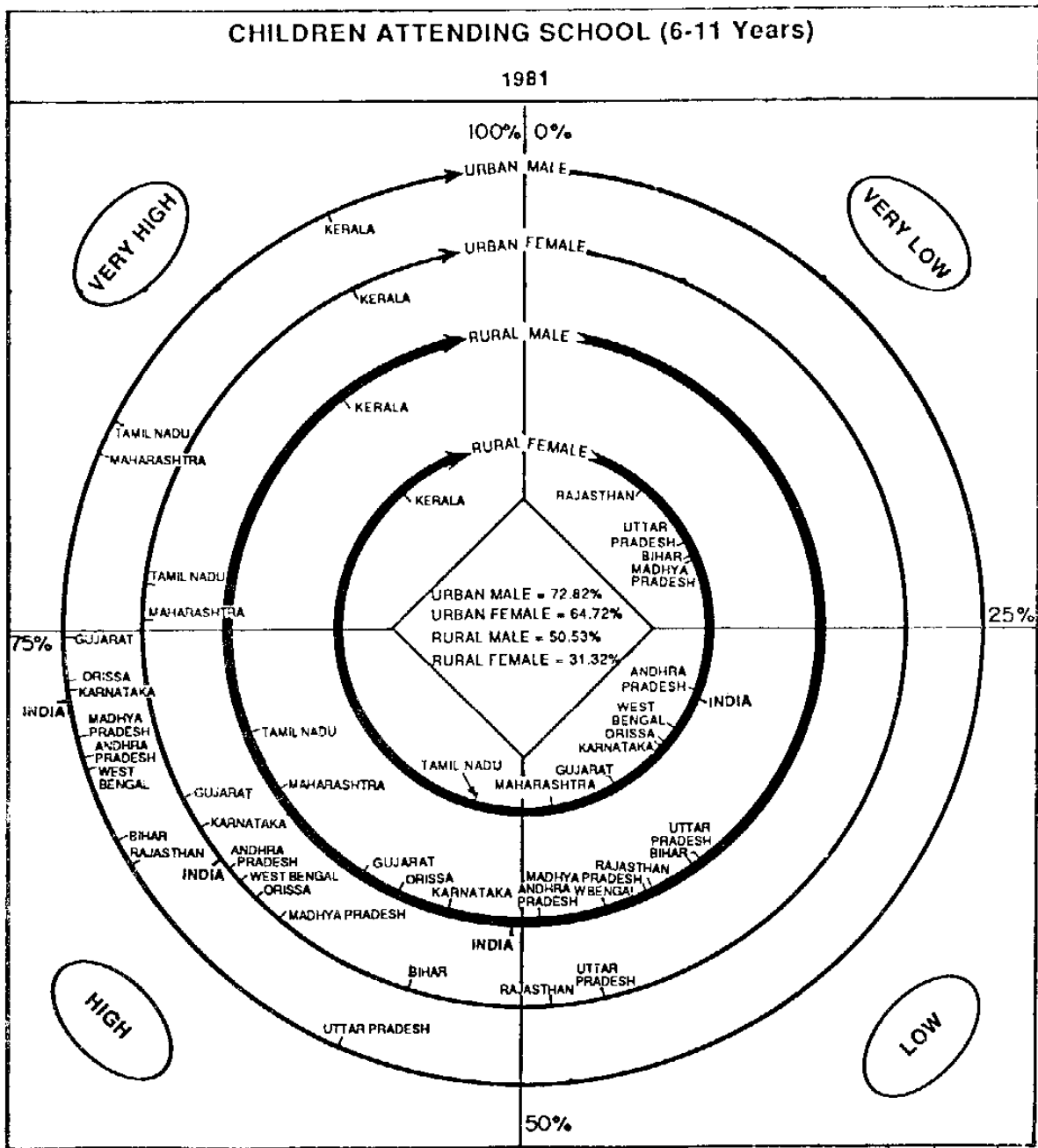
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CHILDREN ATTENDING SCHOOL (6-11 Years)

1981

URBAN MALE = 72.82%
URBAN FEMALE = 64.72%
RURAL MALE = 50.53%
RURAL FEMALE = 31.32%

Fig. 1: Children attending school (6-11 years) - Inter-State Variations

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As one moves from the outer to the inner tracks, the magnitude of the problem and the drag due to low development of education becomes more and more pronounced. The innermost track represents the core of the problem of educational development. In Table 15, data are presented to show the distribution of out of school children in certain selected States. It is seen that almost 55% of the out of school children in the 6 to 11 year age group are in Rajasthan, Uttar Pradesh, Madhya Pradesh and Bihar. This analysis emphasises the need for area-based model of educational planning.

Table 15

DISTRIBUTION OF OUT OF SCHOOL CHILDREN : 1981

State	6-11 years		11-14 years		6-14 years	
	Male	Female	Male	Female	Male	Female
RURAL						
Uttar Pradesh*	23.60	21.57	18.37	18.57	22.21	20.61
Bihar*	15.84	15.17	12.73	12.14	15.06	14.20
Maharashtra	5.32	6.23	6.66	7.54	5.70	6.65
West Bengal*	8.74	7.92	8.68	7.69	8.72	7.85
Andhra Pradesh*	8.05	8.41	9.97	8.77	8.60	8.52
Madhya Pradesh*	9.62	10.11	10.09	9.86	9.76	10.03
Tamil Nadu	3.23	3.67	5.97	6.07	4.02	4.44
Karnataka	4.66	5.12	5.86	5.74	5.00	5.32
Rajasthan*	6.62	7.20	6.12	7.11	7.30	7.17
Gujarat	3.73	3.82	3.77	3.87	3.74	3.84
Orissa*	3.82	4.38	5.19	5.25	4.21	4.66
Kerala	0.66	0.54	1.16	0.98	0.80	0.68
other States	6.11	5.86	5.43	6.47	4.98	6.03
INDIA	100.00	100.00	100.00	100.00	100.00	100.00

State	6-11 years		11-14 years		6-14 years	
	Male	Female	Male	Female	Male	Female
URBAN						
Uttar Pradesh*	22.69	20.46	19.94	17.24	21.86	19.42
Bihar*	10.32	5.77	5.79	6.28	8.96	5.93
Maharashtra	9.29	9.52	9.16	9.91	9.66	9.33
West Bengal*	9.05	8.28	8.68	8.27	8.94	8.28
Andhra Pradesh*	8.81	8.68	9.00	9.79	9.32	9.04
Madhya Pradesh*	7.22	7.72	6.35	7.39	6.96	7.61

Tamil Nadu	5.77	6.17	10.45	11.09	7.17	7.76
Karnataka	6.87	6.98	7.96	7.86	7.20	7.27
Rajasthan*	6.22	7.21	4.90	6.98	5.82	7.13
Gujarat	6.11	5.91	5.39	5.45	5.89	5.76
Orissa*	2.04	2.23	2.41	2.52	2.15	2.33
Kerala	0.66	0.54	1.29	1.06	0.85	0.71
Other States	4.95	10.53	8.68	6.16	5.22	9.43
INDIA	100.00	100.00	100.00	100.00	100.00	100.00

* denotes educationally backward States.

[Source: Census of India, 1981, computed and cited in Aggarwal, Y.P., 'Towards Education for All Children - Intent and Reality'. J.Educational Planning and Administration, 2 (1 & 2), 1988]

Curriculum and its Transaction

6.2.22 The prevailing curriculum of elementary education suffers from several lacunae, some of which are enumerated below:

a) Viewing the curriculum mostly in the cognitive domain and, there too, by and large in recalling facts at the time of examinations;

b) Inflexible and unresponsive to the local needs and environment;

c) Devoid of the component of skill formation;

d) Lacking in social and cultural in-puts from the community;

e) Unrelated to the 'world of work' which exercises a strong pull on the life of a large number of children after the age of 10 years;

f) Transaction mostly through lectures in a non- participative mode;

g) Near-absence of activity-based learning; and

h) Discouraging exploration, inquiry, creativity and initiative on the part of the students.

The above deficiencies of the curriculum and its transaction would have to be removed, if UEE is to be made a reality.

Teacher and Administration

6.2.23 The school teacher is at the bottom of a vast bureaucratic machinery where there is hardly any scope for charting a fresh course of action. Burdened with the inspectorate system and suffering from a low social status, the teacher has, more or less, lost the interest in his/her own profession. Since the teacher himself/herself is a product of a poor school system and unfair examinations, he/she suffers from severe limitations, in terms of knowledge, aptitude for learning and understanding of children. These limitations in turn constrain the development of the next generation of teachers. What measures do we undertake to break this vicious cycle? In many attempts to train teachers in new ideas and skills, it is observed that no more than 20-25% of them respond enthusiastically. What can we do to unleash the unexpressed human potential of each of our schools teachers? What preconditions would be necessary for beginning this process and, later to sustain it? If we can answer these questions in meaningful ways, the first step towards UEE would have been taken. We may as well keep in mind that, at the the time of recruitment, the teacher often has to resort to all sorts of unfair and unethical means. He/she has learnt to return this experience in the same coin at the time of examining his/her students. The fate of teachers' postings, transfers and applications for facilities under the service conditions is determined through political and high-level bureaucratic interventions. There is little reflection in the average teacher of either Gijubhai Badheka or Montessori or Gandhi's Village School Master. With this state of affairs, one faces an up-hill task in empowering the school system for the purpose of UEE.

Probing the Policy Framework

6.3.1 There are studies which show that, if the present demographic, investment, enrolment and retention patterns persist, universalisation may continue to be an elusive goal even well into the next century. What can be done to influence these cold projections so that the Constitutional directive is achieved within this century and equity ensured for all children of India?

It is to answer this question that NPE is reviewed below

6.3.2 The NPE has correctly emphasised the following two aspects which are to be part of the 'new thrust' in elementary education (Para 5.5).

i) universal enrolment and universal retention of children upto 14 years of age, and

ii) a substantial improvement in the quality of education.

The Committee concurs that the issue of enrolment and retention can not be delinked from the issue of quality improvement as far as UEE is concerend. However, the above list of aspects to be emphasised is incomplete as it does not take into account certain areas of concern which have a critical bearing on the capability of the school to attract and retain children. These additional thrust areas proposed by the Committee are :

a) Convergence of services in a habitation/village/ mohalla, as has been envisaged, for instance, for ensuring girls, access to school education. In this case, it implies that holistic day care for children in the 0-6 age group and water, fuel and fodder services need coverage in all those habitations or bastis where girls' participation in education is low. Without this convergence, a significant section of the girls' population may not find it possible to respond to the school at all, no matter how much of any one of these services is provided singly.

b) Linkage between the school and the community, as discussed earlier has an organic role in UEE. The school, being a part of a vast Government machinery, stands alienated from the community whose children it attempts to teach. For this reason the school becomes totally dependent on Government financing and infrastructural support. Whatever support the general public was providing to the school at the beginning of this century, or even at the time of independence, has sharply declined.

c) Decentralised and participative mode of planning and managing school education are generally talked about but rarely brought into practice. This has unfortunately reduced the status of the teacher, acclaimed as the pivot of our educational system, to the level of, at best, a glorified clerk. Neither the concerned voluntary agencies and community groups nor the general public have any effective say in moulding the course of action in education. The entire initiative and decision-making powers have become increasingly concentrated in fewer and fewer hands over the past few decades. The Constitutional amendment of 1976, bringing education into the Concurrent List, has further added to this trend, with the initiative as well as accountability fast slipping out of the hands of the State Governments, not to speak of the Panchayati Raj institutions at village, block or district levels.

Recommendations

i) The Policy Statement in para 5.5 of NPE should be modified to incorporate the following three areas of concern as thrust areas':-

(a) Convergence of services,

(b) Linkage between the school and the community, and

(c) Decentralised and participative mode of educational planning and management.

ii). Formulation of strategies for UEE must take into account the three thrust areas listed above along with the two areas already included in para 5.5.

6. 3 . 3 The policy has certainly done well by emphasising child- centred approach to education and by pointing out that it is the 'best motivation for the child to attend school and learn, (Para 5.6). The Committee's perspective in this regard is presented below :

i) Although implied in the warm, welcoming and encouraging approach' mentioned in NPE, it would be better if the policy would explicitly refer to the elements of joy, fun, exploration and play as integral to learning in the early stages of primary education. This explicit mention is required because the prevailing educational practice in the school system not only excludes these elements, but seems to consciously resist their introduction in the learning process.

ii) Similarly, the policy statement should emphasise the role of singing, drawing, clay-modeling, games and particularly all forms of folk art and folk lore in enriching the learning process.

iii) It is not clear why the benefit of being 'allowed to set their own pace and be given supplementary remedial instruction, is restricted only to the first generation learners. By implication, the policy would deny the other children the advantage of setting their own pace.

iv) The policy emphasises the need to increase cognitive learning and the skill component with the growth of the child. In the same spirit, the policy should have emphasised the role of the affective domain and psychomotor skills at the earlier stages.

v) Whereas the Committee endorses the declaration of retaining the policy of non-detention at the primary stage, it is presented in the negative framework of detention versus non- detention. Instead, a positive concept of continuous, disaggregated and comprehensive evaluation as a means of improving the quality of learning should have been emphasised, with a clear understanding that the concept of a terminal examination has no place in child-centred education (the widespread antagonism amongst the teachers to the non-detention policy in vogue in several States probably has its roots in this negative presentation and teachers' lack of appreciation of the tool of continuous evaluation for quality improvement).

vi) The policy declares that 'corporal punishment will be firmly excluded'. While welcoming this assertion, it may be noted that corporal punishment is already excluded on paper in most of the States/UTs. Yet it persists in most parts of the country. Therefore, the policy would have done well by emphasising measures to control the socio-cultural, psychological and educational factors that justify corporal punishment in the minds of the teachers.

vii) Similarly the policy declaration to adjust school timings as well as vacations to 'the convenience of children' has been made time and again from several public for a. The policy should have, instead, spelt out its strategy to mitigate the reasons that have not allowed this to happen so far.

Recommendation

The Policy Statement on 'Child-Centred Approach' in para 5.6 of NPE should be modified in order to remove the inconsistencies and/or lacunae, as pointed out above.

6.3.4 A close reading of the POA reveals that in its view the rapid expansion, which was not accompanied by sufficient investment of resources', is responsible for 'a deterioration in academic standards' (Para 1, Chapter II). This seems to be rather over-simplification of a fairly complex situation. Many other factors are acknowledged as determinants of the quality of learning in the schools. The Review Committee regards the teachers, the community and the social environment as the key factors for moving towards child centred approach and better standards in education. Provision of additional facilities to the schools (e.g. Operation Blackboard) must be made but it should never be construed to imply that this alone would bring about the desired change in the schools.

6.3.5 The POA lays a great deal of emphasis on decentralisation off planning and educational management gives a call to political parties and their 'local level constructive workers' to play an important role in bringing about an upsurge towards UEE (Para 9). It further intends to give an 'effective voice' to women, youth, and the sections of society who have remained deprived of educational opportunities'. While these proposals are welcome, they lose their meaning since the policy adopts strategies and measures that concentrate initiative and decision-making in a few hands and discourage participation. The highly centralised conceptualisation, planning and execution of the two focal strategies adopted by NPE for UEE- i.e. Operation Blackboard and Non-Formal Education- are cases in point.

6.3.6 As was shown earlier, the reliability of enrolment data is in question. Depending upon the local variables, it is inflated by a factor of two or more. Yet the POA appears to lay considerable faith in the success of the enrolment drive taken up in the seventies and eighties, as indicated by the Gross Enrolment Ratios rising to the level of almost 98% in 1987-88. Consequently, the POA recommends a 'shift from enrolment to retention' (Para 13, Chapter II). What is required here is not a shift but a continuation of concern for the dismally low rate of 'genuine' enrolment as well as for improving retention.

6.3.7 The POA recommends that an attempt should be made to switch over to 5+3+2 pattern by 1995 so that it coincides with the target year for UEE'. It is not at all clear what relationship between the 5+3+2 pattern and UEE is envisaged by the POA. This is, however, a significant matter. According to the Review Committee, the present mode of curriculum development and content planning in the primary and middle schools is determined by what is planned at the +2 level. This results in unnecessarily burdening the child in the elementary school and, at the same time, in not allowing the growth of a holistic and self-sufficient view of the first five and eight years of schooling respectively. In the present stage of social development in most parts of India, a large majority of children, even with improved strategies of universalisation, would quit schooling after

either Class V or Class VIII. It is, therefore, crucial that the curriculum development at these two levels is aimed to provide for a self- sufficient model of knowledge, skills and attitudes within the elementary system such that the majority of children can go out into the 'world of work' and continue self-learning throughout life. It is not being suggested that the +2 level is unnecessary for the majority of our children. As education is a sub-system of the social system, the +2 level is to become both accessible and important in the life of the majority of the children, as the country moves into a higher stage of social development. To be sure, this would not come about without a drastic overhaul of the present development policy and a clear tilt towards equity and social justice in national life. Until this happens the +2 level shall remain outside the purview of universalisation.

Recommendations

i) While giving due importance to the provision of additional facilities to the schools, the policy must also stress the role of the teacher, the community and the social environment as key factors in improvement of the quality of school education.

ii) since the present enrolment data are not reliable the policy should stress a continuing concern for improving both enrolment and retention, as distinct from enrolment to retention.

iii) The curriculum at the +2 level should not be allowed to determine the content and process of education at the primary and middle school levels. The curriculum development for the primary and middle school stages should aim at evolving a self-sufficient model of knowledge, skills and attitudes so that the majority of children who would not proceed to the high schools would be fully equipped to enter the 'world of work' and continue self-learning throughout life.

Reviewing the Resolve

6.4.1 In Para 5.12, the NPE has stated its 'Resolve' for UEE in the following words :

"The New Education Policy will give the highest priority to solving the problem of children dropping out of school and will adopt an array of meticulously formulated strategies based on micro-planning, and applied at the grass-roots level all over the country, to ensure children's retention at school. This effort will be fully coordinated with the network of non formal education. It shall be ensured that all children who attain the age of about 11 years by 1990 will have had five years of schooling, or its equivalent through the non-formal stream. Likewise, by 1995 all children will be provided free and compulsory education upto 14 years of age".

The Committee wishes to offer the following comments on the above statement.

6.4.2 While appreciating the emphasis in 'Resolve' on solving the problem of drop-outs and on ensuring retention, it may be noted that no strategy, howsoever 'meticulously formulated' it may be, can be effective as long as enrolment is not similarly stressed. Under today's conditions, if all of the children attending Class I are retained upto Class VIII, it may still amount to provision of schooling to merely 50% of the children and one-thirds of the girls in the relevant age group. 'Obviously this was not intended by the policy.

6.4.3 The, latter half of the 'Resolve' statement is significant as it makes the following fresh proposals for universalisation for the first time in an official document - a) It views the goal of UEE in two phases provision of primary education for all children who attain the age of 11 years by 1990, and of elementary education for all children upto 14 years of age by 1995.

b) It is the first time that a policy admits that the school may not be able to reach all children. The NPE, therefore, envisages a major role for the non-formal stream in moving towards UEE. This is clearly reflected in the reference to 'five years of schooling, or its equivalent through the non-formal stream'.

6.4.4 The phasing of UEE into two stages- Universalisation of Primary Education (UPE) in the first phase and UEE in the second phase- has been interpreted by some as a step towards dilution of the nation's commitment to the Constitutional directive. This negative interpretation is mainly because of the continued failure in moving towards universalisation since independence. Here, even the NPE's 'Resolve' does not remedy the situation. It may be noted that the policy formulated as it was around mid1986 would begin to be implemented only in the academic year of 1987. This left only three years for schooling until 1990 for children who would have by then attained the age of about 11 years. How did then the NPE expect to provide them with 'five years of schooling'? Apparently, NPE was fitted in the timeframe of the Seventh Five Year Plan. In this light, the Resolve' to 'meticulously formulated strategies based on micro- planning' seems rather over ambitious.

6.4.5 It could be argued that the intention instead was to achieve the stated goal through the non-formal system which would lead to educational attainments equivalent to those in the primary schools within a period of three years. The Committee has not been able to lead itself to accepting such a line of thinking.

In this context the Committee went into the question whether any reliable data regarding attainments emerging from pre NPE years of implementation of NFE programme was available. Based on interactions with the authorities of the Department as well as others, the Committee came to the finding that no such data were available at the time of formulation of NPE. (The evaluation study conducted by NCERT in 1985-86 on the efficacy of NFE was still in progress at the time of NPE formulation and hence the Policy could not have been informed by this study. The presentation made by the officers of the Department of Education before the Committee was mainly in terms of inputs and

without information on attainment outputs). Yet the NPE's 'Resolve' enlarged NFE into a significant parallel sector.

6.4.6 Regarding the new programme of non-formal education (NFE), the following features envisaged by NPE/POA are being highlighted- below:

i) NFE shall strive to reach 'school drop-outs, (for) children from habitations without schools, working children and girls who cannot attend whole-day schools' (NPE, Para 5.8).

ii) The curriculum framework of NFE, though patterned on the lines of the national core curriculum, will be based on the needs of the learners and related to the local environment' (NPE, Para 5.10)

iii) Learning material of high quality will be developed' (NPE, Para 5.10).

iv) The NFE shall promote 'a learner-centred approach' emphasis on learning rather than teaching', continuous learner evaluation', 'creation of participatory learning environment' and 'joyful extra-curricular activities' (POA, Para 26).

v) The NFE shall organise activities to 'enable learners to progress at their own pace' and to 'learn from each other' (POA, Para 26).

The above listed highly desirable features of NFE are indeed relevant to formal schools as well and they are also the essence of the child centred approach mentioned by NPE. The criteria mentioned by POA for selection of NFE instructors being local, being already motivated, acceptable to the community, being preferably from the weaker sections in society, having given some evidence of work in the community are the criteria relevant to the selection of formal school teachers also. Therefore, it is unclear why the policy has advocated NFE, in effect, as a parallel system.

6.4.7 The NPE has further proposed that all measures will be taken to ensure that 'the quality of non-formal education is comparable with formal education (NPE, Para 5.9). The POA elaborates that the scholastic achievements of NFE would have to be such that learners' entry into formal structures is facilitated. In the ultimate analysis, therefore, the effective difference between NFE and the formal school is reduced to the former being held in the evenings and the latter in the day time. of course, a number of other secondary differences in terms of managerial system, infrastructure, salaries, etc. exist. it could be noted in this context that the NPE fully allows for school timings as well as vacations' to be adjusted to the convenience of children' (Para 5.6). Why did the POA, therefore, not propose changing the school timings to suit the needs of those girls and working children who cannot attend the day school? Is it because the school hours cannot be reduced to two to three hours per day, as has been done in the case of NFE? Is the shortening and staggering of school hours not advisable on academic grounds or are there some extraneous factors? These questions are not answered by NPE/POA.

6.4.8 The above analysis would lend itself to the inference that in POA's perception the formal school is not, in fact, amenable to respond to the needs of the child population outside the school system through change of its timings.

6.4.9 With regard to NFE, the POA makes the following significant observation :

"For their healthy development and to ensure that they enjoy conditions of freedom and dignity, the education system will strive to have all children in whole-time schools of good qulity, and till that becomes possible they will be provided opportunities of part-time non- formal education". (POA, para 8 e)

It is clear that the POA itself places NFE at a level lower than the formal school. A feeling widely persists, legitimately or not, that NFE is some kind of a second-grade education for the poor, while the formal school is meant for those who are relatively better off. This feeling has grown in the public mind notwithstanding the fact that formal schools themselves are in poor shape and provide, by and large, what can be fairly described as second grade education.

Recommendation

NPE's 'Resolve' in Para 5.12 should be modified to

(a) emphasise both enrolment and retention in the school;

(b) relate fixing of targets to ground-level realities through a decentralised and participative mode of disaggregated planning, rather than fixing targets in an ad-hoc fashion; and

(c) integrate non-formal and formal education systems over a period of time such that their cadres, infrastructure and management structures would form an organic whole.

Non-Formal Education

6.5.1 The Non-formal Education (NFE) Programme, introduced during the Sixth Five Year Plan, is being implemented since the formulation of NPE 1986 as one of the major Centrally Sponsored Schemes in the area of elementary education. Although its focus is on the ten educationally backward States, it has been extended to cover urban slums, tribal areas, hilly and desert tracts and special projects for working children in the other States as well. In its present form, the scheme extends assistance to the State Governments in the ratio of 50:50 for general (coeducational) and 90:10 for girls' NFE centres. Assistance to the extent of 100% is provided to the voluntary agencies to run NFE Centres.

6.5.2 According to ',Education For All by 2000', a recent NIEPA report, the NFE Programme has the following characteristics:

"In terms of cognitive learning NFE is comparable with the corresponding stage in formal education. Attention is to be paid in NFE to non-cognitive aspects of learning, just as much as we propose in the school system.

It has flexibility to adjust curriculum and textual materials to the needs and interests of the learners.

Its total duration is generally shorter than in formal education.

The programme can be organised at the time convenient for the learners, generally in the afternoons for girls and in the evenings for working children.

It is not dependent on highly paid professional teachers but is organised by local persons who are specially trained for it.

There is the possibility of migration between the formal and non-formal systems."

6.5.3 At present, the NFE Programme is operating about 2.4 lakh centres, including almost 78,000 centres exclusively for girls. In addition to the Government centres, more than 350 voluntary agencies have been assisted to run centres more or less on the pattern of the Government project. However, the number of centres run by voluntary agencies constitute only about 10% of the total number of centres under the programme. A summary of the present status of the NFE programe is presented in Table 16.

TABLE 16

NON-FORMAL EDUCATION PROGRAMME

	1987-88	1988-89	1989-90 (antici-pated by 31.3.90	Total for 1987-88, 1988-89 & 1989-90
1. Amount spent (Rs.in crores)	38.41	40.32	25.65 (48.05)*	104.38
2. NFE Centres brought to function (in lakhs)- cumulative	1.93	2.41	2.60	2.60
3. No. of exclusive				

girls' centres sanctioned-cumulative	-	-	66.792	66.792
4. No. of voluntary organisations approved for NFE programme-cumulative	104	296	364	364
5. NFE Centres brought to function by voluntary agencies-cumulative	8,747	20,957	24,287	24,287
6. Estimated enrolment (in lakhs)	-	-	65	65
7. No. of experimental innovative projects approved cumulative	11	25	34	34
No. of States/UTs covered	15	16	17	17

* The figure in brackets is BE for 1989-90.

[Source: Annual Report, 1989-90 (Part I), Dept. of Education, Ministry of HRD, Govt. of India.]

Table 17 provides information on the gap between the targets and implementation with respect to Government- run (both coeducational and girls' centres) and voluntary agency projects. Table 18 provides information on the quantum of assistance extended to the State Governments and voluntary agencies for different kinds of centres, since the formulation of NPE.

Table 17

NON-FORMAL EDUCATION : TARGETS VS. IMPLEMENTATION
NUMBER OF CENTRES

Year	Projected				Implemented			
	States/UTs Co-Ed.	Girls	Voluntary Agencies	Total	States/UTs Co-Ed.	Girls	Voluntary Agencies	Total
1987-88	145500	48500	6000	200000	130445	54271	8747	193463
1988-89	198750	66250	10000	275000	155310	64792	20957	241059
1989-90	251250	83750	20000	355000	153998	77832	25602	257432

(Source: A Status Report entitled 'Review of NPE (1986) Relating to Elementary & Teacher Education (Briefs), a report prepared by the Ministry of HRD (Dept. of Education) Govt. of India, for the NPE Review Committee, August, 1990.]

Table 18

NON FORMAL EDUCATION - CENTRAL ASSISTANCE TO NON-FORMAL
PROGRAMME

(Rs.in Lakhs)

Year	Projected		Released		
		States/UTs Co-Ed.	Girls	Voluntary Agencies	Total
1987-88	5965.56	2241.17	1311.33	251.33	3803.83
1988-89	7331.62	1817.91	1260.51	614.56	3692.98
1989-90	9747.56	1425.19	1203.15	667.84	3296.18
1987-90	23044.74	5482.27	3774.99	1533.73	10792.99

[Source: A Status Report entitled 'Review of NPE (1986) Relating to Elementary & Teacher Education (Briefs), a report prepared by the Ministry of HRD (Dept. of Education) Govt. of India, for the NPE Review Committee, August, 1990.]

6.5.4 It has already been pointed out how the designs of the NFE Programme and the formal school have common features. The fact that a majority of today's formal schools are devoid of many of these desirable attributes in lesser or greater degree, need not be construed as an indication of basic differences at the theoretical level from what has been envisaged for NFE.

6.5.5 The NFE programme has 'been reorganised on the principles of area coverage (on project basis often co-terminus with the CD block) , micro-planning exercises improved training of NFE instructors and restructured systems of monitoring and evaluation. The NFE centres run by some of the voluntary agencies, however, are reported to have adopted innovative techniques and prepared need-based learning materials. Regarding the Government- operated programme, which constitutes more than 90% of the NFE centres, the NIEPA report has brought out the following glaring deficiencies of the programme :

(a) There is generally a lack of conviction. The state governments are not willing to commit resources for NFE, the administrative system gives it a step- motherly treatment, and there is generally a lack of faith among functionaries, and the families of the children who are supposed to benefit from it.

(b) Although there is scope for adjusting the syllabus to the special needs of the learners, in fact hardly any attempt has been made in this direction.

(c) The quality of instructors and their training leave much to be desired. For all practical purposes, routinely selected persons serve as instructors and the training is so inadequate that the instructor follows the methods by which he/she was taught rather than a genuinely non-formal method.

(d) The management system is totally deficient for the needs. The attempt to group the NFE centres in compact projects has had limited success and there are unconscionable delays in remittance of funds to instructors for their honorarium and lighting arrangements. Sometimes learning materials reach weeks after the start of the centre.

(e) Funds provided for NFE are far short of the needs. The instructor is under-paid and enough learning materials are not available. Lighting arrangements and instructional equipment are below the acceptable level."

(Education for All by 2000, NIEPA, March 1990)

The field visits organised by the Committee also brought out feedback, corroborating some of the above findings.

6.5.6 The Committee also wishes to point out that the NPE/POA make an almost arbitrary reference to the use of 'modern technological aids' in order to 'improve the learning environment of NFE centres' (NPE, Section 5.9). The POA declares that radio-cassette player and other modern technological tools shall be provided to the centres. This directive of the policy is possibly based upon the following two premises:

i) The chief cause of the less than satisfactory learning environment in the NFE centres is the lack of 'modern technological aids'.

ii) Provision of aids such as radio-cassette player would necessarily lead to quality improvement.

It is desirable to ensure that the above two premises are rooted in reliable educational evidence before embarking upon a major programme of investment on technological aids.

6.5.7 A comment on the status given to the NFE instructors in the programme seems necessary. The Committee considered this issue at two levels - first at the level of the policy framework and programme design and then at the level of implementation. NPE declares that 'talented and dedicated young men and women from the local community will be chosen to serve as instructors, and particular attention paid to their training' (NPE, Section 5.9). Indeed, the programme design places considerable faith in the instructors for the success of the project. The instructor is expected to take initiative of locating the learners through a household survey, arrange for the venue with community support and adjust the timings of the centre to the convenience of girls and working children. Even more importantly, the instructor must create and sustain the learning process on the principle of 'learner-centred approach' in order to overcome the barriers that have so far prevented the working children, particularly the girls, from responding to school education. In spite of such great expectations from the NFE instructors, the NPE is hesitant to accord them a status equivalent of 'a school teacher, allowing for their absorption into the formal system only in 'deserving cases'. What more does the NPE expect from the NFE instructor to become 'a deserving case'?. The NPE does not provide answer for this.

6.5.8 At the level of implementation: The NFE instructor is paid an emolument of Rs.105/- per month in the case of primary level centres and upto Rs.150/- per month in the case of upper primary (middle) level centres. It is officially stated that this emolument is to be viewed only as an honorarium and not a salary, since the instructors are supposed to be having other sources of income. The instructor is considered a volunteer in the programme. However, it is widely reported that most of the instructors look upon their-engagement in the programme as regular employment and, therefore, hope to be absorbed in the formal school system with appropriate salaries and service conditions at some distant future. Since the NPE/POA do not propose to meet this expectation of the instructor, the programme design does not provide for any measures for upgradation of the qualifications and training leading to eventual absorption of the instructors in the school system.

6.5.9 The above dichotomy in the cadres of NFE and the formal school is a trap which is beginning to constrain the entire NFE programme in ways which were possibly not anticipated. On the one hand, the instructors would not have the-necessary motivation due to low emoluments, except in some special situations, to perform at a higher level over long periods of time. On the other hand, the Government would neither provide for higher emoluments nor build in measures of upgradation of NFE instructors and their

eventual absorption in the school system. In this context, the NPE had aptly resolved that the effort of ensuring 'children's retention at school' will be 'fully, coordinated with the network of non-formal education' (NPE, Section 5.12). However, what has been implemented ensures that the two cadres of education, the NFE instructor and the school teacher, as well As the two management structures, would always remain parallel to each other. Hence, this dichotomous arrangement of parallel cadres and systems of NFE and the formal school is in contradiction with the stated goal of NPE linking the two organically as an integrated instrument for achieving universalisation.

6.5.10 One more feature of NFE seems to be incongruous with its goals. In spite of claims otherwise, the Programme never provided for measures to weave NFE into the life and need-pattern of the working child, or the girl child. The only dimension that received stress during implementation in most States was making NFE equivalent to the formal school in terms of learning, according to what has come to be known as the Madhya Pradesh Model. The 'work-oriented' and awareness-oriented' models of Non-Formal Education, advocated by an official document, have not been implemented, except in the case of a handful of dedicated voluntary agencies. The pre-policy efforts towards participative development of relevant learning materials in CAPE (a NCERT Programme) remained by and large marginal as its lessons did not make visible impact even on NFE.

6.5.11 As already pointed out, the departmental presentation of NFE programme before the Committee focused attention on inputs, that is, implementation in terms of expenditure incurred, number of centres opened, the estimated number of learners enrolled etc. No concrete information was furnished to the Committee on outcomes in terms of cognitive learning or even performance as judged by regular attendance and functioning of the centres. On the other hand the department pointed to implementation of a few 'outstanding projects' operated by voluntary agencies. On account of this, the Committee could not derive from the Departmental presentation, the totality of the picture regarding the NFE programmes as seen by Government.

Recommendations

i) Over a period of time non-formalise the formal school in the following ways:

(a) Shifting of the school timings to early morning hours, afternoons or late evenings, as per the convenience of the majority of children and in consultation with the Village Education Committee and the Educational Complex;

(b) Adjusting school calendar to agricultural activities, local cultural engagements and the weekly markets with a view to optimise school attendance;

(c) Introducing child-centred approach with concomitant reduction in school hours, but an increase in the learning hours. This would come about through utilisation of improved pedagogic practices involving elements of inquiry, play-way, activity, creative writing,

peer group learning, experimentation etc. creative use of singing, drawing, story telling and particularly of folk-lores and folk-arts would enrich the pedagogic practices.

(d) Linking atleast one day care centre, providing holistic services for children in 0-6 age group, with the school in both physical as well as programmatic terms; the school should adopt the playway and activity- based approach of ECCE from the day care centre; the Anganwadi workers, may be viewed as associates of the school staff;

(e) Wherever required and feasible, holding of classes twice in the day mornings for the written tradition and evenings for oral tradition, games and cultural action;

(f) Introducing 'ungraded class room' which would encourage all children at different levels of learning to set their own pace;

(g) Relating content and process of learning with environment and life of the community; and

(h) Allowing all working children, particularly the girls, to drop-in the school at any time of the day or the year they want; also encouraging the children of migrant families from other villages/habitations/towns to similarly drop-in (this flexibility becomes possible as a direct consequence of the 'ungraded class room' approach). 171 ii) For the purpose of non-formalisation of the school, it would be essential to restructure the appointment, placement and training of teachers in the following ways: (a) In addition to the regular teaching staff, empower the Head Master/Head Mistress to recruit 'para-teachers' (Shiksha Karmis)* for the early morning or evening classes and/or habitations/villages/mohallas still unserved by a school.

(b) Although the appointment of the 'para- teachers' would be probationary for a period of two to three years, she/he shall be paid a respectable emolument, which in no case shall be lower than one-third (preferably, it should be one-half) of the salary of the school teacher or the local minimum wage level, whichever is higher;

(c) As far as possible, the 'para-teacher' should be recruited from the local community, with preference being given to women; if necessary, young persons with commitment and aptitude for working with children having even less than minimum qualifications could be recruited, provided they are willing to upgrade their educational qualifications within the probationary period through the open school system;

(d) The regular school teacher and the 'para- teacher' shall be inter-changeable in terms of teaching responsibilities;

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* The concept of a 'para-teacher' is somewhat similar to the concept of Shiksha Karmis practiced at present in Rajasthan on an experimental basis with a view to reach- out to unserved habitations.

(e) At the end of the probationary period, the 'para-teacher' should be absorbed as a regular school teacher provided she/he has been able to upgrade her/his educational qualification to a certain minimum level (say, class XII) and ensure a concrete move towards enrolment and retention of all children in the community who were earlier outside the ambit of the school; and

(f) Organise the training of the 'para-teacher' along the lines of the 'Internship Model' wherein the training emerges from and is integrated into the empirical experience of the class room; a sand witch programme of internship and in-service training would be evolved by the DIET in consultation with the Educational Complex; the training staff would comprise of the senior teachers of the local school as well as the Educational Complex and also the DIET personnel.

172 iii) In order to non-formalise the formal school, the following package of measures would have to be adopted as a 'pre- (a) handing over the effective control of the school, including the appointment, posting and promotion of teachers, to a coordinated management system involving the school, Village Education Committee and the Educational Complex.

(b) empowering the local community, especially underprivileged sections of the society with assignment of specific role to women groups, to monitor and support the school.

(c) develop the school into a community school which would take active interest in social and cultural life of the village and welcome contribution by members of the community in both the planning and the teaching process; the school would also act as a nucleus of multiple social welfare services provided by the Government, including health, early childhood care and education, women's education, adult education etc.

(iv) Modern technological aids should be introduced only when their role is established on the basis of the class room experience through a participative mode involving teachers and teacher- trainers; any hasty measure to introduce such aids (e.g. radio-cassette player, TV or VCR) would only lead to waste of valuable resources. These should be introduced only where teacher asks for the same based on full needs.

Operation Blackboard

6.6.1 The NPE recommended the launching of a phased drive, symbolically called Operation Blackboard, as a Centrally Sponsored Scheme aimed at bringing about substantial improvement in the facilities of primary schools run by Government, Local Bodies and Panchayati Raj and recognised aided institutions. it has the following three interdependent components:

"- Provision, of a building comprising at least two reasonable large all-weather rooms with a deep varandah and separate toilet facilities for boys and girls;

- At least two teachers in every school, as far as possible, one of them a woman; and

- Provision of essential teaching and learning materials including backboards, maps, charts, toys and equipment for work experience."

(Annual Report, 1989-90, Part I, Ministry of HRD, Dept. of Education)

6.6.2 While central assistance to the extent of 100% is to be provided for the appointment of the second teacher in the single teacher schools and for the purchase of materials, the State Governments were expected to find their own resources for the building. Regarding the cost of construction of buildings, the POA recommended that school buildings be the first charge on the funds of the National Rural Employment Programme (NREP) and the Rural Landless Employment Guarantee Programme (RLEGP), now known as the Jawahar Rojgar Yojana (JRY).

6.6.3 The scheme was designed to cover the primary schools in all the blocks/municipal areas in a phased manner. The target was set at the level of 20% of blocks/municipal areas during 1987-88, 30% of them during 1988-89 and 50% during 1989-90. Tables 19 and 20 present data on the projections made for Operation Blackboard and the extent of it's implementation. From these data, it is clear that the targets were not fulfilled, with only 33% of the schools receiving equipment and less than 25% of the schools completing their construction programme. About three-fourths of the sanctioned posts for the teachers were filled up. A total amount of Rs.373.32 crores has been spent under the scheme during the past three years.

Table 19

OPERATION BLACKBOARD
WHERE DOES IMPLEMENTATION STAND ?

PROJECTED

	1987-88	1988-89 (Rupees in Crores)	1989-90	Total (1987-90)
Coverage of Blocks/ Municipal Areas	20%	30%	50%	100%
Central Allocation Total	99.85	219.20	423.20	742.25
Equipment	41.19	72.56	129.92	243.67
Teachers	58.66	146.64	293.28	498.58

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Estimated requirement School Buildings	240.00	360.00	600.00	1,200.00

SANCTIONED

Coverage Blocks	26.9%	28.02%	9.13%	64.05
Central Allocations Total.	110.61	135.73	126.98	373.32
Equipment	84.14	87.21	54.36	225.71
Teachers	29.47	48.52	72.62	150.61
Requirement for School Buildings	265.00	354.00	75.00	694.00

Coverage	Blocks	4076	(64.03%)
	Schools	3.05 lakhs	(58.7%)
	Teachers	78,492	(53.02%)
	School Bldgs	1,15,135	(47.8%)

IMPLEMENTED

Teachers appointed	57,835	(73.68%)
Schools constructed	25,970	(22.5%)
Schools under construction	35,145	(30.57%)
Equipment supplied worth Rs.	73.69 crs.	(33.05%)

(Source: A Status Report entitled, 'Review of National Policy on Education-1986 relating to Elementary Education and Teacher Education (copies of slides), a report presented by the Ministry of HRD (Dept. of Education) to the NPE Review Committee, August, 1990]

Table 20

OPERATION BLACKBOARD

	1987-88	1988-89	1989-90	Total (1987-88)
Amount spent (Rs. in crores)	110.61	135.73	126.98	373.32
Amount committed by States for School Buildings (Rs. in crores)	300.00	340.00	79.00	719.00
No. of States/UTs covered	27	22	22	-
No. of Blocks covered	1703	1795	578	4076
No. of Schools covered (in lakhs)	1.13	1.40	0.52	3.05
Percentage of primary schools covered	21.42%	26.41%	9.87%	57.70%
Posts of Primary Teachers Sanctioned	36891	36327	5274	78492

[Source: Status Report entitled, 'Review of National Policy on Education-1986 relating to Elementary Education and Teacher Education (copies of slides), a report presented by the Ministry of HRD (Dept. of Education) to the NPE Review Committee, August, 1990]

6. 6. 4 To be sure, Operation Blackboard is a laudable scheme as it has helped focus national attention on the paucity of facilities in our schools. However a closer scrutiny of the policy framework and the design of the scheme reveals the following problems -

i) Whereas the policy correctly emphasises the need to involve 'Government, Local-Bodies, Voluntary agencies and individuals', it was essentially a government formulated scheme, centrally directed. Central direction under the scheme went to the extent of preparation of standard list of the materials to be supplied to each primary school in the country. The list initially was prepared in 1986 for being included in POA and later modified by NCERT in collaboration with the Bureau of Indian Standards. There is no demonstrable evidence that genuine participation of any group or individual outside the Government machinery, or of even the State/UT Governments was sought thereby

ignoring the vast field experience existing in different parts of the country in such matters.

ii) The POA proposes that the project for Operation Blackboard is to be prepared 'on the basis of survey of these facilities in each school in that block/municipal area' (POA, Para 22). Given this intention, it is not clear why a uniform list of material was recommended for all schools, especially in view of the wide diversity that exists in schools in different parts of the country.

iii) The design of the scheme demands that the State Governments commit funds for the buildings and also be prepared to accept the liabilities of the second teacher's salary after the completion of the first phase, 'probably in the latter part of the Eighth Five Year Plan. Due to this stipulation, several States/UTs did not find it possible to fully benefit from the scheme since they lacked funds to fulfil their part of the commitment

iv) It is reported. that many of the women teachers appointed in the scheme sought their transfer out of the single teacher schools as the respective villages lacked accommodation and other basic amenities.

v) The provision of material did not match with any ground level preparation to utilise it for improvement of the learning environment. The mass teacher training programme (PMOST) implemented in pursuance of NPE, lacked elements that are necessary for equipping the teachers with either the motivation or the skill to use the material for organizing a child-centred process.

6.6.5 The centralised and non-participative mode of Operation Blackboard is reflected in a number of ways in the standard list of material prepared by NCERT . For instance, the list includes items such as skipping rope, swing rope with tyre, trash cans and school bell, all of which can be and are easily mobilised at the local level. Another instance concerns the list of the primary science kit in the POA which originally cost only Rs.400/-, but was later substituted by a several-fold more costly kit prepared under the Indo-German Project. The relationship between this costly kit and the Primary School curriculum is yet to be established. This substitution of the kit is not in accordance with the spirit of para 5.7 of NPE which calls for involvement of local bodies. It is unclear why NCERT did not instead seek consultation from the rich field-based experience in preparing science kits which has. been gained by All India Science Teachers Association TIFR's Homi Bhabha Centre for Science Education (Bombay), Hoshangabad Science Teaching Programme (M.P.) Vikram Sarabhai Community Science Centre (Ahmedabad) and many other bodies over the past several decades. Further, during the public interactions, the Review Committee was told how a Secretary of a State Education Department had to take risk in replacing the musical instruments (harmonium, dholak etc.) included in the standard list by local instruments on persistent demand from the teachers and students alike. The POA has also listed radio-cum-cassette player whose role in the learning process at the primary stage, is yet to be demonstrated. The basic point which is being made here is that any meaningful kit/material for a child-centred learning process must be based on the following parameters :

a) It must emerge out of and be related to the growing awareness of the local teaching community about the need for such items.

b) Only those materials should be supplied from outside which can not be mobilised by the children and teachers locally.

Both of these parameters were not conformed to under operation Blackboard.

6.6.6 Another aspect of the problem related to the centralised nature of the scheme has been highlighted in a letter presented to the Review Committee by the Secretary of the Department of Education, Govt. of West Bengal. While giving reasons for State Government's inability to fully benefit from the scheme, the Secretary pointed out that West Bengal, in contrast to most other States, is not a teacher-deficient State. The State, however, is poorer in the proportion of schools having a pucca building than most other States. The effort of the State Government in 1986-87 to persuade the Ministry of HRD to permit the use of the Operation Blackboard funds for construction-of buildings, did not bear fruit. The Secretary states, "Had we been able to secure a reasonable part of the funds for our building construction we would not have had difficulty in making good our building deficiency. Clearly, the scheme has been heavily biased in favour of teacher deficient States as compared to building deficient States". This lack of flexibility of a Centrally Sponsored Scheme to respond to the differing need patterns in the country raises an issue of major concern.

Recommendations

i) The question of continuance of Operation Blackboard as a centrally sponsored scheme may be treated in the light of recommendations made by the Committee in regard to Centrally Sponsored Schemes as a whole in the Chapter on Decentralisation and Participative Management.

ii) The State Governments should devolve all decision making powers concerning operation Blackboard to the Educational Complexes which would seek consultation from DIETs on the one hand, and the concerned school and the Village Education Committee, on the other hand, for planning and implementing the scheme.

iii) The schools and the Village Education Committees, made fully responsible for UEE in their respective areas, should undertake a micro-planning exercise for working out their requirements under Operation Blackboard and be accountable for its implementation.

iv) Operation Blackboard must be given the status of one of the priority strategies for UEE, but, at the same time, it should be ensured that investment is made only on those items whose need has been established by the teachers and other related persons on the basis of micro-planning and class room requirements.

v) For posting women teachers in the villages, it would be best to select them locally, wherever possible, or else make provision for their accommodation, security and other support services.

Moving Towards UEE

6.7.0 Based upon the analysis of NPE/POA and identification of problems and issues as presented in the pervious Sections, the Committee is now in a position to formulate strategies and suggest measures for moving towards UEE within this century.

Quality and Relevance of Education

6.8.1Table 21 presents a summary of information recently made available by the National Sample Survey (42nd Round) regarding the reasons for never enrolling in/dropping out of schools. About one third to one-half of the out of school children find school either boring, irrelevant or threatening (i.e. failure in examinations). Almost another 40 to 45% of them have to stay away from school due to economic compulsions as well as the demands of home or family life., These data suggest that a fairly significant proportion of the out of school children can be brought into the ambit of school education provided education is made enjoyable, challenging and relevant.

TABLE 21

A SUMMARY OF
REASONS FOR CHILDREN NOT ENTERING THE SCHOOL AT ALL OR
DROPPING OUT

(cf. Tables 22 and 23)

S.No.	Reasons	Not Enrolling (%)	Dropping Out (%)
1.	School facilities not available	8-10	-
2.	Not interested	about 30	about 26
3.	Economic Compulsions	37-40	about 36
4.	Domestic Chores	6-7	6-8
5.	Failure	-	16-20
6.	Other reasons	13-17	10-16

 [Source: Based on Table Nos. 7 & 9 of National Sample Survey Report, 42nd Round (1986-87)]

Table 22

PERCENTAGE DISTRIBUTION OF DROP-OUTS BY
REASONS FOR DISCONTINUANCE : ALL INDIA

| Sl. No. | Reason for discontinuance | R U R A L | | | U R B A N | | |
| | | Males | Females | Person | Males | Females | Person |
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Not interested education/further study		26.57	33.25	26.26	23.62	28.47	25.60
2.Participated in household economic activity		26.80	9.38	19.17	22.80	6.71	16.28
3. other economic reasons		20.63	14.97	17.11	24.15	15.42	20.58
4. Domestic chores		2.01	14.25	5.54	2.20	15.93	7.77
5. Failure		18.43	16.68	16.29	21.28	18.77	20.27
6. Others		5.56	11.47	15.63	5.95	14.70	9.50
7. ALL REASONS		100.00	100.00	100.00	100.00	100.00	100.00

[Source: Table No.(") National Sample Survey, 42nd Round (1986-87).]

6.8.2 What is striking about the data released by the Report of the National Sample Survey (42nd Round) is that the category of 'Not Interested' and 'Failure' has emerged as the single major cause for the children to stay out of school (see Tables 22 and 23). In the words of the Report it-self "one can not rule out the possibility that in the case of some (persons) reporting economic or domestic reasons for discontinuation of their studies the real reason may be' lack of sufficient interest in pursuing their studies." While economic reasons may constitute another major category for keeping the men out of school, the category of domestic duties, including household economic activities, is a significant reason for the women to keep away from school.

Table 23
PERCENTAGE DISTRIBUTION OF PERSONS AGED 6 AND ABOVE NEVER ENROLLED AS STUDENTS BY, REASONS FOR NON-ENROLMENT ALL INDIA

Sl. No. (1)	Reason for non-enrolment (2)	R U R A L			U R B A N		
		Males (3)	Females (4)	Person (5)	Males (6)	Females (7)	Person (8)
1.	Too young to go to school	5.70	3.88	4.61	6.71	3.63	4.73
2.	Schooling facilities not available	9.94	10.46	10.25	5.86	9.00	7.89
3.	Not interested	25.18	32.32	29.46	23.46	32.90	29.55
4.	For participation in h.h. economic activity	18.87	9.04	12.98	17.11	6.83	10.48
5.	Other economic reason	31.12	23.56	26.59	34.76	22.59	26.91
6.	Attending domestic chores	1.27	9.87	6.42	0.90	10.70	7.22
7.	Waiting for admission	0.96	0.51	0.69	1.36	0.80	1.00
8.	Other reasons	6.96	10.37	9.00	9.83	13.56	12.23
	ALL REASONS	100.00	100.00	100.00	100.00	100.00	100.00

(Source: Table No.(9) National Sample Survey, 42nd Round (1986-87)]

6. 8. 3 The child-centred approach along with measures such as ungraded class-room and relating content and process with environment and community life shall be the chief instruments for making education both enjoyable and challenging. Possible ways of achieving this aim would be elaborated later in this chapter by presenting certain models.

6.8.4 The element of relevance of education is linked with the issue of vocationalising the entire educational process. An important aim should be to gradually move towards

formation of productive skills amongst school children as they advance in age, to be followed later by providing for both formal and non-formal vocational courses.

Reaching Out

6.9.0 For children who do not respond to the measures suggested above for the improvement of the quality of education it would be necessary to enable the school to reach out to them in terms of both time-and space.

Recommendations

A set of measures to achieve this purpose is presented below:

i) Provide each habitation with a population of 300 or more with at least one Primary School by the year 2000 (this implies an additional 1.22 lakh schools as per 1986 data). In the meantime, each such habitation may be served by a 'para-teacher' linked to the nearest Primary School.

ii) Provide each habitation with a population of 500 or more with at least one Middle School by the year 2000 (this implies 2.5 lakh additional schools as per 1986 data). In the meantime, each such habitation may be served by a 'para-teacher', linked to the nearest Middle School.

iii) A network of 'para-schools', linked to the nearest Primary School, should be started such that all unserved habitations with population of less than 300 would be served by at least one 'para- school by the end of the Eighth Five Year Plan period.

iv) A network of 'para-schools', linked to the nearest Middle School, should be started such that every child has access to a 'para-middle school' within one km. of residence by the end of the Eighth Five Year Plan period middle level, priority should be given to the habitations having enrolments and retention rates for girls below the State average.

vi) In order to reach out to the children who are engaged in the workforce during the day time or the girls engaged in domestic chores, it would be necessary to organise 'para-schools' either early in the morning, afternoons or late in the evening, depending upon the convenience of the children. These 'para-schools' may be run by the school teachers who reside in the same village or nearby. Alternatively, the school may recruit fresh 'para-teachers' even for the habitations which have a school.

vii) For children who are engaged in wage labour in organised or unorganised sectors for durations extending beyond the stipulated 8 hour period and especially for those children

who are engaged in hazardous industries*, it would be necessary to go beyond the measure of opening 'para-schools' within the habitation or in the evenings. For this 'hardcore' measures involving provision for opportunity costs and mid-day meals may become, necessary. In addition, strict implementation of child labour laws in such 'hardcore areas' would become an essential 'educational' task.

Convergence of Services

6.10.0 The Committee has already dealt with the issue of convergence of services, especially in the context of girls engaged in work both-within and outside home. It is reiterated that a detailed plan of providing for convergence of services for each habitation would have to be prepared by the Educational Complex through participation of teachers, Anganwadi workers, Village Education Committees and functionaries of Block-level development and Social Welfare Departments of the Government. Participation of concerned and competent voluntary groups in this process should be encouraged.

School, Para-school and UEE

6.11.1 The Committee proposes that each school, Primary or Middle, may be made fully responsible and accountable for UEE in all the villages/habitations/mohallas in the area of its coverage. For this purpose, the Head Master/Head Mistress should be given the necessary authority and funds to organise 'para-schools' both for reaching out to unserved habitations and to sections of child population unable to come to the school in the day hours. Wherever desirable, the timing of the school itself may be changed to suit the convenience of children, but this decision is to be made entirely at the local level by the school staff in consultaiton with the Village Education committee. The Educational Complex may also be involved for the purpose of coordination and technical advice. Indeed, the school should be given the decision-making power in association with the Educational Complex to formulate its strategy for UEE for the area of its coverage. This implies that the school shall decide, on the basis of micro-planning, the specific mix of 'para-schools', adult education, continuing education, or whatever else is considered necessary.

* Hazardous conditions often amounting to inhuman conditions exist, for instance in the glass factories of Ferozabad (U.P), slate pencil making in Mandasaur District (M.P), carpet-making in Mirzapur (U.P) and match-stick making in Sivakasi (Tamil Nadu).

6.11.2 The 'Para-School' shall have the following attributes :

a) It shall be an integral part of the local Primary or Middle School.

b) It shall be organised either in response to the spatial need of the unserved habitations or to suit the convenience of children in terms of time.

c) It shall have all the attributes of the non- formalised school, as proposed earlier in this chapter.

6.11.3 The 'para-teacher' shall be recruited by the Head Mistress/Head Master of the school in consultation with the Village. Education Committee and Educational Complex. She/he shall be viewed as part of the school staff, but on a probationary period of two to three years. Other conditions of service, criteria of evaluation and eventual absorption as a regular school teacher have been discussed earlier in this chapter.

Child-Centred Class Room

6.12.1 A non-formalised child-centred class room requires a certain philosophical orientation and understanding of child behaviour which has so far not informed curriculum planning and educational practice in the prevailing school system. Some of these attributes are enumerated below only to illustrate what is proposed (this is not an exhaustive list).

i) The focus in a child-centred class room is not on the teacher, but on the child. Hence, the teacher needs to recognise the nature, problems and the attitudes of the children and accordingly evolve his/her own practices of motivating them, teaching, disaggregated evaluation, and responding to what may be an undesirable behaviour.

ii) Like the children, the teacher is also continuously learning and acquiring new experiences.

iii) The rules governing the learning process are not rigid or fixed. The teacher and the children continuously explore, discover, adopt and formulate fresh set of rules according to the emerging situations and challenges in the class room. At the same time, it can not be denied that the teacher is guided in this process by a broad theoretical framework.

iv) Along with knowledge, the method of arriving at knowledge is equally important. The method of acquiring knowledge is built-up from and is re- integrated into the every day experiences of children.

v) The teacher is always aware that children too have their own thoughts and frame-work through which they perceive the world.

vi) In this atmosphere, freedom from all kinds of fears, for children and teachers alike, provides the most conducive basis for learning. How can corporal punishment have any place in this process ?

vii) Ideally speaking, no external agency can have a meaningful say in matters such as learning objectives, pedagogic practices, content or learning aids and seating arrangement. Suggestions and guidelines by the external agency can at best serve as a reference point for the teacher and the children. It is upto them to accept, adopt, modify or, if necessary, reject them.

6.12.2 It is in the above perspective that the Committee presents here two models or approaches to a child-centred class room. These have been formulated by those who have practiced them and reflect their personal experiences. By no means, are these to be taken as exhaustive statements. On the contrary, these may have left many a question unanswered or may even exhibit lacunae.

Model I*

"Primary education can be of any use only as a process which equips the learner to use her own mental and physical resources to continuously improve her abilities to deal with the outside world and also to organise her own experiences in a better manner. With this perception, the definition of minimum levels of learning will not limit itself to what has been learnt in terms of 3 R's and other skills, but would necessarily have to include what attitude towards learning has been inculcated and how far the ability to learn has developed. Not only the acquisition of knowledge, but also the ability to participate in the process of generation of knowledge becomes important.

As a result, the ability to use one's own faculties acquires significance. This ability can not be transferred as a finished product it can only be developed through participation in the educational process. Here the child does not remain a passive recepient, she becomes an active participant.

Improvement in quality of education would mean preparing our schools to facilitate such a process. The child Is active participation As possible only at her own free will and at her own level. This implies an ungraded class where freedom of pace and freedom to question become cardinal principles.The strongest motivation for a child to learn is the intellectual thrill of learning something new or of mastering a new skill. Therefore ungraded class, organised to provide frequent new learning experiences, would keep the child interested in the school. This will take care of those who drop-out because of lack of interest.

Contributed by Shri Rohit Dhankar of Digantar School, Dist. Jaipur, Rajasthan.

Once we accept freedom of pace, each class would have children at different levels of development. We can have vertical grouping in the school. That is, we can have children of all ages and all levels of development in the same class, learning at their own levels at their own pace. Such class-rooms will welcome children as young as 2 years. Therefore, some of the children who cannot come to school because they have to look after their younger brothers and sisters can come to class along with the younger children.

This kind of system will also eliminate the fear of failure and competition.

The school, once freed from the chains of the formal system, can be quite flexible. Different groups of children can come at different times and exciting activities could be organised to be continued by the children themselves out-side school hours as well. if we have a broad-base and open-ended curriculum scheme rather than a fully worked-out curriculum, then the teachers can develop different learning programmes for different groups of children, taking into consideration their special problems, including the problem of lack of time for attending school regularly.

Selection of teachers for such schools cannot be merely on the basis of degrees and certificates. Many more qualities of character, and concerns of an individual have to play an important role.

Most of such qualities and concerns can, however, be developed, given the right kind of orientation in a challenging environment. To train such teachers, each school would have to become a training school and every experienced and concerned teacher would have to become a teacher trainer.

Apart from providing the schools with material facilities, a whole lot of new material and teaching methodologies would have to be developed.

In teacher training and material development, schools in a given small area can function as a group (i.e. Educational Complex), so that expertise available can be used optimally and time and resources may not be lost in duplicating efforts.

DIETs can have a lot to contribute as well as to learn by participating in a teacher education programme based on and built around class-room practice".

Model II*

"The learning programme in such a classroom is based on principles of child development - that children learn by being actively engaged in the process of learning, by discovery and exploration, by concrete experiences, by repetition leading to mastery, by meeting the challenge of graded tasks suited to their ability, at individual pace and style, by imitation of role models

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* Contributed by Smt. Mina Swaminathan of Madras.

and peers, by observation, and by participation in group activity, and so forth. Knowledge about the learning styles and needs of children, aged 4-12, will form the basis of programming. since intrinsic motivation is based on pleasurable experience, enjoyment is an essential learning strategy. Learning must be fun, not just to keep children happy, which is also important, but basically to keep them learning without external rewards and punishments.

The characteristics of such a classroom will be individual and group activity on graded tasks, using a variety of materials, drawn from the local environment. The role of the teacher is to prepare the materials, set the tasks, guide and assist the children, and assess their progress, encourage and motivate them in learning. Essential pre-conditions are the availability of plenty of materials (these can be locally available at low cost, but must be sufficient in quantity) and skills in forming and guiding group and individual activity of children. The teacher must know how to prepare and set tasks. To begin with, these may be set orally-for example, counting something in the compound, classifying, drawning, etc. As soon as children can read, tasks can be set on slates, work sheets or work cards. Reading and following the directions on a work card is itself a reading and comprehension task as well as test.

The teacher should have before her/him concrete tasks and objectives, preferably in a fixed time-frame. Instead of having to complete an inflexible text book or syllabus in a given time, the teacher may have a concrete objective like helping the children to be able to recognise a certain number of words, or perform certain calculations.

The local environment should be the source of materials, ideas, games, tests, challenges and tasks. No set books should be introduced as readers for the first year. Instead, a variety of materials, pictures, cards, notices, etc. should be collected or prepared by the teacher.

Once the tasks are set, the teacher should be free to use whatever methods she/he can devise, with appropriate aids.

Regular skilled guidance, help, support and supervision is required to help new and young teachers to develop materials, organise group and individual activity, etc. and to strengthen their self-confidence and motivation.

Since peer learning and working together are to be encouraged, and children may help each other to learn and explore activities together, there is no room for competition between individuals. Co-operation and mutual support would be essential to help all children learn.

Since children learn at different speeds and in different ways, they may be grouped in different ways, sometimes according to ability or achievement in a particular subject, at other times according to interest, or at other times in order to help the slower learn from the faster. Competition between groups is therefore allowable only in certain situations and to promote certain activities.

There will be no formal grades or examinations in the first five years, but, systematic records will be maintained of the progress made by individual children in basic skills such as reading, writing and numeracy, and their skill in collecting, presenting, comprehending and remembering facts or internalising concepts in the course of group activity".

6.12.3 Several meaningful questions can be raised on what has been stated in the above two models. The Committee proposes neither to enumerate these questions nor to answer them. What is more important is that a new direction is being indicated. Many more models or approaches would have to be worked out in tens of thousands of class rooms around the country and mechanisms devised to collate, integrate and learn from these. Ultimately, it is the teacher and her/his students who have to decide what and how to learn and, at the same time, how to innovate, change or even discard what has been proposed from elsewhere. The principle of disaggregated planning, designing and implementing the curriculum, at least at the primary stage, is of fundamental importance in the context of UEE. NCERT, SCERTs, SIEs and DIETs have to identify and formulate their respective roles within this frame-work.

Goals, Targets and Community empowerment

6.13.0 Goals, targets and community empowerment have been gone into by the Committee in the Chapter on Decentralisation and Participative Management. In this chapter specific recommendations have been given in regard to disaggregated target setting, local area planning with particular reference to the Educational Complex mechanism and participative management including through empowerment and involvement of the community. These recommendations are of special relevance to Universalisation of Elementary Education and should be implemented for realizing the same.

Recommendations

i) Make each school, primary or middle, fully responsible and accountable for formulating and implementing strategies for UEE in villages/habitations/mohallas in the area under its coverage. For this purpose, vest the school with the necessary authority and autonomy to decide upon their mix of strategies and measures (e.g. adult education, para-schools, operation Blackboard). Provide each school through the avenue of the Educational Complex adequate funds and intellectual resources to implement its programme of universalisation.

ii) Authorise the school Head Master/Head Mistress to recruit 'Para-teachers' (Shiksha Karmis) for reaching out either to unserved habitations or to those children who can not attend the school in the day hours. The issues of emoluments, rules governing their probationary period and eventual absorption in the school, and their training in an 'Internship Model', have already been dealt with in this chapter.

iii) Encourage innovation by teachers themselves in building up diverse models of child-centred approach to education and create mechanisms for collating, integrating and disseminating the growing experience of the teaching community within and among Educational Complexes.

iv) In order to increase the relevance of education from the standpoint of working children, especially girls, it would be necessary to emphasise vocationalisation of the entire educational process upto Class VIII level.

v) The goal of universalisation of education may be viewed in two phases the first phase of Universalisation of Primary Education (UPE) and the second phase of UEE. While the school shall be expected to undertake micro-planning for UPE in association with the Educational Complex in the first phase itself, UEE may be allowed to grow organically out of the development of Primary Education. In the second phase, after achieving the goal of UPE, micro-planning for UEE would also become necessary and viable.

vi) Adopt the principle of differentiated or disaggregated targets-and pluralistic educational strategies for achieving UEE. This mode of decentralised and participative planning provides scope for gender-specific, community-wise, Block- level and District-level, and regional parameters to inform the planning process. The national and State targets of UEE as well as resource allocation shall emerge from, collation and integration of the disaggregated targets.

vii) Monitoring of the move towards UEE shall be integral to the planning process and may operate at three independent but coordinated levels

a) Within the Educational Complex, of individual schools;

b) Within the district, of individual Educational Complexes; and

C) Within the State, of individual District Boards of Education.

The reports of monitoring shall be made available publicly and discussed at specially organised for a with a view to build up public pressure for achieving UEE within this century.

viii) Express the learning outcome expected of schools and other educational programmes in concrete and easily communicable forms such that these would inform the public criteria and process of monitoring, questioning and intervening in the system. This may take the shape of monthly or yearly community functions in which the general public may participate in collective evaluation of children and the school, and also offer concrete support, financial and otherwise, for the improvement of the school. In this way, create community-based mechanisms and structures for organising a nation-wide process of community empowerment and thereby build a. countervailing pressure on the school system to perform and achieve UEE.

Monitoring and data gathering

6.14.0 The Committee has already discussed the extent to which the enrolment data are inflated. Similarly, the drop-out rates reported in the official documents, though computed with great care, are based upon enrolment registers in the schools whose reliability is doubtful. These data are further confused by the influence of stagnation in the terminal years and of 'the non-detention policy in vogue in several States. These exercises, however, hardly add to our understanding as these do not provide any information regarding actual attendance, attainments and other critical determinants, such as aptitude for work or attitude towards society. In monitoring and gathering data on UEE, it would be desirable if the following equation is kept in mind (see Fig. 2)

ENROLMENT # ATTENDANCE # RETENTION # ATTAINMENT # APTITUDE

TOWARDS SOCIALLY RELEVANT PRODUCTIVE WORK # ATTITUDE TOWARDS SOCIETY

Fig.2 THE UEE EQUATION

Recommendation

In order to monitor progress towards UEE, it is essential that we move beyond the stage of enrolment and retention. Data must be gathered on actual attendance in class rooms, attainment in learning and equally, if not more importantly, on aptitude towards productive work and attitude towards society. it is only by perceiving UEE in terms of such attributes of education that the whole exercise would acquire a social significance.

CHAPTER 7

ADULT AND CONTINUING EDUCATION

NPE/POA Stipulations

7.1.0 The perspective on adult education has been spelt out in the NPE in paras 4.10 to 4.13 and Chapter VII of the Programme of Action- 1986. Apart, from facilitating creation of ability to read and write the policy links adult education with national goals such as poverty alleviation, national integration, environment conservation, energisation of the cultural creativity of the people, observance of small family norm and promotion of women's equality. Adult Education has also been spelt out as a responsibility of the whole nation all sections of the society involving teachers, students, youth, employees, voluntary agencies, etc., apart from Central and State Governments and political parties and their mass organisations. Functional literacy has been considered as another important concern of adult education. A massive programme of adult and continuing education was envisaged for implementation through various modalities.

Committee's perspective

7.2.1 The Resolution setting up the Committee to review NPE, inter alia, states:

"Despite efforts at social and economic development since attainment of Independence a majority of our people continue to remain deprived of education, which is one of the basic needs for human development. It is also a matter of grave concern that our people comprise 50 per cent of the world's illiterate, and large sections of children have to go without acceptable level of primary education. Government accords the highest priority to education both as a human right and as the means for bringing about a transformation towards a more humane and enlightened society. There is need to make education an effective instrument for securing a status of equality for women, and persons belonging to the backward classes and minorities. Moreover, it is essential to give a work and employment orientation to education....... ".

7.2.2 The perspective of the Committee as regards Adult Education' cannot be presented more effectively than by the following extract of the Perspective Paper on education released by the Committee in September, 1990.

"The content and process of adult education, as distinct from adult literacy, is to be reorganised. The questions of survival, development and justice are to be interwoven into content, pedagogy and learning situation of adult, letting literacy come in organically in the process when, and if, it becomes the felt need of the adult learners. This understanding would help in avoiding the disproportionate emphasis on literacy campaigns. A major objective of these campaigns should be to enthuse the adult illiterates to send their children for school education. Other objectives may include education for democracy and Panchayati Raj and for eschewing violence, casteism, communalism, gender, bias and all other forms of discrimination.....

Post Policy Implementation

7.3.0 In pursuance of the Policy, a National Literacy Mission was established in 1988. In quantitative terms, the Mission seeks to impart functional literacy to 80 million illiterate persons in 15-35 age-group; 30 million by 1990 and an additional 50 million by 1995. The emphasis of the Mission is not on mere numbers but on attainment of certain pre-determined norms and parameters of literacy, numeracy, functionality and awareness. Under this Programme 2,84,000 Centres are functioning in the country with an estimated involvement of 84 lakh adult learners (about 35 lakh men and 49 lakh women). Six lakh literacy kits have been delivered to students, volunteers. Over 30,000 Jan Shikshan Nilayams have been sanctioned to provide Post- Literacy Programmes. Over 300 Voluntary Agencies have also been involved in the process. A Mass Campaign under NLM was launched by the then Prime Minister in May, 1988. Similar campaigns were launched by 24 States and UTs on the same date and after. The Director General, NLM in his presentation before the NPERC stated that the Programme had suffered due to shortage of funds. As against the barest minimum requirement of funds amounting to Rs. 139 crores during 1989-90, the actual amount provided was of the order of Rs.76.17 crores. The position was somewhat improved in 1990-91 when a sum of Rs. 96 crores was provided, considering the magnitude of the problem of illiteracy the large uncovered area and the need for mobilisation (A total of Rs.227 crores was spent under NLM during the years 1987-88 to 1989-90). Much more funds are required even for implementing a purely volunteer-based, campaign-oriented plan of action than what has been provided. the DG, NLM further informed the Committee

- In conformity with the area-specific and time-specific approach for complete eradication of illiteracy, plans have been drawn up/implemented for complete eradication of illiteracy as shown below:

* Kottayam city Kerala made fully literate in 100 days (April-June, 1989).

* Eranakulam district, Kerala made fully literate in one year (January December, 1989).

* Projects for total literacy have been launched in Kerala, Goa and Pondicherry.

* Saksharatha Abhiyan was launched by Gujarat Vidyapeeth on 1st May 88 with the involvement of over 400 voluntary agencies and 1.5 lakh volunteers to make 35.00 lakh illiterates literate by 1991. Two hundred villages out of 1000 covered are reported to have been made literate as a result of this Abhiyan.

* A mass campaign for complete eradication of illiteracy was launched in Karnataka to make 4 lakh illiterates literate by 1990-91. The evaluation of the outcome of mass campaigns has shown that out of 4 lakh illiterate adults, 70,000 become fully literate and 1.30 lakhs partially literate at the close of 1989-90. Bijapur and South Kanara districts in Karnataka have been taken up for total literacy by 1991.

* A scheme for whole village literacy was adopted in 1986-87 in Rajasthan according to which one village in every district was to be made literate every year. Against a target of 60 villages to be made fully literate by 1989-90, 20 villages have been made fully literate. A project of Education for All by 2000 AD is being taken up with SIDA assistance and will be launched soon.

* Twenty CD blocks in West Bengal have been taken up for total literacy from 8th September 1989 (to be completed in one year). The plan is being implemented by the panchayats while the funding has been shared between Central and State Governments 50:50.

* Seventy CD Blocks in Orissa have been taken up for full literacy by 1991.

* Nine Mahanagars and 8 hill districts in UP are being taken up for full literacy in 1990-91.

* The Bihar Education Project encompassing UEE, NFE and AE for total literacy with UNICEF assistance is being launched shortly.

* The Bhagavatula Charitable Trust, Yellamanchill, (Andhra Pradesh) has launched a project known as 'India Literacy Project' for total literacy in Visakhapatnam district with a coverage of one million illiterates. This project is proposed to be jointly funded by the Government of India, Non-Resident Indians and foreign donor agencies. Mandal motivators who will be full time workers in the project, are the kingpin in the programme.

A plan for total literacy has been launched in Coimbatore district, Tamil Nadu. The Coimbatore Literacy Mission Society (COLIM) has been recently constituted with the District Collector as the Chairman. The Society has drawn-up an action plan for imparting functional literacy to 5.25 lakh illiterate adults in 21 Blocks and 6 corporations/ municipalities of the district. It is proposed to involve 50,000 voluntary instructors in the project which is to be implemented during April, 1990 to March 1992.

Past Experience

7.4.0 Adult education programmes have been unsuccessful in the past mainly for the following reasons

-Efforts are made to begin with adult literacy; this is most often not perceived as a felt need; the adult doesn't respond; adult education centres are attended often largely by young persons.

-Adult literacy is not placed within a wider social context. The whole gamut of the developmental needs of the adult of survival, employment, health, etc. are not addressed. There is failure to realise that illiteracy is but a form of marginalisation or exclusion of those who are unable to secure for themselves minimum standards of well-being.

-The problem has been viewed more in the context of teaching methods and of learning to read and write.

Present Scenario

7.5.0 It is a matter of serious concern that half of the World's illiterates would live in India at the turn of the century. This fact belies all our claims to progrss and development. While 53% of the male population was reported to be illiterate in the 1981 census, the level of illiteracy among the women was as high as 75%. This gender disparity in the literacy rate is another issue of national concern. The gap in the literacy levels of SCs vs non SC/ST communities and STs vs non SC/ST communities had widened further during the sixties and seventies as of 1981 census. The literacy rates among SC/ST women are appallingly low, with the ST women in Rajasthan existing at the pre- literate level of 1.2%

Programme of NLM

7.6.1 Notwithstanding the phenomenal effort put in by NLM and a number of determined voluntary agencies during the last three years, there is wide-spread cynicism regarding what has so far gone on under the banner of literacy programmes. The cynicism is the result of a general observation that the majority of the literacy effort, whether by the Government or the voluntary sector, has not demonstrably contributed to increasing the literacy rate. Before the formation of NLM, the Ministry had commissioned 56 research studies to reputed social science research organisations around the country. The Committee analysed 33 of these reports. By and large, the reports had shown that most of the literacy classes rapidly fizzled out due to high drop-out rate. Often there were no objective criteria for finding out the attainment level in terms of literacy at the end of the class, run normally for ten months. The Committee noted that a general practice had been (it continues in many States even today) to declare a person literate merely if did not drop-out for a period of three to four months, even if the attendance was irregular. The question of actual attainment in literacy was not considered.

7.6.2 However, in the context of the scenario presented earlier, the Committee acknowledged that it would be plainly unjust if almost 250 million people in the plus 15 years age groups are left to spend their entire productive life without literacy, a powerful tool for acquiring knowledge and enabling effective participation in democratic polity of India. Clearly like UEE, adult education with a strong literacy component has to be one of the central items on the national agenda. Therefore, the formation of the National Literacy Mission (NLM) in pursuance of NPE was a welcome development on the Indian Education scene.

NAEP to Mass Campaign

7.6.3 The Committee held detailed deliberations with the representatives of both the Ministry and NLM on the issue of methodology used in the adult literacy programme. An attempt was made to understand the reasons why the pre-NPE National Adult Education

Programme (NAEP), started in 1977-78, did not make a significant difference in the rate of literacy among the adults. The Committee found that NAEP mainly relied upon what has come to be known as the 'Centre approach'. A centre is organised with one paid instructor and attends to about 30 adult learners, primarily in the 15-35 age groups. Learning materials like slates and pencils and premises were provided free of cost to each learner, besides other support materials including a lantern. The general experience was not hopeful. The attendance of the enrolled learners was irregular and the drop-out rates fairly high. A centre, after a few weeks or months, either had only a handful of learners left or most of the learners attending were children below 15 years. There were reports of a large percentage of centres closing down due to low response. Others could never get off the ground. Taking this experience into account, the NLM adopted a modified strategy which differed from NAEP. Since early 1989 the Department of Education introduced the Mass campaign strategy that is, from the time total literacy effort was taken up in Ernakulam district of Kerala State. Under this strategy, the entire community's support is mobilised in a given area through mobilisation programmes such as Jathas, street plays etc. Volunteers for imparting adult education as well as those who are to be given adult education are identified. The identified instructors themselves secure the avenues where adult education would be imparted. The services of the voluntary adult education instructors are secured free of cost. Voluntary agencies- are involved significantly in this strategy. This strategy also helps in the total discontinuance of the centre based approach to adult education and thus is meant to be less costly. At present the campaign method is being followed in 62 districts in the States of Kerala, Goa, Pondicherry and Gujarat. The proposal is to add 50 districts per annum to the target for coverage by campaign method.

7.6.4 The NLM officials shared their conviction with the Committee that their modified approach involving mass campaign and reliance on voluntarism has the necessary elements for overcoming the barriers faced by the previous programmes. It was stated that the campaigns were likely to generate a level of enthusiasm that would enable the illiterate adult to cross her/his threshold of resistance vis-a-vis literacy. They placed before the Committee several success or near success stories from different parts of India, though no supporting documentary material as such was provided. Indeed, the Committee has taken note of the positive response the mass campaigns have generated amongst the educated youth, reportedly primarily from the middle class for literacy work. optimistic signs of such responses have been reported from Bijapur in Karnataka, Pondicherry, Durg in M.P., Midnapore in West Bengal and some other districts in other States as well.

7.6.5 This campaign method, even according to the thinking in the Department of Education, is not capable of universal application as of now. The reasons are:

- A total shift from centre based project approach in one shot is not feasible because of the serious disruptions that it can bring about in the on-going process of adult education.

- The campaign strategy cannot be applied in all parts of India principally because of the differing levels of awareness in different States.

- There may be pockets where the number of illiterates will be small; covering those pockets to handle small groups of learners will not be cost effective.

- The campaign method cannot also be introduced universally without appropriate evaluation of the impact it makes in areas where it is being followed as of now.

7.6.6 It remains to be seen whether the enthusiasm generated by these early campaigns in different pockets would be eventually translated into effective literacy classes and then into literacy attainment. Whatever may be the end result, there is no denying that NLM has succeeded in placing adult literacy on the national agenda and also in generating a level of enthusiasm for literacy work among the youth at least in certain pockets.

Ernakulam experiment

7.7.0 During Committee's deliberations, the experiment of Ernakulam district in Kerala was discussed at length. The report of the District Collector shows that the bench mark level of literacy in Ernakulam before the start of the campaign last year was above 90%. In a major and well concerted drive, this level has been raised to about 98% within a matter of less than one year, thus giving Ernakulam district the status of being 100% literate the first one in India. While this is commendable, it is doubtful whether lessons could be drawn from this experiment for application elsewhere. The high literacy rate to start with in Ernakulam, a result of successful school education programme, provided favourable socio-cultural conditions which cannot be expected in most parts of India where literacy rate ranges between twenty to thirty per cent. This situation is particularly acute and distinguishable from Ernakulam in the case of the ten educationally backward States, particularly the Hindi speaking States of UP, Bihar, MP and Rajasthan. Ernakulam, for that matter entire Kerala, exemplifies how literacy is linked with development and socio-cultural factors. In our plans for eradicating illiteracy from India before the turn of the century, we may not be able to wish away the hard ground realities that have been so far responsible for alienating large masses of Indian people from the benefit of education.

Mahila Samakhya Model

7.8.0 In this context the Committee looked at an alternative model of adult education being promoted by the Ministry itself. This alternative can be seen in the design of Mahila Samakhya, a scheme of the Ministry to empower women in pursuance of NPE. The POA chapter on 'Education 'for women's Equality' states, "as majority of women in this age group (i.e. 15-35) are workers, literacy per se may not have any relevance for them" (para 14). Accordingly, the Mahila Samakhya programme primarily emphasises the issues of development and social justice such as health services, minimum wages, water etc. In contrast to NLM'S approach of starting and focusing upon literacy the Mahila Samakhya is designed to being with life-related issues and weave in processes that would motivate the participation towards a desire for literacy. In Mahila Samakhya, therefore, one would move towards literacy as and when it becomes the felt need of poor women groups as a result of raising awareness of their changing role in society.

UEE to pre-empt adult illiteracy

7.9.0 The low rate of literacy in India is a direct consequence of continued failure to universalise Elementary Education, a Constitutional directive. In this context, a comment is necessary about Kerala, where the literacy rates have almost reached the level of, 90% or, in certain parts, even higher. The Committee observes that the success in Kerala on the literacy front is a result of more than a 100 years of sustained effort by various segments of society in promoting school education. Same can be said about Mizoram, where, too, the literacy rates are far ahead than in most part of India.

Recommendations

i) Imparting of literacy should be placed in the context of the developmental needs of the adult. Adult education programmes should be accompanied by a wide range of measures relating to health, nutrition, housing, and employment needs. They should also address themselves to issues of fundamental rights, laws secularism and democracy. After creating awareness in respect of these essential needs and issues the adult learner himself should be expected to, ask for adult literacy as a felt need. Instead of starting with adult literacy, the start should be in respect of creation of awareness for essential needs and from there work backward to adult literacy.

ii) While the mass campaign strategy may be tried out further, the alternative model being employed by the Department of Education through Mahila Samakhya may be closely monitored and its application for adult literacy examined considering that the objective of this project is to create awareness regarding issues of survival and thereby generate felt needs.

iii) The mass campaign strategy as well as the Mahila Samakhya model may be objectively evaluated to look for meaningful lessons for the future.

iv) On most of the developmental problems and matters relating to, fundamental rights, social justice etc., the majority of the illiterates more often than not find themselves in positions of conflict with the official authorities. Therefore genuine initiatives for adult education programmes, voluntary agencies, community groups, political parties and their mass organisations should be facilitated.

v) While NLM goes ahead with its planned literacy campaign in the Eighth Five Year Plan period, an independent study group should be commissioned to evaluate the programme, particularly with a view to arrive at an understanding of what may be appropriate strategies to remove adult illiteracy in the quicker possible time. The evaluation may also look into the various alternative models and study their relevance with respect to diverse socio- cultural and political conditions 'in different parts of India. The minimum objective of this study should be to find out on objective basis what approaches do not yield results, so that, five years later, at least those models may not be encouraged.

vi) The Department of Education should coordinate with the Department of Rural Development and Ministry of Labour and organise programmes for vocational skills for the adult illiterates facilitating flow of funds from programmes like TRYSEM (Training of Youth for Self-Employment). Community Polytechnics should also be involved in a large scale in imparting vocational skills amongst the adult illiterates. (This will enhance the employability of the adult illiterates and thereby create awareness regarding basic needs and issues of life, in the process generating demand for adult literacy as a felt need.)

vii) The neo-literates should be placed in an environment in which they have constant interface with the challenge of the written word.

viii) illiterate adults are those who have either not had access to education or having had access, have been unable to complete their schooling. A person has to remain in school atleast for a minimum of four years to attain a relatively irreversible level of literacy. Literacy should be a form of basic training making it possible for the adult to acquire some knowledge as may be necessary. It is imperative that Universalisation of Elementary Education is given top priority in educational planning and resource allocation. The objective should be to ensure that no child in the early nineties shall grow into an illiterate adult in the next century. (If this can be achieved, we would have then succeeded in controlling the chief contributor to illiteracy in India, i.e. low rate of participation in school education.)

CHAPTER 8

EDUCATION AND RIGHT TO WORK

8.1.0 The concept of vocationalisation as presented in NPE, 1986 (para 5.13) is linked to secondary education. The Policy says vocationalisation through specialised institutions or through the refashioning of secondary education, can, at this stage provide valuable manpower for economic growth'. The salient features of vocationalisation as reflected in the NPE are the following:

- Enhancement of individual employability, reduction of mismatch between the demand and supply of skilled manpower and provision of an alternative for those pursuing higher education without particular interest or purposes.

- Vocational education to be a distinct stream intended to prepare students for identified occupations.

- Courses to be ordinarily provided at the post secondary stage but can be made available after class VIII.

- Development of attitudes, knowledge and skills for entrepreneurship and self-employment.

- Vertical mobility for vocational graduates to be provided through bridge courses.

- A target for diversion of 10% of higher secondary students to vocational courses by 1990 and 25% by 1995.

8.2.1 The POA identifies inadequate organisational structure as a single most important aspect of the unsatisfactory progress of vocationalisation. Building up on this, the POA suggests a Joint Council of Vocational Education (JCVE) as an apex body at the Rational level; a Central Institute of Vocational Education (CIVE) to perform research and development and monitoring and evaluating functions, State Councils and Institutes of Vocational Education (SCVEs & SIVEs) and district level co-ordination committees.

8.2.2 In the view of the Committee the objective of vocationalisation is different from that under NPE. It is not merely to impart specific saleable manual skills but to relate hand with head and heart so that productive labour and socially useful work become a medium for developing creative intelligence and a knowledge base on which one could keep building throughout life. While the Constitution could give the political right to work and developmental planning multiple opportunities for work, the role of education is to equip the students with capability for work with socioeconomic relevance i.e. to empower people for work. It is also to inculcate an attitude for appreciation of work for its own sake.

8.2.3 The emphasis, according to the Committee, should be on work as a medium of education as reflected through the content and process of education itself at all levels and not so much on creation of an exogenous hierarchy of managerial structures like JCVE, SCEVE etc.

8.2.4 In order to achieve diversion of 10%/25% of higher secondary students to vocational courses, NPE envisages two streams; one academic and the other vocational. In the opinion of the Committee, this dichotomy between streams is not desirable.

8.2.5 Hitherto the focus of vocationalisation has largely been in urban areas. The focus has to be directed to the entire world of work including the unorganized sector.

8.2.6 According to the NPE/POA as already brought out, vocational stream is to be introduced at the post secondary stage though there is provision for introducing the same after class VIII. In the view of the Committee, fragmentation of secondary stage into lower and higher secondary for introduction of vocational courses is not desirable. Work experience according to NPE, 1986, though considered as an essential component at all stages, is to be provided through structured programmes. But such structured programmes have often tended to degenerate into trivial activities. One discovers oneself through the medium of work. This was the fundamental insight of Gandhiji, Tagore, Zakir Hussain and others and this is also the justification for socially useful productive work becoming an important medium for developmental education. Consistent with this, SUPW is viewed by the Committee more seriously as something endogenous to the whole process of education presenting a strong base for vocational education at higher levels.

8.3.0 The need for vocational education has been dealt with by various Commissions from time to time. During the British period the system of education in India was geared to two major goals namely, provision of supporting staff for running the administration and the general needs of making the people of India aware of the science and literature of the West. This British legacy has continued and school education has remained largely general, causing unemployment. Wood's Despatch of 1854 advised that education in secondary schools should be practically useful to the people of India in their different spheres of life'. The Hunter Commission of 1882 gave specific attention to provision of vocational education. It called for two divisions of higher schools one providing access to universities and the other of a more practical character to equip the youth for commercial/non- literary pursuits. The Hartog Committee (1929) called for diversified curricula in the schools for diversion of more boys to industrial and commercial careers at the end of the middle stage, preparatory to special instruction in technical and industrial schools. The Sapru Committee (1934) advised vocational studies commencing after 11 years of education. The Abbot-Wood Report (1936-37) suggested a hierarchy of vocational institutions appropriate to the general education structure. The Sargent Report (1944) recommended technical, commercial and art education for full time and part time students on adequate scales. The University Education Commission (1948-49) recommended the opening of intermediate colleges at the end of class X for giving vocational base to the students in a system of general education leading to university

courses. The Secondary Education Commission (1952-53) generally stressed the need for vocational education. The Education Commission (1964-66) pointed out that university degrees were not necessary for the majority of jobs at the middle levels which could be competently handled by vocationally well trained higher secondary graduates. The Commission also referred to more than 50% of the students dropping out of the high schools and embarking upon work without any professional competency. This Commission further identified work experience as an essential element of purposeful education. Vocational education at the +2 stage was built into 1968 Policy. NPE, 1986 re-emphasised vocational education with physical targets on a time bound basis.

8.4.1 Pursuant to NPE, 1986 and POA a centrally sponsored scheme of vocationalisation of education was established. The objective of the scheme was to make' post-secondary education relevant to world of work. The overall budget approved by the Government for the Seventh Plan period was about Rs.410 crores. The scheme envisages grant of assistance to States ranging from 25% to 100% for activities such as conduct of district vocational service, acquisition of vocational equipment, construction of buildings, production of resource materials and teacher training.

8.4.2 The physical target was to introduce vocational courses in about 5,000 schools. Exhibited below is a Table containing particulars of physical and financial achievements under this scheme, as presented by the Department of Education:

Table 1

	1987-88	1988-89	1989-90	Total
Number of States/UTs	18	22	23	23
Number of Schools	1080	1505	163	2748
Number of Vocational sections	3167	4169	484	7820
Amount released (Rupees in crores)	32.56 (50.00)	49.75 (50.00)	43.96 (47.00)	125.95

8.4.3 According to the Department of Education by the end of Seventh Plan, sanctions were issued for creating facilities for an annual enrolment in vocational courses of about two lakh students. The Department estimated the likely annual enrolment at one lakh. Slackening of progress in the scheme during the year 1989-90 has been classified in terms of non-existence of management structures at the State level, non-establishment of school-industry linkages, slow pace of modification of recruitment rules at the Central and State levels for absorption .of vocational graduates in services, non-availability of trained teachers, inadequate facilities for practical training and apprehensions about blockage of vertical mobility.

8.4.4 Monitoring of progress of implementation of vocational education scheme is done through the following modalities:

- Discussions between officers of Central and State Governments during visits to States/New Delhi.

- Quarterly progress reports.

- Release of Central assistance based only on progress reports regarding utilisation of funds released earlier.

- Review seminars of NCERT in which State and Central Government officers participate.

8.4.5 However, delays and shortfalls in implementation have occurred as reflected by the following Table concerning major States:

Table 2

Status of implementation of vocational education in major States.

S. No.	States	Amount sanctioned in Rs. Crores (1987-90)	Amount spent in Rs. Crores (1987-90)	Amount yet to be spent in Rs. crores	No. of courses sanctioned (1987-90)	No. of courses started (1987-90)
1.	Andhra Pradesh	14.70	11.07	3.63 (24.69)	650 courses in 364 schools	650 courses in 364 schools
2.	Gujarat	14.10	1.65	12.45 (88.29)	477 courses in 159 schools	378 courses in 126 schools
3.	Haryana	7.29	3.45	3.84 (52.67)	332 courses in 65 schools	332 courses in 65 schools
4.	Himachal Pradesh	0.85	0.36	0.49 (81.17)	50 courses in 25 schools	50 courses in 25 schools
5.	Karnataka	3.87	2.14	1.73 (44.70)	240 courses in 149 schools	149 courses in 142 schools
6.	Madhya Pradesh	15.39	8.40	6.99 (45.41)	1025 courses in 662 schools	662 courses
7.	Maharashtra	13.07	8.91	4.16 (31.82)	957 courses in 319 schools	478 courses in 239 schools
8.	Orissa	8.41	1.98	6.43 (76.45)	724 courses in 181 schools	124 courses in 31 schools
9.	Punjab	2.62	1.14	1.48 (56.48)	201 courses in 67 schools	201 courses in 67 schools
10.	Rajasthan	2.90	1.12	1.78 (61.37)	321 courses in 125 schools	182 courses in 50 schools
11.	Tamil Nadu	6.96	3.21	3.75 (53.87)	900 courses in 300 schools	600 courses in 200 schools
12.	U.P.	18.32	8.29	10.03 (57.74)	1250 courses in 350 schools	520 courses
	Total..	108.48	51.72	56.76 (52.32)		

figures in brackets are percentages of 'amount spent' to 'amount sanctioned'

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8.4.6 As the above Statement brings out in regard to twelve major States, out of an amount of Rs.108.48 crores sanctioned during the three years 1987-90, an amount of Rs.56.76 crores (52.32%) is yet to be spent. There have been substantial shortfalls in the commencement of vocational courses and coverage of schools against the sanctions in the States of Gujarat, Maharashtra, MP, Orissa, Rajasthan and UP.

8.4.7 Delays and shortfalls have often been due mainly to the following reasons:

- Non reflection of Central assistance in the State budgets.

- Non provision of counterpart funds by the States for certain elements of the scheme in their budgets.

- Delays on the part of the Planning and Finance Departments of the State Governments in giving sanctions for creation of posts to implement the scheme. (State Governments have been chary of creation of posts particularly because, on completion of Plan periods the financial commitments pass on to their Non-Plan budgets.)

- Delays in the production of teaching/learning material.

- Delays in securing the services of teachers.

8.4.8 As of now, the State Governments do not furnish, at the time of presentation of proposals for Central assistance, specific deadlines within which they will undertake the various activities for implementing the vocational education scheme activities such as production of teaching/learning materials, formulation/modification of curriculum/syllabus, completion of civil construction, procurement of equipment, positioning of manpower including teachers etc.

Recommendation

So long as the scheme in the present form is implemented, Government may insist that the State Governments should furnish deadlines for each of the above mentioned activities to be undertaken before funds are sanctioned. Reportedly, in Karnataka State, before seeking Central assistance, the State Department of Education gets all the necessary clearances internally within their Government. This practice may be commended to the other States.

8.5.1 Historically, the basic reasons for the poor performance of vocational education programmes have been:

(i) traditional class/caste oriented social attitude sustained by fairly easy access to highly subsidised college/university education, particularly in liberal arts and humanities;

(ii) lack of socioeconomic relevance of the courses offered; (These vocations are learnt as 'practicals' mainly by those who drop out at much lower levels in the education system. It often gives the 'practicals' an edge over the 10+2 vocational output in the employment/self-employment market because of lack of proper linkage between the vocational education programme and the employment market. As per 1981 census, there were as many as two crore technical/vocational occupations in the employment market while the total number of technically qualified persons in the labour force for manning these positions was less than twenty lakhs which means 90% of the technical/vocational positions were held mostly by the school drop out 'practicals' mentioned above.) and

(iii) distortions in technical education system and lack of linkage between vocational and technical education.

8.5.2 The Committee in making its recommendations for a new model of education, has taken the above historical facts into consideration.

8.6.0 The Education Commission, 1964-66, identified work experience and social service as essential elements of purposeful education. These two elements were integrated into a holistic concept and was re-named Socially Useful Productive Work (SUPW) by the Ishwarbhai Patel Review Committee (1978). Work experience which is to develop creative skills, however, has degenerated into trivial activities, most often extra-curricular, the social dimension essential for the concept missing altogether.

Recommendation

Work Experience/Socially Useful Productive Work should be integrally linked with various subjects both at the level of content and pedagogy.

8.7.0 The two streams envisaged under the NPE has resulted in a dual system of education in which vocational education has come to be looked upon as the poor man's stream. There is need for development of a positive attitude towards work from Class I onwards. There should be higher level of vocational education beyond Class VIII. A core component of vocationalisation has to be part of the curriculum for all and hence the sharp division that exists between the academic (for the 'talented') and the vocational (for the rest) should cease. Besides, for a large section of the students, especially in the rural sector and among the deprived urban communities, vocationalisation at the plus two stage will mean no vocationalisation, in effect. It is necessary to define the meaning of the expression vocationalisation of education, as the Committee uses it here. There is no intention to make all students immediately fit into specific jobs through specific training at the secondary level. In other words, the aim is not to provide terminal vocational courses to all from the secondary stage onwards. But the four year secondary, from Classes IX to XII should be viewed as a stage and integrally, so that courses can be planned that may last one, two or three or four years, in the academic or vocational

stream. While, on the one hand, provision has to be made to enable those who wish to train themselves for immediate placement in the world of work, on completion, it is also the suggestion that all, without exception, including the most academically gifted, should be involved in a basic minimum of vocational or pre-vocational courses at the secondary stage, as part of a process of holistic developmental education. In the case of those who complete class VIII and do not go into the secondary stage of formal education, facilities should be provided for acquisition of vocational skills through other means.

Recommendations

(i) An integrated design of vocational education to be operated for classes IX to XII may be established as presented in the following model with a general core and vocational core and flexible mixes of academic and vocational subjects:

Classes	IX to XII			
Compulsory	Core	General		
	Core	Vocational		
Optional groupings	Academic	Vocational	Academic	Academic
	Academic	Vocational	Academic	Vocational
	Academic	Vocational	Vocational	Vocational

Flexibility should be provided for children to opt for different mixes of academic and vocational subjects as per the pattern exhibited above.

(ii) In order to make vocationalisation a success, substantial structural changes may be introduced in secondary education along the principles of modular courses and credit accumulation, at the same time providing flexibility for multiple exit and entry points for the students. In other words, students opting for any particular vocational course should have the facility of acquiring credits for specific modules of courses, go out into the world of 'work and come back later at their convenience for earning further credits by pursuing further modules. This would make it possible for the schools to offer vocational courses in varying combinations with subjects such as Languages, Mathematics, Sciences and Social Studies. No doubt, vocational and non-vocational subjects should be inter-woven both at the level of content and pedagogy. For those students taking up vocational courses at the secondary stage leading to direct job placements, provision should also be made for further education in those vocations or other fields and, if necessary, bridge courses may be provided. These arrangements are necessary in the expanding world of knowledge and technology, which requires continuing and updating of education for all. What is required for long term viability of vocationalised education is to make provision not merely for specific skill training but also for necessary theoretical background to enhance transferability of well planned and logically designed open learning and distance

learning programmes at the school and university levels should be established as the same would be a good support system for vocationalisation of education.

(iii) For those who do not go in for formal secondary education in the school system, vocational programmes should be organised in non-formal stream like through TRYSEM and community polytechnics and in the formal stream through the ITIs, Rural Institutions etc.

(iv) Several vocational courses get sex stereotyped. That is, they are considered predominantly relevant in the domain of women. This stereotyping should be carefully availed; and girls given access to increasingly diversified courses not discriminated in terms of relevance to men or women. (This subject has been referred to in the Section concerning Education and Women's Equality). Access for Scheduled Castes and Scheduled Tribes to vocational courses should be enhanced too. This has also been referred in the relevant section of the Chapter on 'Equity, Social Justice and Education'.

8.8.1 Technical education including vocational education is represented by a smooth continuation of skill formation through learning of what', 'why' and how' of technology with the help of application of science-and analytical tools. Building up of wholesome vocational competence-of this nature has been ensured by the system which originated in Germany and subsequently extended to East European countries, Japan, Korea and Singapore. This system had a number of advantages with which these countries have captured the consumer market in the field of technology all over the world today. Vertical mobility of the technical manpower from base level to higher level through upgradation of ,education not only ensures a better quality of industrial products and higher productivity in a competitive market but also has a built-in healthy motivation in the social frame for entering into labour force right at the base level and then to rise in career. But unfortunately, the Indian system has continued to operate in the form it was imported a century ago.

8.8.2 In its implementation the vocational education programme organised in pursuance of NPE and POA has come to be largely designed for development of skills and technical manpower for meeting the requirements of the organised sector which accounts only for a small percentage of the total work force- In order to make right to work a reality, courses should be designed with linkages to all kinds of production enterprises, small. or big, urban or rural, industrial or agricultural. The vocational courses of secondary schools, Shramik Vidyapeethas, ITIs, Polytechnics and rural institutes should cater to the highly diversified employments in the unorganized sector small enterprises engaged in maintenance, repair and service vocations (automobile repair, plumbing, electric motor winding etc.), agro forestry, cottage industries, animal husbandry, dairy, fisheries, renewable sources of energy, watershed management, health and hygiene, ecological sciences etc.

8.8.3 The problem faced by school education in today's context is near exclusive emphasis on knowledge through theory alone. Even when theory is taught, its teaching remains barren and partial due to the pedagogic constraint of divorcing knowledge from

practice. The accent is to be on integration of theoretical knowledge with skills, attitudes, productive work, social responsibility and creativity. Education is to be linked with the emerging problems of the world of work. For this purpose, the method of project work should be an Integral feature of the educational process.

8.8.4 If the vocational courses are not meaningfully linked with the user agencies, empowerment for work would remain an idle concept. The isolation of vocational education from the employment market in the organised and unorganised sector must be broken. This is, no doubt, envisaged in the vocational education programme now under implementation as well. But much progress has not been achieved because of apparently continued emphasis on designing of courses for the organised sector, not to speak of the rather sluggish progress in bringing about modifications in the recruitment procedures of the user agencies. The problem of establishing linkages between vocational education and the employment market in the unorganised sector becomes much more complex both because of the highly diversified nature of this sector as well as its vastness.

Recommendation

In order that the process of vocational education is enriched by a meaningful combination of teaching of theory and practice and effective linkages are established with the 'world of work', work benches' and practice schools' may be identified, accredited and involved as described below:

- work benches' and 'practice schools' are work situations selected for the purpose of giving vocational training and direct experience to students within production units or developmental activities of the official agencies. This arrangement offers a more effective educational strategy for providing vocational experience to students than what can be arranged within the four walls of the 'class room'. Here the training would revolve around real problem solving and on-the-job development of skills. Whereas I practice school' is a more institutionalised arrangement with larger units in the organised sector, 'work benches' can be carved out of smaller units from the unorganised sector as well within the neighbourhood of the school. In both cases, the school would not be required to make any substantial investment on skilled personnel or equipment, the same being contributed by the 'world of work', with or without a mutually worked out fee.

-Education at these work places would be through student involvement in work activities which would be clearly identified against different areas and levels of work. Further, information would be available to the students in regard to how, under a given work area, one could move from one level to another (vertical mobility), and skills could be transferred from one work area to another (horizontal mobility). A tested evaluation system would be identified to assess students attainment in the work activity and its inter-relationship with nature and society. Based on this assessment, certificates would be awarded by the accredited I work benches I , whether in private or public sector, government or voluntary organisations, and these should be acceptable for employment in any part of the country. Of course, this would call for devising of proper accreditation

guidelines and procedures, as well as periodic review by authorised bodies, and this task will have to be done carefully, so as to ensure that this educational innovation does not degenerate into unhealthy social and educational practices. Further, special attention should be given to identify and accredit 'work benches' in the rural sector, especially from economies built around activities such as farming, forestry, animal husbandry, dairying, fisheries, watershed management, and ecological conservation.

- Personnel in the 'work benches' and 'practice schools' are not merely to engage themselves in teaching process but are also to be involved in the planning and designing of vocational courses, preparation of text materials and evaluation in a sense in the entire process of education.

8.9.0 The vocational education model envisaged by the Committee would call for effective collateral and complementary steps in the area of teacher education and training; management styles; administrative responsibilities and structures; and meaningful wages and incomes and employment policies as recommended below:

Recommendations

(i) Teacher education courses for vocational education at both the secondary level and post-secondary level should be redesigned in order to prepare teachers who would be equipped, besides general theoretical background and skills, with the necessary interest and attitude for preparing students to meet the requirements of a developing society. Technologists, foremen, skilled craftsmen and other trained personnel from the 'world of work', when recruited as teachers for vocational courses, should be given specially designed bridge courses in areas such as Psychology, Pedagogy, Evaluation, Content Planning etc.

(ii) The management, planning and implementation should be decentralised to the level of individual high schools or school complexes, as well as colleges/universities, thereby involving actively, the Heads of institutions in decision making, alongwith representatives of local enterprises from both the industry and agriculture as well as those of official development agencies and voluntary organisations. This would necessitate shift from the present practice of designing vocational courses under centralised initiatives at the national level. Courses have to be designed at the institution levels (schools/colleges) to the extent possible, drawing upon the resources of DIETs. This would also call for greater autonomy at the institutional level in order to fully exploit local and/or regional industrial, agricultural, commercial and development potential in framing courses and curriculum. This will further facilitate matching of manpower needs at different stages of development planning. The criticality of institutional autonomy for ensuring success of vocationalisation calls for redefining of roles of various central or state-level agencies under the Department of Education (NCERT, SIE, SCVE etc.), so that these agencies would play only catalytic and resource-sharing roles, rather than directing, determining and detailing all processes.

(iii) The existence, at present of multiple and parallel authorities implementing and supervising vocational education, no doubt, is to be seen as a major contributor to ineffective implementation of vocationalisation. This has been brought out by the POA also. Hence, vocational education- should be the responsibility of the Department of Education, though other Departments/agencies must collaborate and be even involved in the planning of vocationalisation.

(iv) The concept of National and State Councils of Vocational Education should be re-formulated in the framework of decentralised planning, management, evaluation and accreditation in order to involve the world of work', private or public, in expanding the reach of vocationalisation of education to the masses.

(v) Above all else the Department of Education should coordinate with the concerned agencies under the Central and State Governments for the establishment of appropriate wages And income and employment policies without linkages to which vocationalisation of education, however carefully designed, will not be a success.

Sidelights

VOCATIONAL EDUCATION : TAMIL NADU STYLE

The system of vocational education obtaining in Tamil Nadu is rather innovative and flexible and is distinct from the 'terminal- competency' based vocational courses that are centrally designed and recommended by the NCERT. Briefly, the modalities are the following:

* Reporting on employment potential in the district based on local knowledge rapid assessment/surveys by the Chief Education Officer. (The employment potential may relate to specific employments in the organised or unorganised sectors or even individual industries).

* On receipt of report from the Chief Education officer, action on the part of the State Directorate of School Education to having consultations with expert resource bodies/concerned industries and formulation of syllabus and course design in Tamil language. (For example, if the employment potential is in the textile industry, consultation may be made with the South Indian Mill Owners' Association or South Indian Textile Research Association).

* Recommendation of the syllabus to the concerned Heads of schools through the district authorities.

* Draft of teaching personnel on part-time basis from the concerned industries for teaching in the schools. (Permanent staff are not normally appointed for the purpose).

* Facilitation of employment of the vocational graduates in the industries concerned where potential was originally identified.

* Discontinuance of the course when the employment potential reportedly ceases to exist.

In Tamil Nadu, already 24% of the students in the higher secondary level have been diverted to vocational education (1987-88) (About96,000 vocational students against a total of3.85 lakhs students at the higher secondary level)As of now, the State has 68 vocational courses.

VIGYAN ASHRAM EXPERIMENT

A successful project is being carried out at Vigyan Ashram, Pabal in Pune Distt. The school has developed itself into a community resource, by training the students of Classes IX and X to learn the technical skills required by the community in a wide spectrum, such as in metal work, electrical work, auto mechanics, construction work, pest control, growing of vegetables, biogas and solar cooker, poultry and dairy etc. Multiskilled instructors are engaged by the school to train the students and the students then become the trained community resource to make available their technical services, which the community pays for. Thus the programme begins as SUPW and grows into vocational skills. Government grants are used for the provision of instructors but the service costs are paid by the community.

NISTADS STUDY

In the process of preparation of this Report, a study was undertaken to assess the willingness of the persons engaged in business and industry to join in partnership and to assist in providing short-term training to the students. The study was titled: "Using Unorganised Sector as Places of Learning: A Case Study of Repair and Assembly Workshops". The study was undertaken by the National Institute of Science, Technology and Development Studies, New Delhi. The study covered five trades, namely Motor Vehicle, Air Conditioner, Typewriter, Stabilizer Repair Shops and Heating Assembly Units. Trainers (Ustads) were interviewed as well as trainees already working in these places. Due to shortage of time, the study was restricted to work stations in Delhi. The Ustad uses the apprentices when he finds that he cannot cope with the work demands. The fresh ones are put with senior ones and in the final phase of training, given independent charge of a particular task. While the formal student learns in school, the working child is learning in a work station, in much harsher circumstances. Can these working children be brought into the mainstream education to update their knowledge? Can the education system provide the flexibility needed in terms of content and timings? Will the Ustad agree to apprentice spending some time, away from work, to update his education? A third issue that the study looked into was the possibility of utilizing the skills and capabilities of the Ustads for vocational education of students in formal schools. The impression gathered from the Ustads is that they would agree, where there is more work and extra hands or free labour is required, not otherwise. But the encouraging aspect of the study was that several Ustads were interested in the proposal. A good deal of appropriate, communication would be necessary to enable those engaged 'in work stations to see the need to join responsibly in the process of education and training than merely continue to wait and pluck the fruits of education and training, when ready.

CHAPTER 9

HIGHER EDUCATION

NPE/POA Stipulations

9.1.1 The perspective on higher education has been spelt out in NPE, 1986 in paras 5.24' to 5.42. The Committee has certain differences in perception in regard to this perspective and the same are presented below.

Committee's perspective

9.1.2 Higher Education as envisaged in NPE, 1986 lays emphasis on 'reflection' rather than action (Para 5.24). While indeed reflection on critical issues facing humanity is important, higher education has a valuable role to play in regard to action on the part of those receiving it, particularly on issues such as regional development, school education (including universalisation of elementary education) etc. in fact, curriculum and the entire education process in the colleges/universities should be dynamically and integrally linked to such issues. The higher education system largely funded as it is from public exchequer should strive for a balance between the regional expectation of the people and their global activities in education and research.

9.1.3 While the perception of NPE, 1986 for consolidation of higher education facilities (Para 5.26) which have already undergone vast expansion over the years and protection of the system from degradation is understandable, it would only be appropriate that the approach is forward looking and dynamic rather than passive. In the process of consolidation, catering to the higher education requirements of backward areas should not be lost sight of. It is not merely a question of preventing the degradation of the system but formulating innovative programmes for transforming the system into an effective instrument for achieving excellence.

9.1.4 it is not adequate if courses and programmes are redesigned (Para 5.29) merely to meet the demands of specialisation better. There is need for a complete reorganisation of academic life of colleges and university campuses with a fresh direction to the faculty and students as distinct from performing certain extension functions. Colleges and universities should be endowed with the capability to guide planning and assist people's initiatives. Such capabilities should be integrally built into the courses and programmes as already mentioned. This alone will facilitate infusing life in the campuses with a sense of societal relevance.

9.1.5 The observations in NPE, 1986 in respect of research in Indology (Para 5.33) in terms of intensive study of Sanskrit and other classical languages at least seemingly underplay the rich folk and tribal cultural traditions which also deserve to be investigated.

9.1.6 In the context of delinking degrees from jobs NPE, 1986 has envisaged National Testing Service (NTS) as a centralised instrument for conduct of tests. In the view of the Committee, tests could be organised by the user agencies on a decentralised basis. The NTS need only be a resource Organisation.

The Present Scenario

9.2.1 It is common knowledge that over the years quantitatively higher education has expanded. As of today, there are 172 universities and 7000 colleges. Student enrolment is of the order of four million 88% of the enrolment being for graduate courses, 9.5% for post-graduate courses and 1.1% for research work. Forty percent of the enrolment is for art courses, 21% for commerce and 19% for sciences women account for 1.3 million of of the enrolled. Number of teachers in the universities and colleges is 2.5 lakhs. These figures have to be reviewed in the context of expansion over the last four decades the same being growth of universities from 25 to 172, of colleges from 700 to 7000 and of enrolment from 2 lakhs to 4 million. No doubt, higher education facilities have come to be provided in remote areas also and there has been increase in the number of first generation learners. The UGC has come to pay attention to quality improvement through special programmes for promotion of excellence in teaching and research. There has been a conscious effort at improving the status of teachers. Educational technology and media have come to play an important role too.

9.2.2 However, the scenario reflects very serious weaknesses. The proliferation of universities and colleges has been rather unplanned. Infrastructure facilities are seriously inadequate. There is marked mismatch between education and employment. Wastage in the system in terms of failures and order of low pass percentages is very high. Examination reforms have been slow. There are serious complaints at all levels about the, lack of responsiveness in 'the system. Academic activities are at a low ebb and the academic calendar itself gets seriously disrupted almost every year. The system of higher education continues to encourage memorization of facts and regurgitation rather than creativity. While the results in higher education are clearly determined by the ,foundation laid in school education, we cannot wait for the ills of school education to be remedied before bringing in meaningful improvements in higher education. We cannot ignore the fact that we do not have many colleges today which can pride themselves of imparting under-graduate education of the highest quality, comparable to some of the well-known institutions in the world.

Post-policy implementation

9.3.0 The scenario of implementation of NPE, 1986/POA, as projected by the Department of Education is presented below:

- Disbursal of development grants to consolidate and develop the existing universities and colleges an average of Rs.1.9 crores per university and Rs.3.4 lakhs per college during the Seventh Plan period.

- Redesigning of courses by 27 Curriculum Development Centres.

- Obtaining of report on new educational management from the Gnanam Committee.

- Revision of pay scales of teachers w.e.f. 1.1.1986.

- Conduct of orientation and refresher courses through 45 academic staff colleges.

- Conduct of national level tests for recruitment of teachers.

- Strengthening of research, particularly in terms of creation of inter-university centres for nuclear science, atomic energy, astrophysics etc.

- One hour telecast of educational programmes, apart from setting up nine Audio Visual Research Centres and four Education Media Research Centres.

- Issue of UGC guidelines for seeking development grants, consolidation, design of courses, improvement of research and creation of State Councils of Higher Education.

- Grant of autonomous status to 83 colleges since 1986.

- Initiation of action for establishment of National Council of Higher Education.

- Obtaining report from Dr. Vasant Gowariker Committee on Accreditation and Assessment Council.

- Approval of a proposal for establishing National Testing Service.

- Operationalising the programmes of Indira Gandhi National Open University for distance education, an amount of Rs.44 crores having been provided to this university during the Seventh Plan period.

- Preparation of a proposal for establishment of a Central Council of Rural Institutes.

Maintenance of standards in higher education

9.4.0 one of the principal problems in the maintenance of standards in higher education is that there has been a proliferation of colleges and universities established by the State Governments without prior consultations with the UGC. The Commission is in no position to control this situation. The only instrument available with the Commission is non-sanctioning of grants to such universities established without prior consultations. This is plainly inadequate. This issue had been gone into by the Estimates Committee, 1988-89 and they had recommended that the Ministry and the UGC should give serious thought to the problem in consultation with the State Governments and develop a mechanism to ensure that new universities are established only if there is actual need and if in-depth spade work has been done. In regard to this matter, the position of

Government would seem to be that the State Councils of Higher Education proposed under NPE, 1986 could bring about some discipline by their role in the areas of coordination and consolidation; and that ultimately unplanned proliferation of colleges and universities could be checked only if there is political will for this. The Committee would like to invite the attention of the Government in this context, to the Resolution of (University) Standards Bill, 1951 which contained provision relating to the establishment of universities and conferring powers on the Union to derecognise any degree granted by a university. However, this Bill was not enacted, apparently having been overtaken by the UGC Act.

Recommendations:

(i) Pressures for opening new colleges and universities being very intense, and the political system reacting to such pressures in different ways, in different states, it would only be appropriate for the Government to re-examine the feasibility of national level statutory mechanism for strongly discouraging non- standard/sub-standard colleges and universities being established. In the process of this examination, no doubt, the Central Government should have necessary prior consultations with the State Governments.

(ii) After NPE, 1986 was formulated and brought under implementation, and though discouragement of proliferation of universities has been specifically mentioned in the Programme of Action, Government of India themselves have passed laws in May, 1989 and October, 1989 respectively for establishing Assam and Nagaland Universities. Steps of this nature may not help in the process of bringing about discipline in the establishment of universities at the State level and should be avoided. Therefore, Government of India should themselves set an example by not establishing more Central Universities without genuine justification for the same.

Restructuring of UGC

9.5.0 The UGC has not been able to function effectively in the face of expansion of the higher education system in terms of increasing number of colleges and universities. Workload in terms of development programmes of the universities to be scrutinised by the Commission has been on the increase and their scrutiny and clearance by the Commission suffer in quality as well as on account of delays.

Recommendation:

Therefore, restructuring of the UGC is called for. In the opinion of the Committee, the Commission should consist of at least five full time members apart from the Chairman and Vice-Chairman, with specialisation in specific areas teaching, research, extension, management and finance. The Commission should also have regional offices for decentralised disposal of the problems relating to higher educational institutions in the

respective regions. Structural decentralisation would be meaningless unless adequate decentralisation of authority and functions is effected and accordingly this should also be effected.

Selectiveness in admissions

9.6.0 University education should be primarily geared for post- graduate, doctoral and post-doctoral studies. If we are to promote and nurture quality, it is essential that at least at the post- graduate and Ph.D. levels, admission becomes somewhat more selective. (It will greatly help us in providing selective admission to higher studies if the training at the 10+2 levels is made more serious and goal-oriented. It will then siphon out a large fraction of our students to productive occupations. It is, inter-alia, keeping this in view, a new model of vocational education has been recommended by the Committee.)

Recommendations:

(i) The universities have come under severe strain on account of the load of administering examinations at the bachelor's level. They should be relieved of the responsibility of holding these examinations so that they can concentrate on post-graduate, doctoral and post-doctoral studies, apart from research. (This matter has also been separately dealt with under the subject of Examination Reforms).

(ii) If in a college M.A. and M.Sc. teaching is to be continued, it must be made mandatory that there are adequate facilities for research in those subjects.

Autonomous colleges

9.7.1 The POA envisages establishment of 500 autonomous colleges during the Seventh Plan. The basic objectives in the establishment of autonomous colleges have been reducing the load of autonomous colleges on the university system, decentralisation of academic administration, promotion of creativity innovations and higher standards. An autonomous college is expected to have the freedom to prescribe rules of admission, determine the courses of study and methods of teaching and evaluation, conduct of examinations etc. The concept of autonomous colleges and the programme for establishment of the same have come under criticism mainly on account of apprehensions on the part of the teachers regarding increased workloads, arbitrariness on the part of the management, likely lack of recognition to products of these colleges etc.

9.7.2 Grant of autonomy to colleges is a process of decentralisation. However, this process will not materialise into tangible results unless there is unreserved participation on the part of the entire academic community. In response to the Perspective Paper on Education and in certain seminars/workshops conducted with reference to this paper, reservations have been expressed regarding the programme of establishment of autonomous colleges. The Chairman of the UGC, during his interactions with the

Committee, observed that autonomy is a matter of unobjectionable necessity but that, however, it should not be construed in terms of physical targets. According to him, a programme for establishing 500 autonomous colleges is somebody's assessment; that autonomy cannot be brought out by such assessment but also by being an accepted way of academic management.

Recommendation:

The UGC has already appointed a Committee to review the programme for establishing autonomous colleges. This review should be expedited and modalities should be evolved in this review for introducing a regime of autonomy by securing the participation of all.

New management for universities

9.7.3 The Education Commission, 1964-66 construed autonomy at three levels:

i) Internally within the universities;

ii) As between the universities and collateral agencies; and

iii) As between the universities and Central & State Governments.

Pursuant to the POA stipulation to review the management patterns of the universities, the UGC appointed the Gnanam Committee which has already furnished a comprehensive report in January, 1990. This report covers all aspects of management including internal and external autonomy, decentralisation, university-government relationship;, status and role of the statutory bodies and authorities, problems of teachers and students etc. Reportedly, the UGC has already considered the recommendations of this Committee and formulated its views and the matter is scheduled for consideration in the CABE.

Recommendation:

In this background, this Committee does not propose to go into the various aspects of management of universities. Government, however, should facilitate early decisions on the report of the Gnanam Committee, the same having been received as early as January, 1990.

Curriculum development

9.8.0 For the redesigning of courses the UGC has set up 27 Curriculum Development Centres in different disciplines. The emphasis is on modernising and restructuring

courses in modular form. Reportedly, 22 Curriculum Development Centres have given the reports and they have been circulated to universities and colleges for consideration and implementation. One important question that arises for consideration, in this context, is whether this centralised arrangement does not militate against the autonomy of the universities and colleges on which much emphasis has been laid under NPE, 1986. one view that has been expressed is that these courses are only recommended to universities and colleges which are free to adapt themselves with such modification as they deem fit. The Chair-man of the UGC, in the course of interactions with the Committee, had occasion to observe that though UGC may be only issuing guidelines on various subjects from time to time, the higher education system as a whole has come to look upon such guidelines as iron-bound mandates and this by itself has introduced a certain rigidity in the system.

Recommendation:

Viewed in the light of this observation, the Government and UGC should examine whether the whole process of Curriculum Development and designing of courses cannot be decentralised the respective universities and colleges seeking the assistance of UGC and panels of experts suggested by them for the purpose of designing courses according to the locally felt needs.

Decentralisation

9.9.0 The Government of India, during the Seventh Plan, funded the State Governments to the extent of Rs.347 crores for the purpose of increasing the salaries of the teachers in the universities and colleges. Upward revisions of pay scales was to go side by side with the teachers taking up certain increased responsibilities like increased work loads. in the order of the Government of India for the revision of pay scales as such, nothing was mentioned about the fulfilment of additional work load by the teachers. Subsequently, the University Grants Commission issued a statutory notification in which it was stated that work load norms would be as per the guidelines of the UGC to be issued separately. These guidelines (Regulations on the Standards of Education) were also issued by the UGC later on. As of now, there is no clear feed back regarding the-extent to which these guidelines have been implemented by the Universities and Colleges.

Recommendation:

In these circumstances, the UGC should immediately conduct a study on the extent to which conditions going with the revision of pay scales of the University and College teachers have been actually implemented and fulfilled.

Teacher Training

9.10.0 Teacher training in the university system is rather weak. All along, very rightly, emphasis has been laid on building up professional cadres of teachers from down at the level of primary school teachers. However, teachers who are recruited into the university and college system are not given adequate training as of now. No doubt in pursuance of NPE, 1986/POA, 48 Academic Staff Colleges have been established. Asked about the adequacy of training for teachers in these colleges, Chairman, UGC in the course of his interaction with the Committee conceded that at present only orientation is given for a period of six to eight weeks and that this is inadequate.

Recommendation:

In order to enhance the quality of the teachers in the university system, pre-induction training for a period of one year after recruitment should be organised. This training should be organised on a decentralised basis by the respective universities themselves.

9.11.0 In the area of research, selectivity, social and economic relevance and cost effective coordination as between agencies should be the cardinal principles to be followed. In specific terms

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Recommendations:

(i) In basic research it may not be really worthwhile to pursue and promote everything that seems interesting, important or feasible. The important criteria for the choice of areas should be promise of achievement of excellence and existence of special advantages that India or Indian scholars possess.

(ii) Where there is a potential for exploitation in the near or foreseeable future in the context of national needs and priorities, special efforts should be made by supporting agencies, (in addition to encouraging basic research in relevant areas) to ensure possible exploitation of these results through establishing proper linkages with user (Economic Ministries or Industry) and undertaking programmes jointly with them.

(iii) In certain selected areas of research all efforts must be made to identify a few educational institutions where talented students and faculty could be attracted for pursuing well-planned advanced courses so that these institutions become the centres of excellence for teaching and research. Such centres should be well publicized and well-equipped so that the best of talent knows about the challenges and opportunities available to them. At these centres, critical-sized research groups should be established around outstanding scientists and engineers. Such centres of excellence should receive support from the Department of Education and the UGC as well as from other agencies for

carrying out research. Resources available for such facilities should be adequate. Facilities of national laboratories located in the vicinity should be made fully available to workers in the universities, who together with the scientists of these institutions should take up joint post-graduate programmes and research wherever possible. (These centres are envisaged differently from the University Departments for which the UGC gives special support to turn them into Advanced Study Centres).

(iv) Science and technology agencies must support universities not only in the form of time-bound research projects but also in the setting up of sophisticated research facilities in educational institutions and providing such other infrastructural facilities which will attract the best of minds from all over the country. S&T agencies should provide certain proportion of overheads (say 20%) to the institutions as part of the research grants. Without such overheads, the institutions will not be able to provide the infrastructure for high-quality research.

(V) It is important that research in humanities and social sciences is directed towards contemporary realities in the country. There is also need to initiate research which takes the Indian intellectual and cultural traditions seriously, not necessarily to accept them without question, but to learn from them in order to understand ourselves and to develop the composite culture of India envisaged in the Constitution.

(vi) We have to pay attention to those who aspire for careers in specialised areas of science, humanities, etc. Since we do not have many undergraduate institutions imparting instruction of the highest quality, a few select ones should be provided high-level support by the states and-the UGC in order to enable talented and motivated students to get proper training and opportunities for learning.

9.12.0 Extension work in universities, as of now, is largely in the nature of individual ad hoc activities undertaken by the teachers social work, adult literacy work, population education work, slum clearance, work relating to National Service Scheme etc. Mostly, these activities are undertaken during the vacation periods. What is needed, however, is extension work being organically linked with the regular process of teaching/learning/research.

Recommendation:

Universities should involve themselves in development issues in the concerned regions. They should become instruments of development in the respective regions. Consistent with this concept, curriculum, course development etc. should undergo significant changes. To be specific, for example, university teachers could involve themselves in improvement of rural schools so. that they become the real 'living link' between the universities and school going population in the regions.

The school experience gained should be built into the content and pedagogy of university education. For this purpose, the universities, so to say as stated elsewhere should affiliate themselves to educational complexes engaged in the improvement of the whole system of school down to the elementary level. This way the universities would also come to contribute to enrichment of knowledge. This would develop a cycle of overall development from content of education to competence building. In the process, students coming into the universities would also improve in quality and standards. There will be consequent overall improvement in the environment prevailing in the university system teachers looking upon their work as of interesting social relevance and better crops of students by themselves contributing to the quality of university education. In the opinion of the Committee, the slogan of the university should rather be "Vishwa Gyan Gaon mein Dhyan".

9.13.1 NPE, 1986 visualises delinking of university degrees from the requirement for recruitment to services. The POA envisages establishment of National Testing Service (NTS) to conduct tests on a voluntary basis to determine the suitability of candidates for specified jobs and to pave the way for evolving norms to judge comparable competence.

9.13.2 In this context the Department of Education has got a detailed project report prepared with reference to the guidelines of a Project Advisory Committee consisting of experts. Establishment of this institution has also been approved in principle by the Government in January, 1988 after examination of the project report. The salient features of the proposed National Testing Service are the following:

- Conduct of tests on a voluntary basis to determine and certify suitability of candidates for specified jobs that do not require a degree or diploma.

- Designing of tests with reference to job description.

- Making the service of NTS available to agencies organising admissions to higher courses.

- Functioning as a resource centre at the National level in test development, test administration, test scoring etc.

NTS is to be an autonomous registered society in the Department of Education. The draft Memorandum of Association and Rules for registering the society have also been prepared.

9.13.3 The Committee has gone into the matter of delinking degrees from jobs in the light of its perspective of decentralisation of management at all levels and examination reforms. These aspects of the Committee's perspective have been reflected elaborately elsewhere in the report. So this is not being gone into over and again.

Recommendation:

In the view of the Committee testing of competencies is best left to the concerned user agencies whether they be employers or educational institutions. While there is need for a National Testing service, it need not be a body for conduct of tests in a centralised way. It need only be a development agency engaged in research and performing certain service activities including in terms of aid to building of models for tests. Model for test development, administration scoring etc. can be built up as part of the service functions of the Organisation. It can also be a clearing house of experiences in educational testing.

9.14.1 NPE, 1986 envisages a new pattern of rural universities to be consolidated and developed on the lines of Mahatama Gandhi's ideas on. education to meet the challenges of micro planning at grass-root levels for the transformation of rural areas. It also envisages support for institutions and programmes of Gandhian basic education. The POA spells out the contours of the programme for development of rural universities and institutes. The rural university/institute is described as a complex of institution to integrate education with productive and creative activities. Disciplines of sciences, technology, humanities and social sciences are to be integrated horizontally and also vertically at all stages of education, primary to higher. , The specific step recommended in the POA is initiative on the part of the Central Government for establishing Central Council of Rural Institutes, for providing resource support for the development of infrastructure as well as conceptual, methodological and academic inputs in the design and structure of programmes, development of teaching and learning materials, evaluation of procedures etc. The POA' also calls for the appointment of a Working Group by the Ministry of H.R.D. to formulate detailed schemes for the development of rural institutes and Gandhian Basic Education.

9.14.2 Following up on the NPE and POA stipulations in respect of rural universities and institutes a project report was prepared by the Educational Consultants India Ltd. (Ed.CIL) assisted by a Working Group headed by Dr. M. Aram. Having examined the project report, the Department of Education has prepared a proposal for establishment of a Central Council for Rural Institutes. There is also a plan provision of Rs. 2 crores for the year 1990-91 for the implementation of a Central scheme for the purpose. Reportedly, the Department of Agriculture and Rural Development have agreed with the proposal for creation of this Organisation. The Planning Commission also would seem to have given their concurrence subject to the condition that the Central Council would have no accreditation functions and that for coordination/determination of standards the Central Council and rural institutes would be under the supervision of UGC.

Recommendation

The Committee is in agreement with the proposal for giving support to rural universities and institutes. However, they should be brought under the umbrella of the State Councils of Higher Education. The State Councils, even as envisaged in the POA, are to give advice to the UGC in' respect of maintenance of standards. Therefore, they can perform this function in regard to rural universities and institutes as well. As already stated, the advice of the Planning Commission on the Department's proposal is also that maintenance of the standards should be left to the UGC. If the State Councils of Higher Education and the UGC together can help in the maintenance of standards and if the present practice of routing funds to rural institutes through the UGC is continued, there would be no need for establishment of a Central Council and the Committee recommends accordingly.

The State Councils may perform the following specific role in handling affairs relating to rural universities/institutes:

- Ensuring autonomy of the institutions in developing their own course content, research programmes and extension activities.

- Ensuring equivalence of the diplomas awarded by rural universities/institutes with university degrees in ,order to' facilitate horizontal and vertical mobility for its graduates.

- Coordination for involving the rural institutes with the district level rural development programmes.

- Facilitating affiliation of rural institutes with State level universities/Agricultural Universities according to their choice.

9.14.3 While Agricultural Universities have set up a model of higher education more relevant to rural needs than ordinary universities by linking agricultural education, research and extension with the development needs of the region, they have not, obviously because of their basic objectives, involved themselves in areas of rural development other than agriculture.

Recommendation

So Agricultural Universities may diversify their education programmes, particularly in areas closely connected with agriculture. The State Agricultural universities should be encouraged to set up centres/institutes for rural development.

9.14.4 The traditional universities also should play a meaningful role in rural development. The establishment of meaningful linkages between the function of the traditional universities in imparting and generating higher knowledge on the one hand and the social and economic development of the region around them on the other, will significantly help in the aimlessness and irrelevance enveloping university education. The traditional universities may also establish faculties of rural studies and research.

9.15.0 The Programme of Action under NPE, 1986, envisages establishment of a National Apex Body. Action has been initiated by the Department of Education, in this context, for the establishment of a National Council of Higher Education to bring about coordination between the UGC, the All India Council for Technical Education, Indian Council of Agricultural Research, Medical Council of India and Bar Council of India. In specific terms, the objective of establishing this body, as reflected by the POA, is to deal with policy aspects of higher education and to undertake integrated planning and to reinforce programmes of post-graduate education and inter-disciplinary research'. Functions envisaged are tendering of advice to Government on policy, coordination of activities of the various bodies in different fields, encouragement of inter-disciplinarity and promotion of interfaces amongst different areas, allocation of resources, establishment and management of common infrastructure and coordination of policy concerning external academic relations.

Recommendation

Going by these objectives and functions of the apex body, it does not seem necessary to create another institution at the national level to function as a super body, as it were. These objectives can be achieved and functions performed by an appropriate coordination mechanism that could be brought into existence by a mere Resolution of Government. This mechanism, in the opinion of the Committee, could have a two-tier structure (i) a Council of Ministers of Higher Education, the Ministers being those holding portfolios relating to education, agriculture, health, law and science & technology; and (ii) a Council of Secretaries dealing with these subjects and Heads of the concerned institutions apart from Finance secretary to Government of India and secretary, Planning Commission. Being a high powered body, the former Council may be presided over by the Prime Minister. One of the concerned ministers may be the Vice-Chairman by rotation. The Council of Secretaries and Heads of Institutions together may basically formulate the policies and submit the same to the Council of Ministers for approval.

Grievance Redressal

9.16.0 one of the surest means of breathing a new environment in the university system is establishment of a proper grievance redressal machinery. This has already been gone into very elaborately by the Law Commission in the context of decentralisation of administration of justice relating to centres of higher education. In the process, the Commission also had extensive consultations with Vice-Chancellors, academics,

university employees and Association of Indian Universities, based on a working paper. The essence of the report of the commission is that the administration of justice in centres of higher education should be tribunalised. For facility of easy comprehension the points made by the Commission in support of tribunalisation are presented below:

(i) In the context of ever increasing complexity of Higher Education due to diversification of educational disciplines and increase in the number of institutions and manpower therein special expertise is required in dealing with disputes. This kind of expertise is not 'normally available in the general legal system. (Reference has been made to the existence of as many as 2000 tribunals of a specialised nature in the UK. Reference has also been made to the recommendations of the Law Commission for establishment of National Tax Courts.)

(ii) Ever increasing volume of work of the ordinary Courts including the High Courts and Supreme Court, consequent on which administration of justice in centres of Higher Education gets badly delayed as in other areas.

(iii) The present situation regarding availability of the Industrial Disputes Act for grievance redressal in Centres of Higher Education is unsatisfactory.

 (iv) Decentralised system of administration of justice through tribunals, by itself, helps in speedy disposal of cases.

Law Commission on Grievance redressal

9.17.0 The structure recommended by the Law Commission is a three- tier one grass-root level, State level and national level. At the base each, University is to have its own grievance handling forum. (The Commission has, indeed taken note of existence of such mechanisms at present like under the Poona University Act.). These grass-root level institutions are to be participative in nature, giving representation for all the effected interests, disputes concerning admissions, malpractices in examinations, disciplinary action against students, students' complaints against teachers etc. are to come within the jurisdiction of the base-level tribunals. State level tribunals are to have original and appellate jurisdiction. Policy problems are to come within original jurisdiction. The National Educational Tribunal also will have original and appellate jurisdiction. In the three-tier structure, the jurisdiction of all courts upto High Courts is to be excluded. The State Tribunals are to have five members:-

1. A sitting or retired Judge of High Court to be Chairman;

2. Two members from among persons eligible for being appointed as High Court Judges;

3. one member from the ranks of former Vice- Chancellors;

4. one member being an eminent Professor.

The National Tribunal is to have the following composition:

1. Sitting or retired Judge of the Supreme Court to be Chairman;

2. Two members from among persons eligible for being appointed as Supreme Court Judges;

3. Two members from the ranks of distinguished educationists/former Vice-Chancellors/administrators.

Judicial members of the State/National tribunals could 'be appointed through the proposed National Judicial service commission. Non- judicial members could be appointed by the Governor in consultation with the UGC/President in consultation with the UGC.

Recommendation:

The recommendation of the Law Commission in regard to tribunalisation of justice in centres of higher education is pending decision. Early decision on this may be taken by the Government.

CHAPTER 10

TECHNICAL AND MANAGEMENT EDUCATION

NPE/POA stipulations

10.1.1 Reorganisation of technical and management education is envisaged in the NPE (para 6. 1) in the context of the anticipated scenario by the turn of the century.

10.1.2 The POA has suggested broad strategies covering management of the system, thrusts and directions in regard to various levels of technical education, interaction networks., infrastructural development" staff development, innovations, research and development. Important amongst these are:-

- Development of technician education, diversification of undergraduate courses special attention to postgraduate education, strengthening and expansion of technical teacher education and training, provision of facilities for continuing and distance education? women's education, interaction networks etc.

10.1.3 Specific measures suggested are:

* Improvement of laboratories

* Provision of libraries

* Provision of building amenities.

* Statutory authority for AICTE

* Creation of national manpower information system * Autonomy for institutions

* Entrepreneurship development.

* Curriculum development.

* Technical education for women

* Distance learning

* Strengthening of Community Polytechnics

* Linkages with industry and R&D organisations.

* Modernisation and removal of obsolescence etc.

Committee's perspective

10.2.1 In the area of technical education, the question that should basically be raised is 'technology for whom'. Technical education should serve the real needs of the people as against the needs projected by the consumerist society. A total reassessment of technology and its use in the rural area is also necessary. What is needed is a social direction being given for technical and management education. Technical education should not result in man becoming the tool of technology. Rather, technology should become the tool of man. The human face of technology should receive unfailing projection.

10.2.2 A rethinking is also called for in management education. It should cater to the real needs of our rural society and disadvantaged sections. It should not be unduly preoccupied with industrial and business administration.

10.2.3 Technical education also has an interventionist and catalytic role to be performed in the areas of planning for the curriculum, courses, campus life etc. Voluntary agencies engaged in technical education for women in rural areas should be helped.

10.2.4 While India should make advances in technologies care should be taken to see that a culture of eternal dependence on foreign technology is not created.

10.2.5 As high quality technical education is being provided in major institutions like the IITs, RECs, that too at highly subsidised costs, a policy to ensure availability of the services of graduates from these institutions within the country atleast for a stipulated period deserves to be devised.

10.2.6 Modern technical and technological education should be informed by the country's own past wisdom.

The present scenario

10. 3.1 The past four decades have been marked by phenomenal expansion of technical education facilities. India has come to have one of the largest systems of technical education in the world. The annual admission capacities of degree and diploma levels respectively are 37,000 and 75,000.

10.3.2 Several institutions of excellence have come to be established - IITs, IIMs, IISc. Quite a few highly specialised institutions also have come to be established like the National Institution for Training in Industrial Engineering (NITIE), Indian school of Mines (ISM), School of Planning & Architecture (SPA), National Institution of Foundry and Forge Technology (NIFFT) and National Institute of Design (NID). A large number of programmes also have come to be established in the areas of quality improvement and service to community through the technical education institutions. The National Technical Manpower Information System has been created to provide upto date and meaningful manpower projections on a continuing basis.

10.3.3 However, serious imbalances and distortions have come about in the growth of technical education. The scenario of technical education has been presented in a telling way in the agenda papers for the Conference of Central Advisory Board of Education (July, 89). In the same terms, it was also presented before the Committee by' the Technical Education Bureau of the Department of Education. This scenario is exhibited below:

- While a large number of habitations in the country are even today without any facilities for technical education, about 38% of the degree level institutions and 30% of the diploma level institutions recognised by the All India Council for Technical Education (AICTE) are concentrated in four states namely, Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu. Almost all the engineering colleges and polytechnics unrecognised by the AICTE are in these four States; and many of them are sub-standard institutions run on commercial basis.

- The enrolment of girls in technical education institutions at degree level is only about 12%, while at diploma level it is about 17%.

- The enrolment of SC/ST students in degree level institutions is less than 5% and in diploma level institutions less than 9%.

- In most of the institutions, both at degree and diploma levels, there is hardly any R and D activity. R & D activities generally take place in the IITs, IISc (Bangalore) and a few universities and colleges.

- There is serious unemployment among engineers and technicians. At the same time, there is a shortage of highly trained engineers in engineering design, advanced materials, turbo-machinery, computer science and micro-electronics. There is a mis- match between production and demand. With the anticipated industrial growth and economic development by the turn of the century, we may have to produce many more qualified engineers and technicians than at present.

- Wastage in the system is enormous. An analysis of the intake and out-turn figures of recognised institutions shows that wastage at degree level is about 30%, at diploma level 35% and at post- graduate level 45%. The situation in unrecognised institutions is worse.

- There is acute shortage of faculty. About 25 to 40% of faculty positions remain un-filled.

- Even our premier institutions are struggling to keep themselves up-to-date. The infrastructural facilities available in the vast majority of our technical education institutions, are alarmingly inadequate. The quality of training in most of the institutions is poor. Many of the courses offered in these institutions are outdated. Teaching competency is low, while the management system continues to be rigid.

- High quality engineers and technologists trained in emerging areas in some of our prestigious institutions migrate abroad. In addition, many good graduate engineers take up management and other professions.

- Technical education institutions by and large function in isolation. In spite of all that has been talked about on the matter, linkages and interaction between technical education institutions and user agencies (such as industry, R & D organisations and development sectors) are not sufficiently strong.

Post policy implementation

10.4.1 Particulars of investments made in the central sector for education during the three years, 1987-88 to 1989-90 are presented in the following table:

Table 1

(Rupees in crores)

	1987-88	1988-89	1989-90	1987-88 to 1989-90
1. Plan	167.43	168.00	136.23	471.66
2. Non-plan	96.22	140.34	142.94	379.50
3. Total for Technical Education	263.65	308.34	279.17	851.16
4. Thrust area schemes*	75.34	70.69	47.24	193.27
(a) IITs	87.03	98.29	103.94	289.26
(b) RECs plan and	28.20	27.08	31.20	86.48
Non-plan				
(C) IIMS	10.60	11.41	15.21	37.22
Total of IITs, RECs and IIMs.	201.17	207.47	197.59	606.23
% of (4) to (3) above.	28.57	22.93	16.92	22.71

10.4.2. Bulk of the budget and expenditure in technical education are accounted for by the Plan Schemes for thrust areas and plan and non- plan provision for IITs, RECs and Indian Institutes of Management. Expenditure on thrust area schemes, during 1989-90, accounted for 34.67% of the total plan expenditure on technical education.

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* The thrust area schemes are:

i) Strengthening of facilities in crucial areas of technology where weakness exists.

ii) Creation of infrastructure in areas of emerging technologies.

iii) Programmes of new/improved technologies.

Thrust area schemes

10.4.3 The Committee reviewed in detail the 'thrust area' schemes both because of their importance and substantial size of their funding under plan as reflected by the above table. These schemes are implemented by obtaining projects from technical education institutions. The projects are got prepared with reference to guidelines provided for the same. They are cleared on a selective basis and assistance released on the advice of National Experts Committee. Monitoring of implementation of the projects is done at present twice in a year, taking up for review implementation of the various projects for which assistance is granted. The review is effected with reference to specific subject areas. Subject experts are associated in the matter of evaluation of implementation of the projects. The Evaluation Sheets in respect of the individual projects taken up for review do not necessarily reflect any significant analysis of the output of the projects. The evaluation seemingly gives importance for the level of expenditure incurred against amounts sanctioned. often, grading of performance of individual projects is summarily given in terms of observations such as 'satisfactory', 'highly satisfactory' etc. In quite a number of cases the beneficiary institutions have simply 'failed to report for evaluation, having received assistance from the Government. The number of projects and concerned institutions taken up for evaluation in the annual Review meetings is also quite large. It is unclear whether such reviews and evaluation do really help in making a realistic assessment of whether value is being obtained for money spent.

Recommendation

A detailed evaluation of the thrust area- schemes should be undertaken by a national level expert committee with the following specific terms of reference:-

i) Whether funds provided for identified crucial projects have been properly spent in terms of purchase of equipment and their utilisation, civil constructions etc.

ii) Whether the objectives of the projects have been achieved.

iii) Whether investment in individual projects has been optimal (grants given in regard to a number of projects are small amounts and there is a seemingly thin spreading of resources)

iv) Rearrangement of priorities, if any, that may be needed in funding projects

V) Advising on strengthening of monitoring system so as to get meaningful feedbacks regarding the success of the projects.

Community Polytechnics

10.4.4 Another important scheme in the technical education sector particularly from the point of view of benefits to the rural sector and the adult unemployment is that of community polytechnics. There are 110 community polytechnics in the country. Since the inception of the scheme in 1978-79, reportedly over one lakh persons have been trained under the scheme; over 5000 villages have been benefited by technical services; and over 6000 villages by transfer of technology.

10.4.5 A National Expert Committee headed by Shri S.S.Kalbag gave a report on Appraisal of Community Polytechnics in 1987. This report itself was given in pursuance of NPE, 1986, which stated that 'the Community Polytechnic system will be appraised and appropriately strengthened to increase its quality and coverage'. The report, inter alia, gave the following important recommendations.

- All the training programmes being carried out in villages through tutors from the village youth trained initially by the staff of the Community Polytechnics.

- Implementation of multi skill training 'programmes to meet rural job requirements more effectively.

- Village centres to take up programmes relating to non formal technical training, TRYSEM, SUPW, techno- economic surveys etc.

- Creation of information system so as to facilitate preparation of transfer of technology document, bring about linkages between village problems and science & technology establishments through Technical Teacher Training Institutes.

- Recurring grants being made proportional to the output of the community polytechnics.

- Community Polytechnics to get inputs of local technological problems from village centres and refer them to the regional information centres located in the Technical Teacher Training Institutes where identification will be done of the agency which could

handle the problem; the Regional Information Centres in-turn to be linked to the National Centre to be located in CAPART.

- Provision of funds through diversified sources Ministry of H.R.D./State Education Departments to provide core-grants, CAPART, Department of Science & Technology etc. to provide for project funds, TRYSEM to provide funds for training etc.

10.4.6 The report of' Kalbag Committee estimated the financial requirements for the years 1988-89 and 1989-90 at Rs. 10.20 crores and Rs. 12.25 crores respectively (Non-recurring as well as recurring requirements included). Inter alia, this outlay was to include establishment of 350 Community Polytechnics and 2000 village centres during 1988-90.

10.4.7 Concrete action on the implementation of the recommendations of Kalbag Committee is yet to be taken. Though the Department of Education has examined the report, the decision taken in a meeting of the Expenditure Finance Committee (EFC) was that proposals for strengthening and expansion of Community Polytechnics could be taken up during the Eighth Plan.

Recommendation

To the extent that three years have passed by after the report was received, the Department should update the financial requirements and take up the implementation of the recommendations of the Committee well within the first year of the Eighth Five Year Plan.

AICTE

10.5.0 The All India Council for Technical Education has come to be invested with statutory authority. There has been wide spread grievance all over India that in taking decisions on requests for approvals of new institutions and courses, there have been inordinate delays due to over centralised style of the Council's operations.

Recommendation

Emergent steps should be taken to ensure that the regional offices of the AICTE are headed by senior functionaries so that they are effective in discharging their responsibilities for coordination with the state authorities. These offices should also be given adequate devolution of authority and functions so that they operate efficiently and speedily with the help of the regional offices.

IITs

10.6.0 The IIT Review Committee has submitted its report in 1986. Though four years passed by since the submission of the report, concrete action does not seem to have been taken on the report. Important among the findings/recommendations of the Committee are the following :-

* The IITs do not seem to motivate the students and teachers sufficiently in regard to their commitment to the nation to give their best and achieve excellence.

* Efficiency and productivity have been affected by obsolescence in the Institutes set up two to three decades ago and lack of coordinated manpower and technology policies.

* IITs should take up research and development activities related to the environment in which they are located. For this purpose, they should diagnose the problems/needs of nearby rural communities and work for their solutions.

* IITs should use their facilities for spreading education.

* The joint entrance examination scheme should be redefined by evolving and introducing an aptitude test. Coaching of SC and ST candidates for joint entrance examination should be rationalised.

* Inculcation of Indian values should be brought about by emphasis being laid, in the curriculum, on the socioeconomic ethos in which technology development is taking place in India.

* Radical changes in the management structure should be made by taking up necessary amendments to the Act and statutes for the purpose. (One of the principal objectives of the proposed changes in the management structure is decentralisation of decision making.)

Recommendation

The report of the IIT Review Committee should be carefully considered and decisions taken emergently.

Future Perspective and Measures

10.7.0 Taking into account the present scenario and the perspective of development of technical education vis-a-vis the national development goals, it is felt that while consolidating and strengthening the ongoing programmes, we should concentrate on certain crucial areas standard and quality improvement at all levels; upgradation of infrastructure facilities; linkages with industry and national laboratories; technology

world and man-power assessment; prevention of brain drain; research and development; cost effective needs; programmes for SCs/STs, women and the physically handicapped; entrepreneurship development; and continuing education.

Recommendations
a) Improvement of quality and standards at all levels

Action:

- Introduce a broad-based flexible system through modular courses with credit system and provision for multi-point entry.

- Encourage creativity and innovation in experimental work by introducing problem/process-oriented laboratory exercises.

- Review curricula on a continuing basis.

- Improve quality of science education in schools.

- Admit students to technical education programmes based only on merit and motivation.

- Make recruitments to teaching positions strictly on merit by open competition and on all-India basis.

- Develop engineering faculty members through the effective use of study leave, summer training, consulting and research opportunities.

- Assess teachers annually through a "staff appraisal scheme".

- Introduce coordinated training programmes for non teaching technical supporting staff.

- Grant autonomy to selected institutions and departments on the basis of the track records.

- Accredit all existing institutions and grade their quality through accreditation procedure.

b) Upgradina of infrastructural facilities.

Action:

- Strengthen the programmes of modernisation', 'removal of obsolescence', 'thrust areas' etc.

- Enhance computer facilities through appropriate networking.

- Provide audio-visual aids and reprographic facilities.

- Improve library services with modern networking facilities through computers and satellite communications.

- Formulate a long term plan for increasing access to world literature in science & technology.

- Establish learning resource centres.

- Provide residential accommodation for faculty and students and improve facilities for sports, recreation, cultural activities etc.

C) Establishment of effective linkages with industry, national laboratories, development sectors and other institutions bodies.

Action;

- Promote industry institution interaction through apprenticeship opportunities, consultancy and sponsored research, continuing education programmes for industry personnel, 'adjunct professorship' in institutions for willing and capable personnel- from industry, 'residency' for institutional faculty in industry, involvement of industry in the development for curricula, courses etc.

- Set up industrial liaison boards, industry- institution cells, industrial foundations etc.

- Make national laboratories such as BARC, NAL, NCL, NPL and DMRL, train students at the post-graduate and Ph.D levels in chosen areas of advanced technology.

- Encourage mobility and exchange of faculty between academic institutions, national laboratories and industrial establishments.

- Strengthen the scheme of networking higher technological institutions with less developed ones.

- Involve professional bodies in planning and organising educational programmes.

d) Technology watch and assessment of manpower needs.

Action:

- Ensure coordination between the Technology Information Forecasting and Assessment Council (TIFAC) under the Department of Science & Technology and the National Technical Manpower System (NTMIS) under the Department of Education to couple the technology forecasting system with the system for manpower forecasting and planning.

- Prepare a National Directory of occupations and Job Titles to identify a variety of need-based courses and fixing intake levels.

- consider reviving the Indian Engineering Personnel Service (IEPS).

e) Measures to prevent brain drain.

Action:

- Make the Scientists Pool in the CSIR more attractive by offering better remuneration according to merit and placement in the right institutions.

- Utilize all international collaboration programmes to enable Indian scientists and technologists to undertake useful collaborative projects with well established institutions abroad.

- Take concrete steps to enhance the mobility of scientists and technologists paying due attention to matters such as accommodation, financial compensation, children's education etc. 246

- Check migration of engineering graduates to non-engineering professions through career guidance activities.

- Make available opportunities of employment, including on part-time basis, for well trained women scientists/engineers.

- Consider bringing in legislation to ensure that highly trained engineers and technologists put in atleast three years of service in the country before they can go abroad as in countries like France.

f) Promotion of research and development (R&D)

Action:

- Set up some of the major national facilities required for carrying out research in educational institutions.

- Provide access to the major national facilities to wider cross-sections of academic community and more importantly to the student community on the campuses.

- Assign to educational institutions challenging mission-oriented projects to give better focus to their R & D efforts.

- Promote centres of excellence around small groups of scientists and engineers.

- Allocate resources for research on the basis of priorities rather than 'something-for-everybody basis.

- Identify problem-oriented research projects of national importance in consultation with industry and national agencies.

- Set up a National Board for Science and Engineering Research solely for funding fundamental research on the pattern of the National science Foundation (NSF) of the United States.

- Encourage multi-disciplinary, trans- disciplinary and trans-organizational research with emphasis on design and development.

- Ensure that the research programmes undertaken by postgraduate teaching and research institutions are properly screened and pre-evaluated.

g) Steps to ensure cost-effectiveness.

Action:

- Wind up courses and programmes which are out-dated and stereotyped. Promote introduction of courses in conventional areas only in exceptional cases.

- Encourage neighbouring academic and research institutions not only to conduct joint programmes, but also to share facilities.

- Make the interested agencies and industries bear the cost of providing trained manpower in certain highly specialised areas rather than support such training from Government funds.

- Explore avenues for multiple usage of infrastructural facilities existing in technical education institutions. They include part-time evening courses, continuing educational programmes, consulting and testing services, and so on.

- Encourage institutions to generate resources through consultancy, testing services, etc.

- Emphasise the role of non-monitoring inputs such as better planning, advanced technologies and practices, better systems of supervision and administration, monitoring and evaluation, and above all dedicated efforts by teachers, students and educational administrators.

- Devise an alternative system as distinct from government funding system to involve private and voluntary effort in technical education sector in conformity with accepted norms and goals.

h) Special programmes for SC/ST, women and the Physical1v handicapped.

Action:

- Identify as many talented and bright SC/ST students as possible at school stage and organize special coaching classes to prepare them to compete with other students 'for admission to professional courses in engineering and technology on their own merit.

- Provide adequate hostel accommodation and special incentives such as scholarships, freeships, stipends etc. to attract girl students to professional courses.

- Organize guidance seminars for girl students at the + 2 stage of school to motivate them and to give them insights into the various branches of engineering and technology.

- Make efforts to introduce training programmes for the physically handicapped in as many existing institutions as possible special equipment and facilities will be required for imparting training to the physically handicapped.

- Devise appropriate formal and non-formal programmes of technical education for the benefit of women, the economically and socially weaker sections, and the physically handicapped.

i) Entrepreneurship development

Action:

- Strengthen the activities and programmes of the National Science and Technology Entrepreneurship Development Board (NSTEDB).

- Promote programmes such as Entrepreneurship Development Programmes (EDPs), Entrepreneurship Awareness Camps (EACs), Science and Technology Entrepreneurs Parks (STEPs) and preparation of opportunity profiles.

- Integrate entrepreneurship education with the formal system of technical education by introducing suitable modules.

- Implement special entrepreneurship development programmes exclusively for S&T personnel in close collaboration with NSTEDB, CSIR Laboratories, Industrial Development Bank of India, Department of Industrial Development and such other agencies.

j) Continuing education and re-training Programmes

Action:

- Formalise retraining programmes for engineering and technology personnel engaged in all sectors, and make them mandatory.

- Create programmed learning packages and employ distance learning methodology to enable self- development and training of all scientific and technical personnel.

- Adopt continuing education as a national culture and make it a recognised activity of all technical education institutions. In fact much of the manpower requirements in emerging areas should be met by retraining technical personnel already in employment.

Investment or high technology

10.8.0 Often investments in higher technical education institutions comes to be criticised on the basis that letter levels of education have to be given priority. While technical education should be reoriented to the needs of the rural people, care should be taken to see that high technology is not de-emphasised, lest India becomes a back number in the world in terms of development. (In fact, some high level technologies do have direct impact on the daily lives of the rural people farmers, fishermen etc.). Even for investment in letter levels of education on grounds of equity and social justice, adequate funds should be provided for institutions of excellence.

10.9.0 It is hoped that with the sort of approach indicated above, the technical education system would be able to produce high quality engineers and technologists to meet the challenges posed by the 21st century.

CHAPTER 11

LANGUAGES IN EDUCATION

Background

11.1.0 Languages are 'central to education. Education Policy should, therefore, spell out in clear terms the manner of their use and development. In our pluralistic society, use and development of languages in the education context is riddled with complexities. The magnitude of the problem is self-evident from the census data. There are 1652 mother tongues in India. There are over 100 languages spoken by about 662 million people. Ninety of them are spoken by 10, 000 people or more. The speakers of languages mentioned in the Eighth Schedule of the Constitution are 632.3 million, that is nearly 96% of the total population. The languages belong to four principal families, namely, the Indo-Aryan, Dravidian, Astro-Asiatic and Tibeto- Burman, howsoever these languages having been in close contact for centuries have come to develop and share certain commonalities in idioms, metaphors, images and semantic constructions. Languages which are used as media of instruction in the schools, as of now, are sixty- seven.

11.2.0 It is in the backdrop of these complexities that educational planners in India have had to evolve a policy for teaching and learning of languages in the educational system. The one now in existence is the policy set out in the National Policy on Education, 1968. The National Policy on Education, 1986 commended the implementation of the policy of 1968 "energetically" and "purposefully".

Languages in Education Policy of 1968:

11.3.0 For the sake of convenience, the Education Policy of 1968, so far as it concerns the development of languages, is presented below:

(a) Regional Languages
The energetic development of Indian languages and literature is a sina qua non for educational and cultural development. Unless this is done, the creative energies of the people will not be released, standards of education will not improve, knowledge will not spread to the people, and the gulf between the intelligentia and the masses will remain, if not widen further. The regional languages are already in use as media of education at the primary and secondary stages. Urgent steps should now be

(b) Three-Language Formula
At the secondary stage, the State Governments should adopt, and vigorously implement, the three- language formula which includes the study of a modern Indian language, preferably one of the southern languages, apart from Hindi and English in the Hindi-speaking States, and of Hindi along with the regional language and English in the non-Hindi-speaking States. Suitable courses in Hindi and/ or English should also be available in universities and colleges with a view to improving the proficiency of students in these languages up to the prescribed university standards.

(c) Hindi

- Every effort should be made to promote the development of Hindi. In developing Hindi as the link language, due care should be taken to ensure that it will serve, as provided for in Article 351 of the Constitution, as a medium of expression for all the elements of the composite culture of India. The establishment, in non-Hindi States, of colleges and other institutions of higher education which use Hindi as the medium of education should be encouraged.

(d) Sanskrit

- Considering the special importance of Sanskrit to the growth and development of Indian languages and its unique contribution to the cultural unity of the country facilities for its teaching at the school and university stages should be offered on a more liberal scale. Development of new methods of teaching the language should be encouraged, and the possibility explored of including the study of Sanskrit in those courses (such as modern Indian languages, ancient Indian history, Indology and Indian philosophy) at the first and second degree stages, where such knowledge is useful.

(e) International Languages

- Special emphasis needs to be paid on the study of English and other international languages. World knowledge is growing at a tremendous pace, especially in science and technology. India must not only keep up this growth but should also make her own significant contribution to it. For this purpose, study of English deserves to be specially strengthened.

The Three-Language Formula

11.4.1 To deal with the three-language formula first: The following problems have been encountered in the implementation of this formula:

- Often, the States offer, in the first, second and third languages more optionals than stipulated in the three- language formula. Even though the number of languages taught is three, the languages are not those in the formula. The preferred third language in the Hindi State is often Sanskrit and not a modern Indian language a southern language though classical languages like Sanskrit do not find place in the three language formula. Controversies, consequently, arise in favour or against accommodating such classical languages within the formula.

- There are differences in the motivation for learning of the third language. While there is economic motivation for learning Hindi in non-Hindi States, the motivation for learning southern languages in Hindi States is largely cultural. This results in lack of uniformity in learning objectives and competence levels in the third language.

- The demand from linguistic minorities to fulfil the commitment for facilities to learn in the mother tongue in schools at the primary level is often not complied with the problem concerning the place of minority language in the three language formula gets confounded on account of the fact that every State is multilingual with two or more minority languages. The particulars of speakers of minority and majority languages in the various States are furnished below:

State/Union Territory	Majority language & % of its speakers		Percentage of speakers of minority languages
Andhra Pradesh	Telugu	85.13	14.87
Arunachal Pradesh	Nissi/ Dafla	23.40	76.60
Assam	Assamese	60.89	39.11
Bihar	Hindi	80.17	19.83
Goa	Konkani	56.65	43.35
Gujarat	Gujarati	90.73	9.28
Haryana	Hindi	88.77	11.23
Himachal Pradesh	Hindi	88.95	11.05
Jammu & Kashmir	Kashmiri	52.73	47.27
Karnataka	Kannada	65.69	34.31
Kerala	Malayalam	95.99	4.01
Madhya Pradesh	Hindi	84.37	15.63
Maharashtra	Marathi	73.62	26.38
Manipur	Manipuri/ Meitei	62.36	37.64
Meghalaya	Khasi	47.45	52.55
Mizoram	Mizo/ Lushai	77.58	22.42
Nagaland	Ao	13.93	86.07
Orissa	Oriya	82.23	17.77
Punjab	Punjabi	84.88	15.12
Rajasthan	Hindi	89.89	10.11
Sikkim	Nepali	60.97	39.03
Tamil Nadu	Tamil	85.35	14.65
Tripura	Bengali	69.59	30.41
Uttar Pradesh	Hindi	89.68	10.32
West Bengal	Bengali	86.34	13.66
Union territories			
Andaman & Nicobar Islands	Bengali	24.68	75.32
Chandigarh	Hindi	55.11	44.89
Dadra & Nagar Haveli	Bhili/ Bhilodi	68.69	31.31
Delhi	Hindi	76.29	23.71
Lakshadweep	Malayalam	84.51	15.49
Pondicherry	Tamil	89.18	10.82

 (Based on 1981 census except information about Assam which is based on 1971 census

- Problems concerning provision of facilities in schools for teaching of minority languages often arise particularly in inter-State border districts. They also arise on

account of demands made for provision of teaching in languages not necessarily identifiable with any particular State, e.g. Urdu and Sindhi. Demands are also made for facilitating learning of languages based on the inclusion in the Eighth Schedule of the Constitution (here, particular reference is to Urdu, Sindhi, Kashmiri and Sanskrit languages).

- The three-language formula does not speak of the mother tongue but only of the use of regional language alongwith Hindi/Modern Indian Languages and English. So, the formula leaves itself open for varied interpretation giving rise to controversy from time to time.

- The three-language formula is restricted only to the secondary, stage. Consequently each State decides how many languages and to what degree fewer or more languages should be taught at other stages of education. The result is that different States have different policies at the primary level and at the higher secondary level.

11.4.2 On a subject like languages which is at once an integrative as well as disintegrative factor, a water tight stipulation-is not appropriate. What is important is appreciation of language as a means to an end, namely, imparting of communication competency for reading, writing and speaking in the overall national and international context. This appreciation is faciliated best by an understanding of the following sound considerations regarding language learning referred to in the report of Education Commission, 1964-1966:-

* Creation of motivation for learning languages is a complex social process. This depends more on social and economic factors outside the school than on academic programmes of the school itself.

* Learning of language should not be a burden on the child at the primary stage through imposition. 'Such imposition can vitiate his (child's) entire attitude towards his studies and may generate hostility to the school itself. This would be counter-productive at a time when our chief objective is to 'win the masses over to education.

* The priority should be for teaching the mother tongue well and eradicating illiteracy; the study of additional language at the primary stage should be kept at the minimum.

* Three languages at the elementary stage will interfere with the development of the child's mastery over his mother tongue and with his intellectual growth.

* At the secondary stage the student would have been 'won over to education. Compulsory study or a heavier language load at this stage does less harm.

* Learning of English/Hindi should be facilitated not in terms of years of study but in terms of hours of study and level of attainment. Two levels of attainment could be envisaged those who study for three years; and those who study for six years.

* Learning of other modern Indian languages in each region facilitates 'multiple channels of internal communication'.

* Language learning should also be construed as a means of securing national and social integration. This would be facilitated by learning of English or Hindi as link languages.

* Learning of English may be facilitated in the upper primary or secondary stages considering that this would be needed as a 'library language' in the field of Higher Education and, consequently, a strong foundation in the language will have to be laid at the school stage.

* Learning of additional languages in general is a costly and difficult load which the education system is ill-equipped for. The States, most oft en, do not have adequate resources for provision of additional language teachers.

* Students (and parents) are often indifferent in the matter of school level learning of more languages which adds to their workload without directly providing skill or knowledge usable in immediate life.

11.4.3 Presented below is a statement on the atatus of implementation of the three-language formula in the various States.

S.NO.	NAME OF THE STATE	STAGES OF LEARNING THE THREE LANGUAGES			NAMES OF THE LANGUAGES	REMARKS
		1st LANGUAGE CLASSES	2nd LANGUAGE CLASSES	3rd LANGUAGE CLASSES		
1.	2.	3.	4.	5.	6.	7.
1.	Andhra Pradesh	I-X	III-X (Telugu) VIII-X (Hindi)	VI-X	1st Lang. Telugu/Urdu 2nd " Telugu/Hindi 3rd " English	
2.	Arunachal Pradesh	I-X	I-X	VI-VII	1st Lang. English 2nd " Hindi 3rd " Assamese/ Sanskrit	
3.	Assam	I-X	V-X	V-VII	1st Lang. Assamese/Hindi/ Bengali/Bodo/ Manipuri 2nd " English 3rd " Hindi	
4.	Bihar	N.A.	N.A.	N.A	1st Lang. Hindi/Urdu/ Bengali/Oriya/ Maithili/Santhali 2nd " Hindi (for non-Hindi students) Sanskrit (for Hindi students) 3rd " English	
5.	Goa	I-X	V-X	V-VII (English/ Modern Indian languages)	1st Lang. Hindi/Urdu/ Marathi/Konkani/ English	
				VIII-X Hindi/ Marathi/ Konkani/ Gujarati/ Kannada/ Urdu/ Sanskrit/ Arabic/ Latin/ German/ French/ Portuguese	2nd Lang. (Hindi & classical language) Marathi/ Konkani/English 3rd Lang. Hindi/Marathi/ Konkani/Gujarati/ Kannada/Urdu/ Sanskrit/Arabic/ Latin/German/ French/Portugues.	
6.	Gujarat	I-X	V-X	V-X	1st Lang. Gujarati	

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| | | | | | 2nd " Hindi | |
| | | | | | 3rd " English | |

7.	Haryana	I-X	VI-X	VI-VIII	1st Lang. Hindi 2nd " English 3rd " Telugu/ Sanskrit/ Punjabi/ Urdu	In classes IX-X, the students can choose any of the following languages as elective subject: Sanskrit/ Punjabi/Urdu/Telugu/ Hindi/ English/Per- sian/Tamil/Bengali / Russian/German/French
8.	Himachal Pradesh	I-X	IV-X	IX-X	1st Lang. Hindi 2nd " English 3rd " Urdu/Tamil/ Telugu.	
9.	Jammu & Kashmir	I-X	VI-X	VI-X	1st Lang. Urdu/Hindi 2nd " English 3rd " Hindi/Urdu/Punjabi (Optional)	
10.	Karanataka	I-X	V-X	VI-X	1st Lang. Kannada 2nd " English 3rd " Hindi	
11.	Kerala	I-X	IV-X	V-X	1st Lang. Malayalam 2nd " English 3rd " Hindi	
12.	Madhya Pradesh	I-X	VI-X	VI-X	1st Lang. Mother tongue at primary stage. Mother tongue or English at Middle stage. Hindi,English,Marathi, Urdu,Punjabi,Sindhi, Bengali,Gurajari,Tamil, Telugu,Malayalam (any of them at sec.stage) 2nd Lang. Sanskrit,Hindi,English (any one) 3rd " English,Sanskrit,Hindi, Marathi,Urdu,Punjabi, Sindhi,Bengali,Gujarati, Telugu,Arabic,Persian, French (any one)	
13.	Maharashtra	I-X	V-X	V-X	1st Lang. Marathi,Hindi,Urdu,English,Sindhi Gujarati,Kannada,Telugu,Bengali. 2nd " Hindi,Marathi,Urdu. 3rd " Hindi,English.	
14.	Manipur	I-X	VI-VIII	VI-VIII	1st Lang. Manipuri/recognised	

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					local dialect
				2nd "	English
				3rd "	Hindi
15.	Meghalaya	I-X	V-X	V-VIII	1st Lang. Mother tongue
				2nd "	English
				3rd "	Hindi,Khasi,Garo,Assamese
					Bengali (any one)
16.	Mizoram	I-X	V-X	V-VIII	1st Lang. Mizo,English
				2nd "	English,Mizo
				3rd "	Hindi
17.	Nagaland	I-X	I-X	VII-VIII	1st Lang. Local dialect/English
				2nd "	English,local dialect,
					Hindi
				3rd "	Hindi
18.	Orissa	I-X	IV-X	VI-X	1st Lang. Oriya,Hindi,Bengali,
					Telugu,Urdu,English
				2nd "	English,Hindi
				3rd "	Hindi,Oriya
19.	Punjab	I-X	III-X	VI-X	1st Lang. Punjabi
				2nd "	Hindi
				3rd "	English
20.	Rajasthan	I-X	VI-X	VI-X	1st Lang. Hindi
				2nd "	English
				3rd "	Urdu,Sindhi,Punjabi,
					Bengali,Sanskrit,Gujarati
					Malayalam,Marathi.
21.	Sikkim	I-X	N.A.	N.A.	1st Lang. English
				2nd "	Nepali,Bhutia,Lepcha,
					Limboo,Hindi.
				3rd "	(Same as 2nd languages.)
22.	Tamil Nadu	I-X	III-X	N.A.	1st Lang. Tamil or mother tongue
				2nd "	English or any other
					non-Indian languages.
23.	Tripura	I-X	III-X	VI-X	1st Lang. Bengali,Kok-Borok,Lusahi
				2nd "	English
				3rd "	Hindi
24.	Uttar Pradesh	I-X	III-VIII	VI-VIII	1st Lang. Hindi,Urdu,English
				2nd "	Hindi,English
				3rd "	Sanskrit or Urdu or any
					other modern Indian
					.language.
25.	West Bengal	I-X	VI-X	VI-VIII	1st Lang. Bengali or mother tongue

					2nd "	English,Bengali,Nepali (any one)
					3rd "	Bengali,Hindi,Sanskrit, Pali,Persian,Arabic,Latin Greek,French,German, Spanish,Italian.
26.	A & N Islands	I-X	VI-X	VI-VIII	1st Lang.	Bengali,Hindi,English, Tamil,Malayalam,Koren, Nicobarese.
					2nd "	Hindi
					3rd "	Hindi,Telugu,Bengali Malayalam,Urdu,Sanskrit.
27.	Chandigarh	I-X	I-X	III-X	1st Lang.	Hindi,Punbaji,English (English at Sec.Stage)
					2nd "	Punjabi,Hindi
					3rd "	English,Punjabi,Hindi (Punjabi/Hindi at secondar stage only)
28.	Dadra & Nagar Haveli	I-X	IV-X	V-X	1st Lang.	Gujarati
					2nd "	Hindi
					3rd "	English
29.	Daman & Diu	I-X	V-VII	VIII-X	1st Lang.	Mother tongue.English Marathi,Urdu,Hindi.
					2nd "	Hindi,Marathi,Konkani, English.
					3rd "	In addition to the list of 2nd languages Arabic, Latin,German,French, Portuguese.
30.	Delhi	I-X	VI-VIII	VI-VIII	1st Lang.	Generally Hindi
					2nd "	English
					3rd "	Sanskrit,Punjabi (Urdu Bengali,Sindhi,Gujarati, Tamil,Telugu,Persian, Kannada,Arabic,Marathi, are also offered as minority languages)
31.	Lakshadweep	I-X	IV-X	V-X	1st Lang.	Malayalam
					2nd "	English
					3rd "	Hindi
32.	Pondicherry	I-X	VI-VIII	VI-X	1st Lang.	Tamil,Malayalam,Telugu.
					2nd "	English
					3rd "	Hindi

NOTE :-
N.A. : Not Available

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11.4.4 As it is apparent from the statement, there is no uniformity in the number of years of learning of the various languages consistent with the considerations projected by the Education Commission 1964-66 though there has been a broad consensus in the country for the acceptance of the three-language formula. The Programme of Action (POA) formulated with reference to NPE 1986 identified the following deficiencies in its implementation:

* All the languages are not being taught compulsorily at the secondary stage.

* Classical language has been substituted for a Modern Indian Language in some States; no provision exists for the teaching of South Indian languages for which the formula indicated preference for the Hindi speaking States (A point already brought out).

* Duration for compulsory study of three languages varies.

* Competency level to be achieved by students in respect of each language has not been precisely specified.

11.4.5 The Sarkaria Commission, having traced the entire history of the formula has called, in the following words, for its implementation uniformly and in its true spirit:

The States Reorganisation Commission has inter alia recommended that the Government of India should, in consultation with State Governments, lay down a clear policy in regard to instruction in mother tongue at the secondary stage. The All India Council for Secondary Education recommended the adoption of a three-language formula in September, 1956. This formula was also endorsed by the Chief Ministers' Conference 1961 in a simplified form. The National Policy on Education 1968 also laid down that the "three-language formula" should be vigorously implemented. The National Policy on Education 1986 has also laid stress on the implementation of the same.

Unfortunately, the "three-language formula has. been observed more in breach. Some States are following what is virtually a two-language formula. One State is imposing what is virtually a four-language formula on linguistic minorities. We are of the view that effective steps should be taken to implement the three- language formula in its true spirit uniformly in all the States in the interest of the unity and integrity of the country.

Recommendations

11.4.6 Whatever be the difficulties or unevenness in the implementation of the three-language formula, it has stood the test of time. It is not desirable or prudent to reopen the formula.

(i) In order to bring about uniform and rationalised implementation of the three-language formula the following measures should be taken: a) The Kendriya Hindi Sansthan (KHS), Central Institute of English and Foreien Languages (CIEFL) , and Central Institute of

Indian Languages (CIIL), the three National level institutions charged respectively with the development of teaching of Hindi, English and modern Indian languages should come together and, in consultation with the CBSE and NCERT and each of the concerned State Governments, spell out modalities of ensuring uniformity in the matter of acquisition of language competency by the students in the school system. They should particularly bear in mind the observation of the Education Commission 1964-66 that learning of languages could be facilitated not merely in terms of years of study but in terms of hours of study and level of attainment (particular mention could be made in this context of the English language teaching package which the CIEFL has developed under the title 'English - 400' - a package which facilitates teaching and learning of English in 400 hours spread over three years. The objectives of the consultation mentioned above may be:

- Specification of the objectives of teaching different languages;

- Specification of levels of language proficiency to be reached in respect of each language; and

- Specification of the class from, and the duration for which the three languages will be taught.

(Though achievement of these objectives have been referred to as pre-requisites in the POA,1986, concrete effective action is yet to emerge).

b) One of the principal activities undertaken by all the three national level language development institutions, the KHS, the CIEFL and the CIIL is training of teachers of Hindi, English and modern Indian languages. The KHS trains teachers from non-Hindi speaking States in the teaching of Hindi as a second or third language. Likewise, the CIIL trains teachers in the teaching of modern Indian languages as a third language. The CIEFL offers post-graduate diploma courses for those teaching at the college level. Further, they conduct in-service training programmes for teachers at the school level. These institutions, however, have been constituted differently. The CIEFL is a deemed university. The KHS is an autonomous Organisation registered under the Societies Registration Act. The CIIL is only a subordinate office of the Department of Education, Government of India. While the CIEFL and the KHS have considerable operational flexibility on account of their constitution, the CIIL is subject to all the functional rigidities of a subordinate office of the Government. Majority of the faculty of the CIIL even at the primary level are doctorate holders. In terms of teaching and research, they have been doing very important work in the area of development of modern Indian languages. Their work is also predominantly academic in nature. Unlike in the case of subordinate offices of the Government of India exercising regulatory functions of the government, as an academic institution, the CIIL deserves to be relieved of the functional rigidities of a subordinate office. It may be converted into an autonomous body.

The capacity of the CIIL for teacher training often remains considerably under-utilized as reflected by the following statistics:

Year	Capacity (No. of Seats)	Capacity Utilized
1986-87	360	354
1987-88	360	279
1988-89	360	391
1989-90	360	246
1990-91	360	259

The teacher training courses are of a ten-month duration. The CIIL pays the teacher his salary during the training period, apart from a stipend of Rs. 400.00 per month., However on account of the fact that the services of the teachers will not be available for the schools during the training period, the concerned States have not been forthcoming in deputing enough number of teachers. There is a strong need for this teacher training programme being strengthened significantly. Specific measures that can be considered are:

* Enough funds should be put in the possession of the CIIL for enhancing its training capacity. The enhanced capacity for training may be at least 1000 teachers per annum; the teacher training programmes of the CIIL should also be followed up by further correspondence courses for the continued training of teachers initially trained; teachers so trained may function as resource persons for the training of other teachers in the respective States for which appropriate programmes have to be evolved by States. The Planning Commission may provide enough funds for the purpose as part of State Plans.

* The CIIL could also organise teaching of modern Indian languages for the teachers as well as students on the Akashvani and Doordarshan (the CIIL already has a language laboratory which is equipped for, and is in fact producing, audio tapes for the teaching of modern Indian languages, even as CIEFL and KHS have audio packages for the teaching of English and Hindi respectively).

d) Learning of Hindi in the non-Hindi speaking States has come to stay and is being increasingly taken recourse to in the school system as well as outside. The teacher training capacity of the Kendriya Hindi Sansthan is also fully utilised. Nonetheless there is a large backlog in the country of untrained Hindi teachers. The capacity of the Kendriya Hindi Sansthan for teacher training should be enhanced from 275 (75 seats for residential course and 200 for correspondence course) to 750 (250+500) per annum, considering that the number of untrained Hindi teachers in the country is about 15,000.

e) Whether the medium for teaching is Hindi or any other modern Indian language, importance should be given not merely for language teacher training but also for teaching of subjects in the respective languages. I I

f) Pending ultimate switchover to the media of regional languages and Hindi for purposes of higher education, English will continue to be a vital medium for the universities and colleges. Articulating this, the Education Commission (19 64 -6 6) observed: "For a successful completion of the first degree a student should possess an adequate command over English, be able to express himself in it with reasonable ease and felicity, understand lectures in it and avail himself of its literature. Therefore, adequate emphasis will have to be laid on its study as a language right from the school stage. English should be the most useful library language in higher education and our most significant window on the world .... " Dealing with improvement in the language competencies in the students in general including English, the Programme of Action formulated under NPE 1986 called for development of textual materials, teacher training and research in the methodology of language teaching, development of infrastructural facilities, designing of remedial courses for the school and university students etc. The POA has also specifically mentioned about the NCERT, CIEFL, RIE, Bangalore and H M Patel Institute of English, Vallabh Vidyanagar coming together for study of language attainment of students. However, the fact remains that over the years, the standards of English language teaching have been going down. Though there are eleven English Language Teaching Institutes (ELTIs) at the level of the States, not all of them are of adequate standards. As of now, only the Regional Institute of English, Bangalore and the H M Patel Institute of English have been active. Most of the other institutions have been suffering for want of adequate and suitable man-power resources and infrastructure. Even in the use of Central assistance offered during the Seventh Five Year Plan period through the CIEFL, the ELTIs have not been uniformally effective or dynamic. The CIEFL, in early 1990, conducted a national seminar on the teaching of English at secondary level and took stock of the situation obtaining in the country. The following, among the main recommendations made by this Seminar should be brought under early implementation:

- The ELTIs should be put on a sound footing with minimal core staff, the strength of which is to be enhanced depending upon the number of programmes and projects undertaken by them.

- The ELTIs should offer in-service training programmes for all categories of functionaries English language teachers, Inspectors, Supervisors, Headmassters etc.; they should undertake need based extension and research work, produce teaching and testing materials; and bring out programmes for learners and teachers of English on the Akashvani and Doordarshan.

- The ELTIs should monitor the programmes of District Centres for saturation training of school teachers in English (as of now, there are 25 District Centres in the country).

- The States should provide adequate financial and other resources to the ELTIs.

- Panels of experts in English language teaching should be prepared and maintained at the State and national levels. Their expertise should be availed of by taking their assistance on consultancy basis for promoting English language learning/teaching.

- A series of regional seminars/workshops should be organised with a view to re-design the English component of B.Ed and TTC courses.

- Survays of learner sub-populations have to be undertaken to make analysis of such populations from the point of view of teaching English (this is based on the recognition that in backward and rural areas, sub-populations have specific needs in the matter of learning English).

Language Media for Higher Education

The Education Commission 1964-66, dealing with a common medium in higher education, had pointed out the advantages of education through the regional languages; had advised avoidance of any policy of drift; and had suggested that the U.G.C. and the universities should carefully work out a feasible programme suitable for each university or group of universities. It had called for a change over to the regional languages media over a ten-year time- frame. The Programme of Action under the 1986 policy emphasised the need for progressive adoption of modern Indian languages as media at the university stage. It also called for specific decisions by the State Governments in consultation with universities, preparation and production of textual materials, orientation of university teachers, and translation of books from English into Indian languages. Further, it called for efforts on the part of the UGC to identify measures to ensure adoption of modern Indian languages in a time bound manner. Nonetheless, progress in this regard has not been uniform or satisfactory. The Education Commission 1964-66 considered the production of University level textbooks in regional languages, a major step in the switch over to the media of these languages. The commission had also observed " .... nor should we get involved in the vicious circle 'no production because no demand' and no demand because no production".

The Suresh Dalal Committee constituted by the Government to go into the scheme for production of university level books in modern Indian languages, has recommended the continuance of assistance under the scheme. Under this scheme, a capital of Rs.1.00 crore each was given to the States by the Government of India. This was meant to be used as a revolving fund for continuous production of university level books. In many States, the books produced not having been sold, the scheme came to a stand-still.

(ii) <u>The programme of production of university level books in Indian languages should go side by side with conscious decisions on the part of universities/States in consultation with the UGC for switch over to the Indian languages media. The modification that can be thought of in the implementation of this scheme in future is that the production of text books may be left Primarily to the universities. The objective of this modification is one of securing an agency which will be the producer as well as the consumer of the books.</u>

(iii) In order to facilitate speedier switch over to regional language media, at least options may be given to students for taking examinations at all levels in the regional language media. (In Maharashtra, for example, already this facility is being provided to postgraduate students).

(iv) In order that an overall environment for switch over to the regional languages is created, apart from promoting the interests of national integration, in the higher education system, provisions should be made for the teaching of Indian literature in the Indian languages.

Development of Hindi as per Article 351 of the Constitution

Article 351 of the Constitution has entrusted the Union of India with the duty "to promote the spread of the Hindi language, to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India and to secure its enrichment by assimilating without interfering with its genius, the forms, style and expressions used in Hindustani and in the other languages of India specified in the Eighth Schedule, and by drawing, wherever necessary or desirable, for its vocabulary, primarily on Sanskrit and secondarily on other languages". In order to fulfil the above mandate, the Government has set up the Central Hindi Directorate (CHD), the Commission for Scientific and Technical Terminology (CSTT), apart from the Kendriya Hindi Sansthan (KHS) to which reference has been made earlier. Specifically their activities are:-

CHD - Conduct of correspondence courses for non-Hindi speaking people; preparation of bilingual, trilingual and multilingual dictionaries with Hindi as the base.

CSTT - Evolution of scientific and technical terms.

KHS - Conduct of training programmes for Hindi teachers from non-Hindi speaking States; research in the methodologies of teaching Hindi as a second/third language.

The above programme for promotion and development of Hindi handled as they are by three different agencies, get fragmented in their implementation. CHD and CSTT are subordinate offices of the Department of Education whereas the KHS is an autonomous Society as already stated.

(v) With a view to strengthening and unifying the efforts for the promotion and spread of Hindi as envisaged in Article 351, these three organisations could be merged into a single institution. In view of the fact-that the nature of work of such an institution will Primarily be academic and as effective operational flexibility will be required for its meaningful role, if it is to handle its task with impact, it should be an autonomous body. The Head of the institution should be a renowned and senior Hindi scholar in the country. He should be not less in rank than a Vice-Chancellor. (An argument that could be raised in regard to the merger of CSTT into this autonomous Organisation is that it also evolves pan-Indian terminologies. These terminologies, however, are Hindi-based. In any case evolution of technical terms in regional languages is best left to the concerned State level institutions many of which have in fact done significant work).

(vi) As Article 351, inter alia, speaks about spread of Hindi language duly enriched by, and drawing from, Sanskrit and other languages, study of classical languages in the school system as part of social sciences should be provided for.

Sanskrit: Maintenance and Co-ordination of Academic Standards

The Rashtriya Sanskrit Sansthan (R.Skt.S) established in the year 1970 is now running six Kendriya Sanskrit Vidyapeeths. It has also been functioning as an examining body, holding examinations for the students in forty-one traditional Sanskrit institutions, which are affiliated to it. Every year about four thousand students take these examinations. These examinations are held for various courses, Prathama to Acharya (MA) including Shiksha Shastri (B.Ed) and Shikshacharya, (M.Ed) . They also award Vidya Varidhi (Ph.D) and Vachaspati (D.Litt) degrees.

The R.Skt.S by its mandate, is essentially concentrating on Sanskrit learning in the traditional system. Universities, on the, other hand facilitate learning of Sanskrit in the non-traditional system. There are at present 65 University Departments offering Sanskrit courses. A dichotomy has come into existence in the system of Sanskrit education (as between traditional and non-traditional systems) on account of the R.Skt.S. and the Universities operating in different styles. The medium of instruction in the traditional system is Sanskrit while in the non-traditional it is English or regional languages. The products of traditional system are strong in Sanskrit but weak in English and other modern Indian languages. Those of the non--traditional system are strong in English/MILs. but deficient in Sanskrit education.

Independently of the R.Skt.S, Sanskrit Universities and the University Departments of Sanskrit, the Department of Education, Ministry of Human Resource Development, has also been Promoting Sanskrit education in the traditional style by funding to the extent of 95% fourteen Adarsh Sanskrit Pathshalas and two Sodhsamsthas. These institutions are uder institutional level management bodies on which Govt. functionaries are given representation.

(vii) In view of the substantial difference between the traditional and non-traditional styles of Sanskrit education and to remove the dichotomy mentioned above, there is need for a national level agency which is to lay down, maintain and co- ordinate the academic standards for Sanskrit education as whole by bringing about meaningful interaction between non-traditional and traditional styles. The R.Skt.S. could be strengthened, elevated in status and given the role of a national level Commission for the Purpose. The head of this Organisation should also enjoy the status of a Secretary to Government of India. (In this context, it is worthy of notice that the Central Sanskrit Board has advised the enhancement of the status of the R.Skt.S. as an institution of national importance.

Article 350 A: Instruction in the Mother Tongue-Problem of the Urdu Speaking People__and Development of Urdu.

Urdu occupies the sixth position among the languages of India in terms of the number of those who speak this language. According to 1981 census, the number of Urdu speakers is 35 million constituting 5.34% of the total population of India.

Urdu is an indigenous language and is widely spoken by all sections of Indian people belonging to all faiths, castes and creeds. It belongs to the whole country and has an inter-state character. It is not the concern of any one State or community. The responsibility for its development already stands shared by the Central Government.

The Government of India appointed a Committee in 1972 under the Chairmanship of Shri I.K.Gujral, the then Minister of State for Works & Housing for the promotion of Urdu. The Committee submitted its report in 1975. Over the years, there has been persistent public demand to implement the recommendations of the Gujral Committee particularly giving Urdu its due place in education. Early in 1990, the Government appointed a Committee of Experts under the Chairmanship of Shri Ali Sardar Jafri, to examine implementation of Gujral Committee recommendations. (The NPE Review Committee has had- interaction with the Jafri Committee.) One of the major recommendations of Gujral Committee which has been accepted by the Jafri Committee, is the provision for adequate safeguards for the Urdu linguistic minority at the primary and secondary levels of education.

 (viii) Keeping in view the need for imparting instruction in the mother tongue at the primary level to all the linguistic minorities and in the light of interactions with the Ali Sardar Zafri Committee, it is recommended that arrangements for the purpose of teaching in the mother tongue of the minorities should be as follows:-

Primary level

(A) The Education Department of the State Governments, Union Territories and the Local Authorities should, in the light of Article 350-A of the Constitution, make necessary arrangements for teaching in minority language at the primary stage for the benefit of those who claim it as their mother tongue. A Committee to monitor the implementation of these constitutional commitments may be set up in the concerned States with the Chief Ministers as Chairmen.

(B) In substitution of *10:40 formula:

a) where in an area speakers of minority language constitute 10% or more of the total population, one or more minority language medium primary schools should be set up according to need. Such schools need not be exclusively of one medium. Efforts should be made to keep all students at the same school to avoid segregation irrespective of their mother tongue.

b) in an area where minority language speaking people constitute less than 10% of the total population, a minority language teacher should be provided in such schools as are likely to get a minimum of 10 minority language speaking students;

The 10:40 Formula envisages provision of facilities for teaching in the medium of the mother tongue at the primary stage where there is a minimum of 10 students in a class or 40 in a school as a whole.

C) for immediate purposes, bilingual teachers may be appointed in schools mentioned in (b) above. The existing teachers in such schools may also be given incentives to learn minority languages additionaly.

Secondary level

In substitution of *15:60 Formula:

a) it should be presumed that two third of the students leaving primary schools would be desirous of moving on to the next stage of education. Minority language medium sections in the existing secondary schools should be provided on this basis and minority language knowing teachers should be appointed in anticipation of students offering minority language as medium. The emphasis should be on students studying through different media in the same schools;

b) in the case of higher secondary schools in cities having concentration of minority language speakers, one minority language medium higher secondary school should be opened for every group of 8 to 10 primary schools;

c) the State Government should help in raising the standard of teaching in such minority medium higher secondary schools as are run by linguistic minorities themselves;

d) the pre-conditions, if any, for permitting the setting up of minority language medium higher secondary schools and sections privately should be relaxed in favour of the concerned linguistic minority setting up such schools or sections, and the procedure so simplified that the required permission would be granted within two months of the date of application;

e) the facility of minority language medium secondary schools should, as proposed in the case of primary education, be provided wherever the minority language speaking population of an area constitutes 10% of the population.

(ix) The Jafri Committee has also recommended that the status of the Bureau for Promotion of Urdu should be changed from that of a subordinate office to an autonomous Organisation in order to arm it with functional freedom and enhanced financial powers. This Committee supports this recommendation as well, consistent with its approach that academic bodies should be independent of the rigidities of the subordinate offices of the Government of India.

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* The 15:60 Formula seeks to provide facilities for teaching through the medium of the mother tongue, at the secondary stage-where there is a minimum of 15 students in a class or 60 in a school as a whole.

Development of Sindhi

Sindhi, like Urdu, is also a stateless language which is neither the official nor the regional language of any State. However, the speakers of Sindhi language are spread in several States of India and like Urdu, it has an inter-State character. In the development of Sindhi, therefore, the Government of India has a special responsibility.

The Sindhi Advisory Committee which advises the Government of India on the issues relating to the promotion of Sindhi has recommended the establishment of a Sindhi Vikas Board on the pattern of Taraqqui-e-Urdu Board. At present the work of promotion of Sindhi is entrusted to the Central Hindi Directorate which is not a very satisfactory arrangement. Besides the promotional activity is confined only to the holding of workshops, seminars and the purchase of Sindhi Books.

(x) This Committee has gone into this question and recommends the establishment of a Sindhi Vikas Board, considering its inter-State character, its inclusion in the Eighth Schedule of the Constitution and the persistent demand from the Sindhi speaking people and their organisations for the formation of such a Board. There are other inter-State languages as well, besides Urdu and Sindhi like Gorkhali, Santhali, Maithili and Bhojpuri. special measures for the development and promotion of these languages should also be taken.

National Level Facility for Training in Translation

POA, 1986 having referred to translation efforts being undertaken by a multiplicity of agencies, the National Book Trust, the Sahitya Akademy, the State Akademies etc. called for efforts at translation being systematised. The POA also envisages the establishment of a Central Translation Bureau (different from the translation bureau under the Deptt. of Official Language of the Ministry of Home Affairs). The term of reference recommended by POA for this Central Translation Bureau was identification of gaps in dictionary resources so that suitable support programmes could be chalked out for the preparation of bilingual and multi-lingual dictionaries.

(xi) What is required is not yet another agency for the routine Production of dictionaries. on the other hand, a national level facility should be established in the country for the purpose of imparting training in the methodologies of translation. This facility could be established as part of the Central Institute of Indian Languages.

A Fresh Linguistic Survey of India

(xii) The last linguistic survey of India (only one hitherto) was carried out from 1898 to 1928. Since this survey, considerable changes have come about in terms of vocabulary, diction, evolution of new dialects etc. Often, controversies also do arise regarding the identity of the languages. Therefore, a fresh linguistic survey of India based on rational principles should be undertaken. This new Survey would be of immense help in use of

languages in the educational system particularly in the North-East and other areas where education is not taking Place necessarily in the mother tongue.

Use of Technology for Language Development

In the multi-lingual society of the country, over hundreds of years, proverbs, idioms, images and metaphors have come to be shared by all languages. In this context, the future points to the need for significant role to be played by a mediating language. It is here that use of modern technology becomes indispensable for the purpose of transfer of vocabulary from one language to another. Computer technology has already come out with sophisticated computer programmes for transliteration from one language to another. The Department of Electronics has also taken up a project entitled TDIL (Technology Development for Indian Languages) with the concurrence of the Planning Commission. Reportedly, an outlay of Rs.17.00 crores is envisaged in regard to this project during the Eighth Five Year Plan, outlays for 1990-91 and 1991-92 being Rs.2.00 crores and Rs.5.00 crores respectively.

(xiii) Within the umbrella of the TDIL, Department of Education should undertake specific sub-projects for use of technology in the development of languages covering all aspects - learning systems machine translation/transliteration, human machine interface system, etc. In the Preparation and implementation of these sub-projects reputed Sanskrit universities and institutions should be involved.

CHAPTER 12

CONTENT AND PROCESS OF EDUCATION

NPE/POA Stipulations.

12.1.1 NPE, 1986 calls for a reorientation of content and processes of education. The modalities envisaged are:

The curricula are to, be enriched by cultural content; value education to be the given significant place; media and educational technology are to be employed in all the spheres; work experience is to be an integral part of the learning process at all stages; environment consciousness is to be promoted; science and mathematics teaching are to be geared for promotion of spirit of enquiry; the examination system is to be recast in terms of continuous comprehensive evaluation of scholastic and non-scholastic achievements; and development of language is to be in terms of 1968 Policy. 12.1.2 Going into greater details, the Policy implications in this regard are elaborated by POA in terms of the following:

- Access to education of a comparable quality for -all;

- Introduction of minimum levels of learning and provision of threshold facilities;

- Articulation of national system of education and a national curricular timeframe with a common core.

- Improvement of teaching and 'Learning through examination reform.

- Development of culture-specific curricula and instructional material for the disadvantaged;

- Overhauling of teacher education system;

- Decentralisation of educational administration;

- Promotion of voluntary efforts and people's participation.

- Use of modern communication technology in education, training and awareness creation.

12.1.3 Several intervention programmes have also been envisaged in POA with reference to the above implications of the Policy.

12.1.4 The organisational responsibility for bringing about the reorientation of content and process of education has been cast by the Policy of the NCERT, State Directorates of 'Education, SCERTs, State Institutes of Education and Boards of education.

12.1.5 The intervention programmes, according to POA, are to be implemented in areas of content reorientation, process reorientation, development of technical support system, and mobilisation and motivation by effective uses of communication technology and monitoring mechanism.

Committee's Perspective

12.2.1 While the national core curriculum is important, the Committee would call for full scope being provided in addition to core curriculum for diversity in content and pedagogy according to the socio cultural milieu of the school, college or university.

12.2.2 While the POA does speak about decentralisation of educational administration and creation of institutional autonomy as already pointed out, even in the process of reorienting the content it has recommended a fairly highly centralised modality, namely, preparation of instructional packages in core-curriculum areas, exemplar packages on specific work-experience activities etc. In the course of responses to the Perspective Paper on Education apprehensions have been expressed about introduction of a standard, uniform curriculum which would be the result of Centrally directed efforts. While Central coordination would be meaningful, the process of preparation of curriculum should be decentralised through the involvement of State agencies.

12.2.3 So far as process reorientation is concerned, while teacher training is very crucial, the Committee would call for modalities which are innovative and are designed to cater to the requirement of having to provide teachers in mass scales particularly for the primary level. Apart from this, courses for education of teachers required at the secondary levels in the schools have to be redesigned universally over a period of time to develop meaningful teaching comptetencies. Examination reform cannot be construed a is an isolated activity to bring about process orientation. It has to go as a package along with reform in the structuring of courses and flexibility for students to avail of the restructured courses according to their convenience.

12.2.4 Education Technology should not be construed as merely referring to technological aids like TV, VCR, RCCP, Computer etc. More importantly, it refers to the whole area of process of teaching/learning and designing courses for the same irrespective of use of technological aids. While educational technology as a 'means of communication and motivation is important, its use should be modulated to meet the class room situations obtaining in the schools most of which are very unsatisfactorily provided in terms of infrastructure. Education Technology should emerge out of the felt needs in the class rooms. It should not be thrown at. the students. and the teachers, so to-say, in terms of an external imposition whether the teachers and the students want it or not. While computer education is indeed important, its implementation in schools should be in the perspective of the resource costraints seriously inhibiting education at primary level.

Culture content

12.3.1 NPE and POA have dealt with the question of enrichment of the curriculum by culture content etc. at two levels. At one level India's common cultural heritage has been identified as one of the elements of core-curriculum. The NCERT while preparing the model syllabi and exempler instructional packages is to apropriately include this core in the content of education. At another level (paras 8.1 to 8.3 of NPE) a synthesis has been envisaged between change oriented technologies and cultural traditions through education and establishment of linkages between the university* system and institutions of higher learning in art, archaeology and oriental traditions.So far as cultural content of education is concerned, apart from the common cultural heritage, diversities of the cultural traditions in India are as important. The oral and folk traditions also symbolise the vibrance of Indian culture as distinct from textbook culture.

12.3.2 Following up on NPE stipulation for synthesis between change oriented technologies and cultural traditions, the Department of Culture formed two committees and also prepared certain schemes such as production of cultural resources and software for education; review of textbooks; introduction of cultural components in school under minimum cultural content programme; introduction of courses in colleges and universities; courses on archaeological engineering etc. These schemes involved coordination with agencies like Centre for Cultural Resources and Training (CCRT), NCERT (CIET), Archaeological Survey of Indian etc. However, the Planning Commission was unable to allocate resources and advised the Department of Culture to secure the resources from 'the Department of Education. The Department of Education was also unable to provide resource support, apparently on account of inadequacy of resources for its own priority areas.

Recommendations

(i) The cultural content of education should include not merely the common cultural heritage of India as a whole but also diversities of cultural traditions of all parts of India, particularly those symbolised by the oral and folk traditions.

(ii) In conveying to the student community, through the content of education, the cultural traditions of the country, the needs for acceptance/rejection of the same based on critical analysis should also be inculcated.

(iii) The Department of Education should take upon itself the primary responsibility of linkages between the university system and institutions of higher learning as envisaged in the NPE instead of leaving it as a sectoral responsibility of the Department of Culture.

Value education

12.4.0 The modality envisaged in the POA for value education is also the inclusion of the same in the core curriculum to be followed up by production of exemplar instructional packages by the NCERT. In the same way as unity of culture has been sought to be projected, in the area of value education also the emphasis is on unity, that is, on unity and integration of the people (para 8.5 of NPE) . This is indeed appropriately so. However, value education should be much more broad based. The modality of imparting education on these values cannot also be confined to the translation of the core curriculum into instructional packages.

Recommendations

(i) Democracy, secularism, socialism, scientific temper, equality of sexes, honesty, integrity, courage and justice (fairness) , respect for all life forms, different cultures and languages (including tribal) etc. constitute the mosaic of values which is vital to the unity and integrity of the country. The content and process of education should be all pervasively informed by these basic values.

(ii) Imparting of value education should be an integral part of the entire educational process and school climate, as distinct from dissemination of values through special classes or lectures in morality or through mechanical textbook-based learning methods. Some of the specific activities that could be promoted in this context are:

- Establishment of linkage between the school and the, community to stress the harmony and inter- dependence between human being and human being and human being and nature;

- Narrating stories, including folktales depicting heroism, of martyrdom' and supreme self-sacrifice on the part of great personalities belonging to different religions and regions etc.

- Community singing of folk-songs;

- Study of classical traditions of India as part of social sciences.

- Systematic and greater exchange of students within a region and between regions.

- Encouraging schools and colleges to take up projects on States or regions of the country other than their own.

(iii)In value education importance should also be given to 'hidden curriculum' whether it be inside the class room situation or outside. Subtle inculcation of values contributing to the development of total personality of the individual should be organised. These values would encompass a wide range of attributes such as courtesy in person to person

interface, a result oriented behaviour, personal and intellectual integrity, magnetic conduct etc. In other words, the overall output of hidden curriculum shall be what is normally understood by the use of the expression 'Tehzeeb'.

Languages

12.5.1 NPE, 1986 calls for implementation of Education Policy of 1968 so far as it concerns languages. An energetic development of regional languages and literature, implementation of three language formula, development of Hindi as envisaged in Article 351 of the Constitution, provision of facilities for the teaching of Sanskrit and strengthening of study of English are the important aspects of the 1968 Policy relating to languages.

12.5.2 The Policy in respect of languages enunciated during 1968 and 1986 has come to be stabilised and generally accepted all over the country. The Committee is not in favour of reframing it. However, certain implementation strategies are crucial and should be taken recourse to.

Recommendation

In order that the language Policy which has already come to be established and stabilised is meaningfully implemented, the following measures should be taken:

- Universalisation of imparting instruction in the mother tongue at the primary stage including for minorities and tribals.

- Development of regional languages.

- Progressively imparting education in regional languages including at the tertiary level in a time bound manner.

- Development of language competencies of students, by providing operational flexibilities for the national language institutions like Kendriya Hindi Sansthan, Central Institute of English and Foreign Languages and the Central Institute of Indian Languages.

- Strengthening of language teacher training.

- Provision of national level facility for training in translation methodology.

(All the measures mentioned above are more elaborately dealt with in the chapter on Languages in Education).

Educational Technology

12.6.1 NPE, 1986 envisages use of educational technology 'to avoid structural dualism' and as a mode of delivery of education out to distant areas and deprived sections. It is also to be employed for dissemination of information, teacher training, sharpening awareness of art and culture and inculcation of values.

12.6.2 Measures envisaged by POA for use of education technologies are:

- Extension of TV and radio transmission

- Expansion of programme production facilities.

- Provision of radio receivers in primary/elementary schools.

- Implementation of programmes for computer manpower development.

- Introduction of computer science courses at the Higher secondary level, extension of computer literacy programmes etc.

12.6.3 The Central Institute of Educational Technology and UGC have been identified in the POA for playing coordinating role.

12.6.4 In pursuance of NPE and POA the Department of Education brought under implementation a centrally sponsored scheme for educational technology with an outlay of Rs. 115.90 crores. The physical targets under the scheme were supply of one lakh colour TV sets and five lakh radio-cum-casette players to primary and upper primary schools. Assistance to States in the programme was envisaged at rates ranging from 75% to 100%. Presented in the Table below is the status of implementation of the educational technology programme as projected by the Department of Education:

Table 1

Education Technology : Achievements

	1987-88	1988-89	1989-90 (antici-pated by 31.3.90)	Total for 1987-88, 1988-89 & 1989-90
Amount spent (Rs. crores)	14.14	16.20	16.50 (16.50)*	46.84
No. of States covered	13	29	31	32
No. of TV sets distributed	10049	12049	2799	24897
No. of Radio-cum-Cassette Players distributed	37562	67735	49963	155260
Continuing Schemes @				
1. Amount released to CIET (Rs. crores)	5.28	3.10	3.146	11.526
2. Amount released to SIETs (6 INSAT States A.P, Gujarat, Bihar, Maharashtra, Orissa, and U.P (Rs. in crores)	1.40	1.53	2.20	5.13
3. Amount released to ET Cells (Rs. in crores)	0.22	0.26	0.54	1.02
4. Amount released to States, UTs for TVs/RCCPs (Rs. in crores)	7.15	11.19	10.60	28.94

@   Expenditure figures under continuing schemes are included in the "total amount spent" exhibited in the first line under "Achievements"

*   The figure in brackets is BE for 1989-90.

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12.6.5 Some of the important problems encountered in the implementation of the scheme for distribution of TV sets and radio-cum-casettee players are the following:

* The rates originally fixed for the procurement of these equipment were Rs.600/- for RCCP and Rs.6,500/- for TV set. At these prices, the State Governments were notable to procure the equipment. The prices have since been revised to Rs.1,000/- and Rs.8,500/- respectively but the revision has come rather late - during 1989-90.

* There have been inordinate delays on the part of certain State Governments like in the case of Rajasthan, Gujarat and U.P. in the matter of effecting purchases of RCCPs and TV sets. Funds given to them in earlier years have not been used for these purposes.

* These equipment have often been supplied to schools where proper buildings are not available and where watch and ward facilities do not exist. on account of this, there have been cases where the equipment have been kept elsewhere outside the schools.

* For operating the RCCPs, software have not been given; on account of this, the equipment have remained unutilised.

* The State Education Departments have often failed to act with reference to the directories of education broadcasts of different regional stations of the All India Radio.

12.6.6 In the INSAT States (Andhra Pradesh, Bihar, U.P., Gujarat, Maharashtra and Orissa), Education TV Programmes are telecast for five days in a week for 45 minutes per day. This is done within the school hours. However, children do not have access to this programme for want of TV sets. (A recent study carried out in Orissa by the CIET has brought out that only in 15% of the cases, there has been successful utilisation of the equipment.)

12.6.7 A proposal has been pending for creation of an Educational Media Foundation with a corpus fund with the objective of use of educational technology to achieve the goal of universal elementary education and, for this purpose, to tap talents for the production of Radio and TV programmes. It was also envisaged that this Foundation could function as a clearing house on education technology for the school system. However, the Central Institute of Educational Technology which was to play a crucial role in the matter of establishment of this Foundation has not been able to show results.

12.6.8 The six INSAT States were also expected to create State Institutes of Educational Technology to function autonomously. so far, only Orissa has taken a decision on the creation of this Institute. Reportedly, the Governments of Bihar and Maharashtra have since taken decisions for creating the same. Gujarat does not seem to approve of the idea of an autonomous institute. In the existing institutions, technical and professional posts have remained unfilled. The States are not providing full time Directors. Consequently, the capability of the INSAT States to produce educational software has not been of the desired level. Presented in the following Table is a statement on Education Technology Staff in Position (academic, technical, productive and administrative) in the CIET and

INSAT States. This statement brings out the staff deficiencies, particularly in the professional side

Table 2

Education Technology
Staff in Position in SIETs

	Posts sanctioned by Govt. of India	Posts filled up	Posts lying vacant
A) CIET (Central Institute of Educational Technology)			
1. Academic and Production	135	103	32
2. Engineering	86	64	22
3. Administrative	114	97	17
	335	264	71
B) SIET, Hyderabad (Andhra Pradesh)			
1. Academic and Production	55	40	15
2. Engineering	38	19	19
3. Administrative	35	30	5
	128	89	39
C) SIET, Patna (Bihar)			
1. Academic and Production	52	39	13
2. Engineering	38	29	9
3. Administrative	30	20	10
	120	88	32
D) SIET, Ahmedabad (Gujarat)			
1. Academic and Production	59	37	22
2. Engineering	39	28	11
3. Administrative	28	19	9
	126	84	42

E) SIET, Pune (Maharashtra)

1. Academic and Production	52	43	9
2. Engineering	38	33	5
3. Administrative	30	28	2

	120	104	16

F) SIET, Bhubaneswar (Orissa)

1. Academic and Production	52	37	15
2. Engineering	38	31	7
3. Administrative	28	19	9

	118	87	31

G) SIET, Lucknow (Uttar Pradesh)

1. Academic and Production	61	47	14
2. Engineering	38	30	8
3. Administrative	28	28	-

	107	105	22

12.6.9 As of now, Doordarshan is making time available for Education Programmes as follows:-

* Three hours 45 minutes per day in five regional languages (Hindi, Gujarati, Marathi, Oriya and Telugu) on a time sharing basis (45 minutes for each language). This is meant for children in the age group of 6-8 and 9-11. The programme is telecast on five days in a week Monday to Friday.

* Two hours per day for five days in a week for the programme of UGC.

* Telecasting of children's film once in a month.

12.6.10 A group on use of satellite services for education headed by Shri Kiran Karnik (consisting of representatives of the Department of Education, Department of Space and Ministry of Information and Broadcasting has given a comprehensive report on the requirements of TV time for educational purposes. The group has advised creation of 85 production centres in the country with 13 training institutes. The estimated outlay is of the order of Rs.1200 crores required over two plan periods. According to the group, with this size of outlay, one channel of the Doordarshan dedicated exclusively to education could be provided.

Recommendations:

12.6.11 The Educational Technology Programme as a whole should be reviewed by the Government in the light of the above experience specifically

(i) Status of utilisation of the RCCPs and TVs already provided to the various States should be quickly studied in detail, closely involving the States themselves so that their proper utilisation is ensured. Where it is obvious that these equipment cannot be used on account of difficulties in providing the required infrastructure, they should be transferred to schools where such infrastructure exists. In the class room situations obtaining in the majority of the schools which are indifferently provided with infrastructure, there are serious problems in using TV. The TV programmes cannot also be a substitute for normal teaching. (The printed material used by the teacher still remains the most potent tool for imparting of instruction). Priority should rather be for use of audio and video cassettes for educational purposes. The reason is that the teachers will have the facility of playing them in a regulated way at the time they consider suitable for the students.

(ii) Within the Education Department, in the monitoring of the implementation of this programme, there should be very close coordination between the Schools Bureau which handles the scheme and the Elementary Education Bureau which deals with the problems of the children of the relevant age group. In fact, use of education technology hardware as well as software should be made part of monitoring of UEE.

 (iii) Teacher training in the use of these equipment should be organised. The emphasis in teacher training should be on instructional designs suitable to local needs. Techno aids should be made available to the teachers only if and when needed.

(iv) Already, infrastructure and capability are available in existing institutions in the country for the production of educational software. The UGC, NCERT, the Central Institute of English and Foreign Languages, Central Institute of Indian Languages, and the Kendriya Hindi Sansthan are the organisations which have facilities and experience in this area. While the creation of education media foundation may be worthwhile, simultaneously with this, the modalities of utilising the existing institutions should be laid down by the Government. These Institutions themselves could tap talents from the open market for production of educational software.

(v) Immediate steps should be taken for properly manning the technical and professional posts in the State Institutes of Educational Technology so that their capacities are fully utilised and the present situation of their apparent under utilization altered.

(vi) Early steps should be taken for implementing the programmes to have a channel of the Doordarshan dedicated for education, care being taken to ensure that distance learning at all levels is facilitated. (It is worthy of mention here that the Indira Gandhi National Open University has been pressing for separate TV time for its programmes) . Reportedly, Doordarshan has been demanding commercial rates for telecasting education programmes. In the context of educational development which is the basic minimum

human need, it is not appropriate to apply commercial rates for education programmes particularly, as they are designed for providing access to education for the disadvantaged sections of the society. The Government should fund the costs involved - I & B Ministry meeting the capital cost, and the running costs being met by the Department of Education, Ministry of Human Resource Development on no loss, no profit basis.

Computer Education

12.7.0 The programme for computer education in the secondary and senior secondary schools (CLASS Project) was originally meant to be funded by the Department of Electronics. From the year 1987-88, funding from that Department has come to be rather nominal. With serious resource constraint faced by the Department of Education even to meet its commitments on priority areas, not much progress has been made in the area of implementing this scheme for providing computer learning for the school students. Some of the major problems in the implementation of this scheme have been the following:

* Virtually, no software is available in regional languages.

* The Computer Maintenance Corporation (CMC) has not been able to supply the hardware requirements though an amount of Rs.4 crores has been provided to it.

* Institutions of higher learning in the country which have been brought into the picture as resource centres (there are sixty such centres in the country) have not been able to show much results. There has been a provision of Rs.1,500/- per resource centre for meeting the expenses on project fellows. The fellows have often failed to undertake visits to the schools with the result that feed back has not always been available on the Status of use of computer.

* Training of teachers in the use of computers has been rather inadequate. In the Hindi speaking States, lack of knowledge of English has bee a serious impediment for the teachers in getting trained in the application of computers. Largely, under the programme, BBC micros were acquired. The CMC has not been able to make additions to these equipment for giving them capability to use regional languages.

* Often, there have been inordinate delays in the supply of computer hardware after imparting of training in their use. (The delays have been of the order one-and-a- half years between the time of training and supply of hardware.)

* Computer learning is not reflected in the time tables of the students. It is linked to SUPW for which generally two periods in a week are provided in the school system. This is inadequate for meaningfully imparting computer education.

Recommendations:

(i) Computer education, of course, is important because computerisation has become part and parcel of technologies contributing to development in every sphere. However, a cautious approach should be followed in the expansion of computer education. The simple reason is the serious resource constraint and the need for priority being given in the deployment of available resources for universalisation of elementary education. (The Committee itself recognises that at school stage computer awareness is necessary but computer aided learning requirements (CAL) as such is to be carefully evaluated before introduction.)

(ii) Computer learning should be made an integral part of the time table. Emergent and meaningful steps for the production of computer software in regional languages should be taken. The resource centres which are expected to train teachers and provide necessary support should be streamlined. The time gap between teacher training and computer hardware supplies should be minimised. The project not having been very successful consequent on having been tied down to CMC, the Government should bring about involvement of diverse agencies, at the same time going in for computers other than BBC micros, apart from these equipment being improved for facility of operating software in regional languages.

Work experience, environment awareness and mathematics and science education

12.8.0 While the Committee agrees with the emphasis given by NPE in regard to work-experience, environment orientation to education, mathematics teaching and science education, differs in regard to Implementation modalities. Specifically -

(i) Work experience/SUPW has remained a largely marginalised activity and this should become an integral part of the curriculum. Work has to be construed as a medium of education as 'senses are the window to our minds' (already brought out in the Chapter on 'Education and Right to Work').

(ii) Appreciation of environment should be inculcated amongst children through their participation, on a day-to-day basis, in project work on ground. (This will also be one of the incidental outcomes of implementation of the new model of vocational education recommended by the Committee). One of the basic objectives of environment orientation to education should be creation of a positive interface between the human being and environment.

(iii)Traditional wisdom and knowledge should be integrated in the teaching and learning of mathematics and science. (Already much enthusiasm has been generated in using the sutras of vedic mathematics as enrichment material for school education. This, for example, could be followed up).

(iv) In the teaching of science, conscious deviation has to be made from the practice of imposing on the students standardised terminologies and nomenclatures. They should be encouraged to build up their own perceptions about natural and physical phenomena through the discovery method which will help them understand the underlying principles first on their own. In other words, the approach to science teaching-learning should be deduction method as well, and not induction method alone. For bringing about significant changes in terms of this style of science teaching, appropriate orientation of the teachers and the functionaries of Boards of Education should be organised. A whole range of new books should be brought out and simple experiments devised for the purpose.

(v) The objective of science teaching itself should be inculcation of a scientific temper. Emphasis should be not on mere acquisition of scientific knowledge but use of scientific method as a tool of acquiring knowledge. 'How' is as important as 'what'.

Sports, Physical education and youth activities

12.9.0 Consistent with para 8.22 of NPE, 1986, for providing opportunities for the youth to involve themselves in national and social development through National Service Scheme (NSS), National Cadet Corps (NCC) etc., the Department of Youth Affairs & Sports took up the matter with the Planning Commission at the time of formulation of Eighth Five Year Plan i.e. for larger coverage of students under these programmes, apart from Bharat Scouts and Guides. However, that Department has not been able to secure any significantly favourable response.

Recommendations:

(i) As in the case of implementing programmes relating to synthesis of culture and education, in the matter of provision of opportunities for the youth to involve themselves in national and social development through educational institutions and outside them, the primary responsibility should be with the Department of Education.

(ii) Dr. Amrik Singh Committee has recommended widening the base for sports in educational institutions; laying down sports syllabus for students at different levels; orientation of teachers for sports and games; close coordination between Lakshmibai National College of Physical Education (LNCPE) and educational authorities at different levels for drawing up a plan for reorientation of teachers etc. This package of measures should be implemented.

 (iii) Provision of specific slots during schooling hours for physical education; stipulation of acquisition of specific grades in Physical Education to qualify students for particular classes, incentives for Physical Education teachers; and regular courses in sports and physical education for students who want to choose this field as a career option are other important measures which should be brought under implementation.

(iv) One of the important elements of physical education, all along has been emphasis on stereo- typed drills. Aerobics bringing out the rhythm in human movement have lot more educational and developmental value. This should be made part and parcel of physical education programme. The emphasis should also be on Indian games.

(v) General youth programmes to be implemented in the school system could be a package of the following measures:

* Conduct of National Integration Camps; teaching of patriotic songs special reference to children of one region learning songs of other regions; and interState visits of students;

* Introduction of National service Scheme in all the schools at +2 level;

* Grant of appropriate credits for national service at the college level for award of degrees.

(vi)Only 5% of the youth are involved in youth activities in the school system. There is a vast reservoir of youth potential outside the school system. Appropriate activities should be organised for them as well. The youth outside the school system should be given access to the infrastructure available in the schools. This alone will facilitate expanding the social base of those who are drafted for youth activities.

(vii) The physical education teachers have all along been given a secondary status in terms of their service conditions, emoluments and means of according recognition to them. They should be treated as equal in every respect to other teachers.

(viii) National Integration camps should be so organised that opportunities are offered for the mixing of the youth with the underprivileged tribal population. This will also bring about national integration in the true sense of the terms.

Examination Reforms

12.10.1 Examination reform has been a subject of almost consistent consideration by various Committees and Commissions appointed by the Government of India from time to time. The justification for examination reforms arises from academic considerations. Examinations alongwith teaching and learning, in fact, constitute the trinity of functions in the educational process. Examinations over the years have tended to be an instrument for testing memory. Learning has become a rather mechanical process of acquiring skills and teaching has been largely a process of coaching for examinations. The relationship between examinations and standards of teaching and learning are intimate. Improvement in any one of these aspects results in improvement of other aspects as well. Therefore, the objective of examination reform is to make it an instrument of good education.

12.10.2 The Indian University Commission (1902) observed that the teaching in Indian education stood subordinated to examination and not examination to teaching. The

Hartog Committee (1929) deprecated academic bias of examinations at the school level, geared as they were to the needs of the majority who did not have access to the university system and were to enter life. Similar criticism was voiced by the Sargent Plan 1944. The Radhakrishnan commission (1948) pointed out that examination reform was a matter of very high priority in education reform as a whole. The Mudaliar Commission (1952-53) made elaborate recommendations on examination reform and called for reduction in the number of external examinations, conduct of objective tests, assessment of attainments of the students through a proper system of school records, weightage for in-school tests, symbolic rather than numerical marking for purposes of evaluation and grading etc. The Education Commission (1964-66) considered the question of examination reform at all stages of education and called for evaluation being construed as a means to assess learner development on an objective basis. The CABE Committee on Examination Reform (1970) also made wide ranging recommendations. The National Policy on Education, 1986, envisaged evaluation as a continuous process so that the student would be helped to improve his level of achievement, as distinct from certification of the quality of his performance at a given moment of time. The National Policy on Education, 1986 also considered examinations as a means for improvement of quality of education. Specifically, it called for removal of subjectivity in examinations, de-emphasis of memorisatin, continuous and comprehensive internal evaluation of scholastic and non-scholastic achievements of students, improvement in the conduct of examinations introduction of concomitant changes in instructional material and methodology, introduction of the semester system from the secondary stage in a phased manner and use of grades in the place of marks. The Programme of Action (POA) suggested several specific short-term and long-term measures for carrying out examination reform at the school level as well at the university level. The following Table presents a gist of these measures:

Table 3
Measures for Examination Reform

	Short-term measures	Long-term measures
School Education	* Continuance of public examinations at the levels of classes X & XII; XII	Stipulation of the levels of attainment expected at classes V, VIII, X & by the State Boards of Education;
	* Decentralised conduct of examinations;	* Prescription of learning objectives by the State Boards of Education;
	* Spot evaluation of answer scripts.	

		* Development of schemes of evaluation on continuous basis;
		* Conduct of research in procedures for evaluation and examinations and examinatins through consortium of Boards of Eduation.
		* Movement towards cumulative grading system.
University level.	* Introduction of continuous institutional evaluation at the post-graduate level to begin with in unitary universities, deemed universities & autonomous colleges;	* Development of alternative system of evaluation in the place of external examinations for affiliated colleges;
		* Some universities functioning as examining bodies for a number of colleges;
	*Indication of students' performance through letter grades;	* Introduction of flexibility in the combination of courses, introduction of modular courses, provision for accumulation of credits and continuous research on evaluation procedures by agencies like AIU.
	* Assessment of overall performance on the basis of cumulative grade point average;	
	* Facility for improvement of performance by students through subsequent appearances	

12.10.3 Following up on NPE, 1986, NCERT conducted a National Seminar on Examination Reforms and issued certain guidelines to the States, principally covering the subjects of scaling and grading, continuous comprehensive internal evaluation, setting up of balanced question papers etc.

12.10.4 The CABE, in July, 1989, also recommended that the State Boards should take effective steps in the areas of grading and scaling, continuous comprehensive internal evaluation of scholastic and non-scholastic achivements of students etc. The 19th Annual Conference of the Council of Boards of School Education in India, (COBSE) recommended the following in September, 1990:

* Comprehensive and continuous internal evaluation should be introduced in a phased manner, initially at the elementary stage;

* A letter grading system on a nine point scale should be introduced fro declaration of individual results by the State Boards by 1995 at the elementary stage.

* The State Boards should work towards abolition of public examinations, particularly at the end of class x subject to credibility of continous and comprehensive internal evaluation, stage of reforms effected in grading system and introduction of entrance test for admissions in institutions for higher learning.

* Introduction of semester system in a phased manner from the secondary stage so that the students are enabled to progress at their own pace.

12.10.5 Examination reforms having been recommended consistently by various Committees and Commissions over the years, steps for the same have been taken differently in different Stages. Presented below is a statement of the status of examination reforms at the schools stage in different States.

Table 4
Status of Implementation of Examination
Reforms at The School Level.

S. No.	Steps for Examination Reform	Boards/States which have introduced Reform
1.	Development of policy statement (designs) for each question paper.	Andhra Pradesh, Assam, Gujarat Kerala, Maharashtra, Punjab, Rajasthan, CISCE, J&K M. P., Manipur, CBSE, Haryana Tripura, Karnataka, Goa, U.P., West Bengal.
2.	Appointment of paper setters from among those trained in evaluation.	Andhra Pradesh, Gujarat, Kerala, Maharasthra, Orissa, Rajasthan CISCE, J&K, M. P., Manipur, Tamil Nadu, Haryana, Goa U.P., West Bengal.

3.	Appointment of panels or paper steers for each question papers.	Andhra Pradesh, Assam, Kerala Gujarat, Maharashtra, Rajasthan, CISCE, Tripura, Goa, U.P.
4.	Allocation of definite proportionate percentages of marks in question pap-ers for testing different abilities.	Andhra Pradesh, Assam, Gujarat Maharashtra, Kerala, Rajasthan CISCE, J & K, M.P., CBSE, Hary-ana, Manipur, Tripura, Karnataka, Goa, U.P.
5.	Ensuring an effective coverage of the syllabus through the question papers	Andhra Pradesh, Assam, Gujarat Kerala, Maharashtra, Rajasthan CISCE, CBSE, J & K, Manipur, M.P., Haryana, Goa, U.P.
6.	Introduction of specific pinpointed questions in the question paper.	Andhra Pradesh, Assam, Gujarat Karnataka, Kerala, Maharashtra CISCE, CBSE, Haryana, Tripura, Goa, U.P., West Bengal.
7.	Inclusion of short-answer questions in the question papers, besides the essay-type ones.	Andhra Pradesh, Assam, Gujarat Karnataka, Kerala, Maharashtra Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, CISCE, CBSE, Haryana, Tripura, Goa, U.P., West Bengal.
8.	Introduction of objective type questions (multiple choice) in the question papers.	Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, CISCE, Tripura, Goa, U.P.
9.	Use of question banks for setting question papers.	Gurajat, Rajasthan, CISCE, Goa, Bihar, CBSE, Haryana, West Bengal.
10.	Abolition of overall options in the question papers.	Andhra Pradesh, Assam, Gujarat Karnataka, Kerala, Orissa, Rajasthan, CBSE, U.P.
11.	Development of marking scheme alongwith each question papers by the setter himself.	Assam, Gujarat, Karnataka, Kerala, Punjab, Rajasthan, CISCE, CBSE, U.P., Goa Maharashtra, West Bengal.

12.	Division of question papers into two separate sections for fixed response and free response questions with fixed separate time limit.	Andhra Pradesh,Gujarat, Kerala, Karnataka,Punjab, Rajasthan, Tamil Nadu, CISCE.
13.	Introduction of centralised spot evaluation 'of scripts.	Andhra Pradesh, Assam, Gujarat Karnataka, Kerala, Tamil Nadu, CISCE, CBSE, Tripura, Goa, U.P
14.	Introduction of mechanical processing of examination results.	Andhra Pradesh,Gujarat, Kerala, Karnataka, Maharashtra Rajasthan, CISCE, CBSE, U.P.
15.	Scaling of subject-wise results for making them comparable.	Gujarat, Kerala, CISCE.
16.	Allowing students to clear the examination in parts.	Andhra Pradesh,Karnataka, Kerala, Rajasthan, Punjab, CBSE.
17.	Permitting students to improve their grades by appearing at subsequent examination.	Andhra Pradesh,Karnataka, Kerala, Rajasthan,Punjab, CBSE.
18.	Reckoning both the product and performance in evaluation of practical work in science subject.	Assam, Gujarat,Kerala, Punjab, Maharashtra, Rajasthan CISCE, Tripura, CBSE, Goa, U.P.
19.	Incorporation of both academic and non-academic ares of pupil growth in the scheme subject.	Rajasthan, Tamil Nadu.
20.	Issue of separate certificate of internal assessment alongwith that of external examination.	Rajasthan.
21.	Analysis of question papers in details as feedback for paper setters.	Rajasthan.

| 22. | Analysis of answer-scripts of the examination locating common errors, correlation in   score and functional value of item, etc. | Rajasthan. |
| 23. | Autonomy to schools in curriculum teaching, text books and evaluation etc. | Rajasthan. |

12.10.6 The following further statement presents information on the status of implementation of examination reforms in the universities:

Table 5
Status of Implementation of Examination
Reforms at the University Level.

S. No.	Item	No. of Universities
1.	Universities which have introduced internal evaluation at different levels	74
2.	Universities which have developed question banks.	74
3.	Universities which have adopted grading systems for various courses	45
4.	Universities which have introduced semester system	71
5.	Universities which have initiated steps to divide syllabus into units/areas of content	56
6.	Universities which have decided that choice in answering questions should be restricted to each units of syllabus	50
7.	Universities which have agreed to hold examinations without fulfilling the requirements of minimum lectures/tutorials, laboratory sessions etc.	52

12.10.7 The above statements on the status of implementation of examination reforms clearly bring out that not in all the States or universities all the elements of examination

reform have been brought under implementation in a coordinated manner. Despite efforts at reforms the present day situation is one of tail wagging the dog i.e. the system of examination dictating the character and quality of education itself. The schools have come to be construed as some kind of a giant conveyer belt, transferring students from stage to stage leading to the university, rather than institutions equipping the students for life and working in society. The centralised public examination system, as distinct from evaluation at the institutional level results in the majority of the examinees getting thrown off the conveyer belt, in effect making education discriminatory and elitist. (It is the comparatively more well-to-do who are able to afford the coaching materials and guidance through tuitions required for success in examinations.) The importance given to the marks in public examinations obtained by students either for admission to higher courses or for selection of jobs has resulted in marks-based value system. The universities also have tended to jack up their marking system to compete with good universities, not necessarily mindful of standards. Universities are also under severe strain on account of the burden of holding examinations at the under-graduate level. It is desirable that universities are relieved of the load of administering examinations. The students have to take several admission tests for entry into engineering and medical institutions. Apart from being a strain on the students, parallel tests by different institutions are an avoidable waste of resources.

Recommendations

(i) The question of examination reform should be construed as a package of all the following factors:

* Introduction of semester system.

* Continuous internal evaluation; and maintenance of integrity of such evaluation (and examinations in whatever form and scale they may be conducted); within the same classes, in primary stage, diaggregated evaluation of groups of students to cater to individual differences.

* Teachers playing the key role, the principle being "He or she who teaches shall lay down the syllabus and also evaluate".

* Facilities for students to move from one stage of education to another by appearing in entrance tests.

* Facilities for students to have the freedom of choice of modules rather than whole course packages.

* Provisions for credit accumulation by students and facilities for transfer of grade from one institution to another'; facilities of multiple entry and exit for students which in effect facilitates opening up and non- formalising the school system. It is this package as a

whole which should be brought under implementation and not merely individual elements, that too in a piecemeal or ad-hoc fashion.

(ii) In the present context of our educational system, however, there are serious apprehensions basically about the concept of the teacher playing the key role. In the responses received in pursuance of the perspective paper on education, these apprehensions have been voiced by a large number of respondents. The main reason for these apprehensions is that the authority vested in the teacher in this regard might be abused in various ways. Respondents have also expressed the opinion that experiments in this regard in the past have not necessarily been successful. Another view expressed is that the teachers themselves might not be prepared to accept the onerous responsibilities going with examination reforms. It is natural that any attempt at reforms for the purpose of changing the status-quo means resistance from the established order. However, the call for examination reforms on the part of experts over the years having been very consistent and several States and universities already having taken up examination reforms in fact, though in a piecemeal way, there is undoubtedly need for orderly progress towards examination reforms in terms of the above package. Implementation of this package, however bristles with several practical problems, diversities in the educational system in the country being vast. Therefore, there is need for an Examination Reforms Commission. This should also be a permanent body which will facilitate monitoring of progress in examination reforms from time to time until the task is fulfilled in stages. The terms of reference for this Commission may be:

i) Review of the status of examination reforms from time to time.

ii) Phasing of examination reforms, indicating timeframe within which, and levels at which, the reforms are to be effected.

iii) Introduction of fair and objective systems of grading/scaling.

iv) Laying down norms for continuous comprehensive internal evaluation and suggesting safeguards against abuse of this evaluation system.

v) Advising on minimum levels of learning to go with internal evaluation system.

vi) Laying down modalities for semesterisation and modularisation.

vii) Advising on inter-institutional linkages to secure comparable standards.

viii) Teacher orientation for successful implementation of examination reforms.

It is obvious that the Examination Reforms Commission will have to go into problems relating to the reforms in each State, fully involving the State level authorities such that problems at the State as well as the sub-State levels are fully taken into consideration. Functionaries of UGC, AIU, AICTE, NCERT, NIEPA, State resource institutions, State Boards of Education and other expert bodies at the national and other levels, apart from

teacher and student organisations will also have to be consulted from time to time by the Commission. The Commission may be headed by an eminent educationist with the rank of Minister of State, Government of India. The Commission maybe a compact body consisting, apart from the Chairman, of experts in the areas of school, university and technical education. The Chairman and members may be full tine functionaries.

The School Bag

12.11.0 The theme, in fact a serious problem, which is referred to and complained about universally by the teachers, students, parents and educationists, is the 'load of the school bag'. This problem is often picturesquely presented as creating hunch backs out of the shool children and as relieving the children of the joys of learning - literally making the learning process burdensome. In a recent meeting of the CABE also, this came up for serious reference. The Committee has considered this matter in all its aspects and has the following suggestions to make:

Recommendations

(i) The knowledge in different disciplines needs to be viewed in an integrated manner, rather than in water- tight compartments. By doing this it would be possible to avoid unnecessary repetition of facts.

(ii) There is over-dependence on textbook-based learning, rather than on inculcating efficient reading habits and capabilities of self-learning. Emphasis on supplementary reading material and library work as important elements in school education can help in reducing exclusive dependence on textbooks, without losing on quality of education.

(iii) There is a fallacy which has guided formulation of curriculum, particularly in science subjects, for a long time and is one of the chief causes for the load of the science books. This is the principle of preparing the science material to catch up with the exponential growth of knowledge. Instead, there is need to stress the scientific method of acquiring knowledge, rather than knowledge itself. Equipped with the tool of the method of acquiring knowledge, the student would be in a position to learn throughout life according to his/her needs.

(iv) The present syllabus over-emphasises memorisation and recall of information. Concept formation and understanding of basic principles is invariably underplayed. A shift in the emphasis from mere information to concepts and principles would make it possible to eliminate the irrelevant material from the textbooks.

(v) At present the curriculum at the +2 level is used to-put pressure on the designing of curriculum in the middle and primary schools. What is needed instead is to view primary and middle-level curricula in a self- sufficient package of knowledge, aptitude and skills with which the child can go into the 'world of work' and continue self-learning

throughout life. This step would ensure that what is taught in the elementary stage is determined only by the needs of the children in this age group. The social significance of this change lies in the fact that a great majority of our children would quit education after the middle school and only a few would proceed to the high school.

(vi) The curriculum is based on an erroneous view that learning comes to an end with the public examination. Therefore, the curriculum framers try to stuff the textbooks with as much knowledge as possible. In place of this, it would be helpful if capabilities of self-learning and an aptitude to learn throughout life is emphasised.

(vii) The focus of the present curriculum is on a narrow segment of cognitive domain i.e. memorising facts. The entire curriculum needs to be reorganised to give due emphasis to not only all dimensions of the cognitive domain, but also to affective domain and psycho-motor skills. This reorganisation would provide an immense scope for eliminating those parts of the syllabus which need a lower emphasis in this new framework, as an important part of the curriculum would then have to cover the affective domain and psycho-motor skills which are not tied tip with textbooks.

(viii) The class room learning is invariably alienated from what the child learns from home and the society. This frequently results in avoidable repetition. Further, the school syllabus, instead of building upon the store of knowledge acquired by the children outside school, often ends up either ignoring it or even unconsciously mitigating it.

CHAPTER 13

TEACHERS AND STUDENTS

NPE/POA stipulations

13.1.1 The NPE 1986, while discussing the various aspects of education has placed immense trust in the teaching community. Teacher competency, accountability, aptitude and favourable attitude to the profession are to be ensured before teacher training or recruitment takes place. The policy framework of NPE insists on recruitment of competent teachers and in-service training which could freshen them up once again. It has stated in clear terms the guidelines to be followed in teacher education, and in-service programmes.

13.1.2 The POA on teacher education discusses in detail, the operationalisation of the policy outlined. The role of the teacher in the educational context requires three aspects, namely training in academic inputs, training in psychological inputs and research and development. Teacher accountability, competence and innovativeness are insisted upon, and teachers should possess in themselves the vital personality traits of motivation and concern.

13.1.3 For school teachers, pre-service training for the profession is insisted. NPE has also suggested an overhaul of teacher-education as the first step towards educational reorganisation. Other measures for reorganising teacher education at the various levels are also suggested. SCERTs and NCERT will implement the several programmes of research and training at the State level and from the centre respectively. District Institutes of Education and Training (DIET) will be established with the capability to organise pre-service and in-service courses for elementary school teacher and for the personnel working in nonformal and adult education. The National Council of Teacher Education will be provided the necessary resources and capability to accredit institutions of teacher education and provide guidance regarding curricula and methods.

Committee's perspective

13.1.4 There is need for revamping the existing teacher education programmes. The reasons are:

- The present teacher education programme is theory- oriented.

- It is isolated from school, colleges, universities and community.

- Practice teaching period allotted is not adequate in terms of duration and experience gained and what is done during this programme is often stereo-typed.

- Materials prepared during practice teaching have no relevance to the realistic conditions of the schools.

- Catering to all types of students during practice teaching is not taken care of.

- There is little or no scope for the development of the affective domain of the teacher, especially of essential quality of teachers such as empathy, respect for the individual student, attitude towards profession, children, society and development of values etc.

- Demonstration or model schools are not under control of Colleges of Education.

- There is no provision for organised and periodic in- service education of teachers.

- In-service programmes are not effectively done; poor co-ordination and monitoring of in-service education programmes. Absence of research base for making in- service education more effective.

- Inadequate infrastructures at the State and National levels.

- There is minimum of emphasis in developing professional skills in the form of techniques, approaches or methodologies for becoming a facilitator to promote group learning, and in general, learning to be an educator for human development, rather than for merely meeting examination needs.

- Evaluation system is not criterion-oriented.

The above mentioned points indicate directions along which teacher education could be modified. Suggestions listed below will give guidance for overrhauling teacher education programme.

Removing Deficiencies

The NPE lays emphasis on Teacher Education as follows "Teacher Education is a continuous process and its pre-service and in- service components are inseparable. As the first step, the system of teacher education will be overhauled". If an important change in the education system is to be brought about by radical transformation of the present system of teacher education, then the functions of teacher education would include the following suggestions in addition to the points outlined in NPE.

Recommendations

i) Selection of student should be regulated through stringent aptitude and attainment and not merely on University grade or mark.

ii) The training programme should be competence-based and there should be an integration of theory and practice for situational applications.

iii) Affective aspects to be taken care of so as to develop in students the qualities such as empathy, attituted towards profession, society and develop values.

iv) In-service and Refreshers courses are to be specific and they should be related to the specific needs of the 'teachers. In-service programmes should take due care of the future needs of teacher growth, evaluation and followup should be part of the scheme. Research should support better management including delivery system of the programme. Development of innovative strategies and pilot trial of significant activities should be encouraged to ensure the effectiveness of the programme. DIETs should have the major responsibility for organising in-service courisa3600 Hf ementary school teachers. A strong distance education system of in service education should be developed using TV, Radio and Print media. it can be strengthened by occasional contact programmes.

V) All should be strengthened with continuous supply of relevant learning material including journals. Provision should be made for every teacher to attend in- service programmes according to the specific needs and requirements.

vi) The first degree in teacher education should not be given through correspondence education.

Preparing Teachers for the New Thrusts

13.2.0 In the light of the new thrusts which the Committee is proposing for the education system, the teacher training would have to be totally revamped with a view to equip the teacher with the following attributes:

a) empathy and a school perception of the need profiles of children from different educationally backward sections of society;

b) understanding of the status of women in society and the need to introduce a gender perspective in all dimensions of education;

c) capability of imparting education in all aspects of cognitive and affective domains as well as psychomotor skills;

d) aptitude for innovative and creative work;

e) perception of the interventionist role of education in a stratified society and the ability to give operational meaning to this role;

f) preparedness for vocationalisation of entire educational process and aptitude for integration work in academic learning;

g) ability in special areas such as pre-school education, education for the handicapped children, continuous and comprehensive evaluation, activity-based learning, scientific methods of acquiring knowledge etc.; and

h) a sensitive understanding of her/his role in a decentralised and participative 'mode of educational management.

13.3.0 In addition to the personal attributes enumerated above, the new thrusts towards UEE would require the teacher of the elementary stage to be trained in the following concepts, methods and skills:

- non formalisation of the school which would involve introduction of child-centred approach, ungraded classroom, diaggregated and continuous evaluation, and a sensitive understanding of child's behaviour;

- reaching out to the unserved habitations and those sections of children who have not so far responded to schooling by organising 'para-schools';

- linking up with ECCE and adopting its play-way and activity-based approach into the primary school;

- developing school into a community school where school becomes a nucleus of several social and cultural activities of the village besides becoming a centre through which developmental and social welfare services may be made available to the village;

- mobilising resources, both human and otherwise, for enrichment of the learning environment through introduction of signing, drawing, clay-modeling, folk- lore and folk singing in the class room;

- developing content on the basis of the minimum levels of learning;

- community empowerment by communicating the expected learning outcomes in simple forms and arranging opportunities where the community could directly evaluate what their children have gained from the school;

- capability to, guide vocationalisation of entire Elementary Education, alongwith mastery over at least one SUPW or vocational skills;

- understanding of how, to integrate different subjects into an organised whole.

Recommendations

Revamp the teacher-training programmes along the lines suggested above, particularly for the teachers at the elementary stage, with a view to meet the requirements of the new thrusts proposed for UEE.

Internship Model of Teacher Training

13.4.1 The challenge of UEE has posed the problem of training several lakhs of additional teachers within the next few years at the elementary stage. The conventional approach of institution based model of pre-service and/or in-service teacher training may not be adequate for the purpose for the following reasons:

i) Being isolated from the ground realities, this model is unable to provide for suitable mechanisms to integrate field problems in the training modules.

ii) The linkage between theory and practice is rather weak in this model.

iii) The infrastructural facilities available today for this model are just not adequate for meeting the UEE requirements.

13.4.2 It must be kept in mind that the problem of preparing teachers for UEE cannot be reduced to mere quantitative terms, notwithstanding the reauirement for rapidly preparing a large number of teachers. The need for quality and relevance in education is, of critical importance for UEE, as shown elsewhere. Any model of training would have to take these facts into consideration.

13.5.0 The Committee, therefore, proposes an alternative model, termed 'Internship Model' to meet the challenge. The model is particularly suited for preparing 'para-teachers' who would be recruited by the school Head Master/Head Mistress for organising 'para-schools', as envisaged elsewhere. However, the model is based upon sound educational principles which merit attention of teacher educators for all sorts of training situations.

13.6.1 Becoming an effective teacher is not a question of acquiring a bagful of tricks of the trade, but of growing into a human being skilled in the art of communication. It may be better to speak of developing a teacher than of training one. However, whatever the terminology used, training is an ongoing continuous process spread over time. From this point of view, a model of teacher training based on the concept of internship is proposed as an alternative to the conventional pre-service teacher training course. The characteristic of this model and its differences from the conventional model are summarised below:

	Internship	Conventional
i)	Long duration	Short duration
ii)	In-service	Pre-service
iii)	On-the-job, alongwith inter-mittant 'in-the-institution'	In-the-institution only, (including an adjunct of

	training (i.e. sandwiching)	'practice teaching')
iv)	Practical and theory through practice	Mainly theoretical
v)	Reality-oriented	Ideal-oriented
vi)	Experience-based	Instruction-based
vii)	Inductive	Deductive
viii)	Low-cost	High-cost

13.6.2 The internship model is firmly based on the primacy and value of actual field experience in a realistic situation, on the development of teaching skills by practice over a period of time, on supervised teaching under the guidance of more experienced and skilled persons, on role modelling as a time-tested pedagogical principle. It is "inductive" because it expects to draw theoretical insights after exposure to a range of personal experiences and observations; a deductive model first gives instruction in basic principles in an abstract manner, and expects the student to apply the principles to real life situations later on.

13.6.3 The relationship between the content of teacher training (what is to be learnt) and process (how is it to be learnt) is illustrated in the following diagram. All content can be grouped under the headings Knowledge, Skills and Attitudes, and all processes can be grouped under the headings Theoretical Instruction, Practical Work and Field Experience.

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                        C     O     N     T     E     N     T

                      Knowledge        Skill        Attitude
                    ------------------------------------------------
                    | Short-        |             |              |
  P   Theoretical   |               |             |              |
      Instruction   |    term       |             |              |
  R                 |               |             |              |
                    ------------------------------------------------
  O     Practical   |               |  Medium     |              |
                    |               |             |              |
  C       Work      |               |   term      |              |
                    |               |             |              |
  E                 ------------------------------------------------
        Field       |               |             |              |
  S                 |               |             |  Long        |
      Experience    |               |             |              |
  S                 |               |             |    term      |
                    ------------------------------------------------
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13.6.4 Knowledge required to be an effective teacher at the primary level is partly of subject matter content, but this is a small component, since the primary teacher, especially in the first three years, is expected mainly to teach literacy and numeracy skills, and 'life skills. The main knowledge required is from the field of child development of how children develop and how children learn, of the stages of development, of children's needs etc. This kind of knowledge can be given largely through the conventional modes of instruction lecturers, discussions, reading, audio-visual methods, etc. Group discussions based upon the observations and life experiences of the trainees themselves can be an excellent way of teaching this kind of theory. This sort of instruction can be given in a short-term, hence it has been placed in the first box.

13.6.5 Skills required by a teacher are of many types, ranging from ability to tell stories, sing, dance, play games and act, to skill in making and doing things, skills in various crafts and domestic activity and interactive skills like stimulating, guiding and encouraging children, handling groups at various levels etc. Skills need regular and constant practice and cannot be learnt 'by mere instruction, though initial demonstration may be useful or even necessary. So skills have been labelled as medium term and placed in the middle box.

13.6.6 Attitudes towards work, towards children of different ages, towards self, towards women, towards different cultures, towards society, and towards others are the hardest to build up. They can never be taught by direct instruction but are acquired through various processes such as exposure to role models, limitation of role models, peer attitudes and other socialisation modes. Attitudes like a 'Long time to be internalised, hence they have been labelled long-term and placed in the last box.

13.6.7 To make a success of the internship model of training the following are required:

- realistic field situation for teachers;

- long duration;

- supervised teaching in the field;

- good role models; and

- trainers who are themselves skilled and effective teachers.

13.6.8 All except the last two may be fairly easy to get by merely placing trainees in the field. Even the last two are available among experienced teachers in the field, though it may be hard to find among those conventionally labelled as trainers, that is, the staff of training schools and inspectors of schools. On the other hand, all the cost and paraphernalia of the conventional pre-service two-year training course can be saved, by placing trainees in the schools as intern-teachers, paying them for it, and expecting them to fulfill their regular duties.

13.6.9 A sandwich pattern is suggested, starting with a brief period of 'theoretical orientation', followed by long periods of supervised teaching in the schools, alternating with short institution-based sessions of discussion and clarification of theory and for learning and practice of skills. During the internship, each trainee should be attached as an intern to an experienced and skilled teacher who acts as a role model and, in addition, should receive guidance through demonstration in skills by skilled trainers. These periods should continue to alternate for several years. In the second and third year, supervision may become less frequent and the trainees left to function more and more independently. The trainee should be certified as a trained teacher only after three (or five) years. The final evaluation should be done on the basis of continuous evaluation by the supervisors and senior teachers of the trainee's abilities, skills and effectiveness as a theacher, by evidence of his practical skills in the form of objects made and events carried out (NOT by-demonstration lessons) and by a short written and oral test of knowledge. The actual division of time periods is flexible and varying patterns can be adopted.

13.6.10 It is reckoned that the newly recruited 'para-teachers' may be given a short (say, two weeks) orientation course before being given job placement. During this course, S/he may be acquainted with the basic strategies and measures adopted for UEE and also be sensitized towards children, particularly girls, from under- priviledged sections of society.

13.6.11 From time to time, the trainees in the Intership Model may be invited either by a local High School or DIET for a sandwich programme of in-service institution-based short term course with a view to enrich theory as well as exchange experiences among the trainees.

Recommendations

i) The Internship Model of teacher training may be used extensively for preparing 'para-teachers' during their probationary period. The programme in each Educational Complex may coordinated at the Complex level in close linkage with the DIET. This training would have to be sandwiched with in-service institution- based short term courses in between.

ii) The Internship Model may also be explored as a possible way of training other types of teachers as well.

Training High School Teachers

13.7.1 A revised curriculum has been prepared by the NCTE for the B.Ed. courses. Before the curriculum is finalised, the draft may be sent to the different training institutions around the country for comments and suggestions. This exercise will also make them feel involved and at the stage of implementation, there will be more readiness to transact the new curriculum.

13.7.2 The Committee considered the integrated model of teachers education which has been practised by the four Regional Colleges of Education, (RCE). In this model, following class XII, trainee is given a 4-year course integrating subject and methodology. At the end a B.Sc.-B.Ed. degree is awarded. The Committee observed that this model provides the necessary professional touch to the training and, therefore, needs to be encouraged.

Recommendations

i) The new NCTE syllabus for B.Ed. courses should be circulated to all teacher training institutions and State/UT Governments for detailed comments, before the matter is finalised.

ii) Encourage more institutions to open the 4 year integrated course along the lines of Regional Colleges of Education.

Preparing Teacher Educators for Leadership Role

13.8.1 The Committee notes the following situation with concern:

a) The educational objectives and strategies are planned in isolation of those who have to implement them, i.e., the teachers and teacher educators. Consequently, they interpret the objectives and strategies in their own perception and this can even result in action that may be diametrically opposite of what was intended.

b) Further, the teachers and teacher educators do not have any concrete role in policy implementation or its monitoring. Their role is confined to doing only what they are told.

c) The teacher training institutions, irrespective of their level or status, are essentially service institutions, meeting the expectations of policy framers.

13.8.2 The teachers, teacher educators and the training institutions must be assigned a leadership role in all aspects of education policy making, planning, strategy formulation, implementation and monitoring. Unless this is done, the education system is unlikely to respond to exhortations to change and serve the society. True, they lack today the necessary motivation, aptitude' and competence to assume the leadership role, but this cannot be an excuse for not taking the first step forward in the right direction. With appropriate inputs and mechanisms for their growth, a process needs to be generated right away to ultimately place the responsibility where it legitimately belongs. In this, the teacher educator would have a pivotal role.

13.8.3 The Committee presents the following profile of a teacher educator:

- Should preferably belong to the cadre of school teachers and must have experienced the system at least for a few years;

- should also have exposure to the outside world at large in order to acquire a broader perspective;

- should be of high academic competence;

- should possess an integrated view of knowledge and conviction in the interventionist role of education;

- should carry a historical and socioeconomic understanding of the problems and issues faced by Indian society, as also the world;

- should have empathy and burning concern for the under-privileged;

- should have competence for research and an aptitude for using research as a powerful tool for educational and social development.

- should be distinguished by having personality attributes such as -

a) ability to think and work with a sense of independence,

b) ability to act against the prevalent or populist opinion,

c) ability to convince and catalyse people,

d) ability to lead both by precept and practice,

e) ability for creative and sustained action,

f) ability to mobilise resources, both human and financial, from within and outside the community, and

g) ability to work with different segments of society, including the Government.

- A high motivation for need achievement,

a) a desire to achieve

b) ability to work even when demotivating factors are, present

c) a willingness to accept responsibility and feel accountable

d) high inter-personal skills

13.8.4 In order to develop such a teacher educator, a special programme of education, having the necessary status and resources, would have to be developed. The programme would give adequate weightage to cognitive, affective and operational components of the role expected of a teacher educator. The institutions running these programmes must play an active role in educational policy making, planning, implementation and monitoring from the very beginning, thereby also providing a 'field situation' in which the trainees of a teacher educator programme would receive training.

Recommendations

i) Give the teacher educator a leadership role in all aspects of the educational system, including policy making, strategy formulation, implementation and monitoring.

ii) For the above purpose, organise a specially designed training programme such that all the desired attributes of a teacher educator would be inculcated in the trainee.

Continuing Teacher Education:

13.9.0 It is suggested that the responsibility "or planning and Organisation of the in-service programme should be assigned to the Educational Complexes. They have the advantage of both being not too small and not too big. Being small enough, supervision and care of individual and small group needs is possible. Being large enough, in terms of number of teachers, it will be easier to get resource support from outside the Complex as well, such as from DIET, SCERT and a variety of other institutions, and in particular from the nearest Teacher Education College. It would seem essential, for the health and vigour of the TE College that such on-going and 'regular contacts are maintained with the teachers. While the teachers in the Complex will often prove to be very good resource persons, with a little orientation and support, the EC may require additional support and these can easily be organised in-service programmes should basically be in small manageable numbers, and hence attempts at Organisation of in-service at state level and worse, at national level, will not prove very effective.

Recommendation

The proposed Educational Complex may be given the responsibility for coordinating and organising in- service teacher training programmes for the teachers in the area of its coverage. In particular, the Complex can provide an effective channel of 'communication between the schools and DIET.

Miscellaneous Issues

13.10.1 The selection, placement and professional updating of Teacher Educators will also require urgent attention. The present practice of often making certain training

institutions such as SIE, SISE, Field Offices etc. as dumping grounds for unwanted or troublesome persons is a great injustice to them as well as to the ones who come for training. The practice in several Universities of rotation of Head of the Department may also be extended to the other categories of teaching staff in the Government. This will provide them a chance to unlearn and relearn in a new situation.

13.10.2 With close to 4 million teachers, the problem of in service assumes much greater urgency. The teacher is a professional like any other professional, such as doctor, engineer or lawyer. To qualify and to remain as a professional person, one must have updated knowledge and skills. Think of a doctor, prescribing drugs banned a decade ago or an engineer using methods that are found to be either very costly or unsafe. There is also a code of professional ethics that applies to every profession. To qualify as a professional, therefore, the teacher must have updated knowledge and skills along with a code of ethics. That is why it is essential that every teacher, without exception go through an in-service education programme once every five or six years. If done as a ritual or to fulfil a prescription from above, or for filling State or national reports, it will serve little purpose. As with other professions, the requirement of updating must be linked to continuing as a professional. Hence the possibility of withdrawing the teaching license must also be there, if some refuse to go through a course of re-orientation or attend without learning anything.

13.10.3 In a recent national workshop, held by NIEPA, (December 1989) a detailed articulation was made of administrative and financial powers that the Heads of Secondary Schools should have in order to function well and to improve the quality of education. Since the workshop was a Government initiative, the recommendations of the workshop may be made applicable in the Government controlled schools, at least as pilot project.

Recommendations

i) The practice of using teacher training institutions as a dumping ground for unwanted or troublesome persons should be stopped forthwith. Instead, competent persons may be brought into these institutions from schools and other Government institutions on a rotational basis.

The continuation of a teacher may be linked with the completion by her/him of the requirement of updating her/his knowledge from time to time.

All the necessary administrative and financial powers be vested with the Head of the institution (i.e. Primary/Middle/High Schools), so that she/he may function with autonomy to fulfil the assigned role.

District Institutes of Education and Training (DIET)

13.11.1 The NPE deserves credit for launching a nation-wide programme of strengthening teacher training institutions at the district-level and giving them the role of identifying and responding to the teacher training requirements of the area of their coverage. During the past three years substantial funds have been provided for construction of buildings, purchase of books and creation of other facilities. The success of DIETs is critically linked with the following factors:

i) The quality of its staff and the principal, and

ii) Its autonomy from SCERTs and the State Governments for taking initiative in organising its own research and training programme.

Reportedly DIETs are often being still viewed in the old mould of Government-controlled teacher training institutions, rather than as autonomous agencies in a decentralised management system,

13.11.2 In view of the new thrust proposed by this Committee, DIETs would have to assume fresh roles to meet the challenges.

Recommendations

i) The State Governments must ensure full autonomy to DIETs for embarking upon its own programme of research and training so that these are able to play their expected role in bringing about quality improvement and reform.

ii) In view of the new thrusts given by this Committee to education, DIETs would have to undertake fresh responsibilities and develop competence in the respective areas as enumerated below:-

a) Universalisation of Elementary Education (UEE);

b) Early Childhood Care and Education (ECCE);

c) Women's Education with emphasis or giving a gender perspective to the entire educational process;

d) Education for promoting equity and social Justice among SCs/STs and other equcationally backward sections of society, including minorities

e) Vocationalisation of the entire educational process; and

f) Examination reforms, modularisation multiple entry and exit points.

Status of implementation of the Centrally Sponsored Schemes of Teacher Education

13.12.0 Twenty-three States have been given assistance by the Central Government under the Scheme of Teacher Education and altogether an amount of Rs.104.70 crores has been released to them during the three year period 1987-90.

This is certainly one of the schemes under which monitoring has been close. Nonetheless, progress cannot be said to be of the desired level. Out of 101 DIETs sanctioned during the year 1987-88 and 11.4 sanctioned during 1988-89, only 70 and 20 respectively have become operational/semi-operational. State Governments have not been forthcoming in giving specific information in respect of the progress made in the establishment of CTEs/IASEs - i.e. 15 of them sanctioned in 1987-88 and 17 in 1988-89. While this is generally the picture at the overall level, the States of Andhra Pradesh, Tamil Nadu, Kerala, Rajasthan, Madhya Pradesh and Union Territory of Delhi, reportedly, have had reasonably good performance to exhibit.

West Bengal, Maharashtra, Gujarat and certain North Eastern States like Manipur and Tripura are reported to have exhibited virtually no performance after having received assistance from the Government of India.

No State has so far notified the revised recruitment rules for manning the posts in the teacher education institutions.

The problems in achieving the desired level of progress in the implementation of this scheme would seem to have been hesitation on the part of the State Governments in committing themselves without being assured of continued assistance during the Eighth plan, non- creation of, or delays in, the creation of posts required, lack of reasonable implementation machinery in the States, the usual delays that go with the process of executing works (preparation of plans and estimates, invitations of tenders, awarding of works, obtaining sanctions of the competent technical/administrative authorities etc.) , delays in reflection of the required funds in the State budgets etc.

Recommendations

i) Emergent steps should be taken for getting completed all the teacher education institutions for which financial assistance has been given by the Government of India.

ii) Further financial assistance to States which have not so far completed the earlier phases of project implementation should be avoided - i.e. until physical progress is demonstrated in regard to funds given but not yet used.

iii) As the faculty of the DIETs is the most crucial element in the teacher education programme, emergent attention may be given to the filling up of all the posts. Recruitment rules for manning these posts should also be got issued by the State Governments urgently.

Teachers & Students : General Issues

13.13.0 Teachers have to play a crucial role in the process of social transformation. They have to shoulder complex tasks as active participants in national development. It is in this context that the social status of teachers, the material conditions of their life, and the environment of their work have significance.

An indicator of the status that a professional enjoys is the influence that members of his profession are perceived to exert on the people and the society in general. A large proportion of teachers today do not feel that they exert any significant influence, on the community and still less in the society generally. Indeed, many members of the teaching profession feel that the image of their profession is either unfavorable or indifferent. Nevertheless, most of the teachers feel that they wield considerable influence over students and that they shape the values and characters of the students.

Economic benefits, job security and freedom of work are generally perceived as necessary conditions for improvement in the social status of teachers. However, increase in material benefits id not sufficient. Cultivation of professional competence, capacity to inspire and motivate students, devotion to, duty, good scholarship and academic record, and quest for knowledge and excellence are all equally significant. Unless the level of professional competence does not rise alongwith betterment of material conditions, the status of teachers will not improve. Pursuit of excellence and establishment of reputation as a teacher go a long way in giving high status to teachers even if material benefits are not at par with other professions.

Teachers' Welfare

13.14.0 Conducive working conditions and environment are necessary for improving teacher effectiveness; however, provision of various welfare facilities for them are just as necessary. These should include:

- Office-room for individual teachers with adequate provisions for interaction with students, staff lounges, departmental libraries etc.

- Residential quarters at reasonable rent

- Facilities for community/corporate life including cultural and recreational facilities

- Medical facilities

-Travel facilities for visiting libraries and other advanced academic centres, industrial establishments, etc. including participation in conferences, seminars, etc.

Teachers' Participation in Management

13.15.0 Teachers should be provided with opportunities to participate in a wide range of activities that are crucial to the growth and development of the institutions they serve. Participation in such activities as preparation of the institutional plans, strategic; planning, curriculum design and development, preparation of academic regulations, etc. should be activities in which teachers play significant role. The involvement of teachers in these functional areas should be fostered through conducive structures and work environment. Such involvement then will lead to a meaningful participation of teachers in decision making and implementation of the programmes. From this point of view, a more comprehensive role- assignment of teachers is necessary

In specific terms, participation of teachers should be encouraged in :

- Planning and resource mobilisation, curriculum design and development, formulation of institutional strategies for development, etc. They should be represented on Committees, Boards, etc. involved in the consideration of these issues.

- Teachers representation on Executive Council, Senate (Court) and other principal decision-making bodies should be considered as essential to provide the necessary academic input in the deliberations of these bodies.

- Teachers should be represented on bodies which consider matters like teachers' welfare, their, conditions of service, and their grievance redressal mechanisms.

- It should be advisable if appointments at the level of Pro-Vice-Chancellors, functional Deans/Directors, Registrars, etc. are made from amongst teachers to ensure functional linkages between the academics and the administration.

Questions concerning teacher participation in management and their representation on decision-making bodies have generally centred around such issues as democratic representation like elections. Views have been expressed against elected representation as it has introduced on the campuses an element of political activism and of ten situations of conflict and confrontations. While elected representation might be welcomed where healthy competition can be ensured, other modes of representation, namely, seniority by rotation or nomination etc. might also be considered.

Teacher Mobility

13.16.0 Mobility of teachers should be encouraged both within the education system as well as between the education system and other related sectors. To ensure this mobility, the conditions of service of teachers should provide for protection of their past services and provision for transfer of the benefits of such services while moving from one institution to another and from the education sector to other sectors.,

Students

13.17.0 Education, particularly higher education, seeks, to develop among students qualities of initiative, leadership and a spirit of service to the community. With the 18 year old becoming voters, they have become active participants in our political life. It is necessary that this participation is conditioned by maturity of outlook, capacity for-good judgement, and the sensibility that discerns values. While' students have the right of dissent, they should exercise the same in democratic ways.

Higher education should provide opportunities to students to cultivate these concerns. Students should play a leading role in the Organisation of corporate life, cultural activities, games and sports, academic societies, hostel committees. etc.

In order to provide a direction and sense of purpose to student participation in the corporate life of institutions, State level Committees could be set up to consider the following issues:

- The approach to higher education in the universities and colleges

- The academic programmes of general significance

- The Organisation and programming of teaching work and examinations

- Extra curricular and co-curricular activities in universities and colleges including Organisation of inter-university competitions and tournaments, youth festivals, etc.

- Work experience programmes for students

- Organisation of social service of students

- Residence and discipline of students

The State level committees could be constituted with student representatives elected/nominated from universities/colleges within each State.

At the university level, Students' Councils should be set up with the Vice-Chancellor as its President. These Students' Councils should be assigned the responsibilities for:

- Orientation of new students

- Organisation of students health services

- Organisation of residential facilities

- Vocational guidance, counselling and placement

- Students activities, financial assistance to students

- Co-curricular activities

- Student discipline

- Supervision and coordination of the activities of different student associations and societies

- To Allocate funds for different activities of student associations

- To recommend financial allocation for various activities.

There could also be Students' Advisory Committees at the department of faculty levels. These committees could provide a forum where students 'could express their views on important academic question like the structure of the courses, the content of the syllabi, the pattern of instruction and examinations, research, etc. besides issues relevant to better working of the universities. The suggestions made by the students at these forums should be given due consideration by the appropriate authorities/bodies.

Institutions of higher education should organise satisfactory student welfare services. These services should comprise those which directly relate to the classroom, the laboratory and library activities as well as those which supplement educational programmes though they are not an integral part of them. These latter categories of services would include health, social well-being, morale, residence, food, entertainment, medical care and extra curricular programmes.

It would be advisable to set up in the universities and colleges Student Employment Committees. These committees should have close liaison with employers and employment agencies. The major functions of these committees should be:

- To ascertain the requirement of trained personnel in various fields.

- To advise the respective Boards of Studies to courses (full-time, part-time, etc.) to meet those requirements.

- To assist students in obtaining full-time or part time jobs while studying. For this purpose, these committees should work in coopration with-

* State planning agencies, to plan new openings for students

* Local Government administration

* Government departments and employing agencies

* Industry and industrial organisations

* Social institutions and organisations

These committees should also effectively interact with the Board of Studies to bring to bear on their deliberations the changing employment profiles, emerging occupational needs, potential employment opportunities, etc.

<u>Representation of students on these bodies should preferably be by nomination. They should be nominated on the basis of merit and distinction obtained in the relevant areas of activities, etc.</u> A method of indirect election for deciding the representation on State level committees or university level committees might be considered in which the representatives of students who constitute various activity groups or societies should participate in the elections rather than the General Body of students.

CHAPTER 14

DECENTRALISATION AND PARTICIPATIVE MANAGEMENT

NPE/POA Stipulations

14.1.1 NPE, 1986, in Part X, which deals with the management of education, has called for an overhaul of the system of planning and management of education one of the corner-stones is to be decentralisation and creation of spirit of autonomy for educational institutions and giving preeminence to people's involvement including association of non-Governmental agencies and voluntary efforts. (para 10.1). The measures envisaged are pivotal role for the Central Advisory Board of Education, creation of State Advisory Boards of Education, and establishment of District Boards of Education and local level agencies to deal with planning, coordination, monitoring and evaluation. The Policy also calls for formulation of the Indian Education Service.

14.1.2 The District Boards of Education are envisaged in the POA as statutory authorities with comprehensive responsibilities for planning and implementation of all educational programmes upto the higher secondary level.

14.1.3 At the local levels, according to the POA, heads of educational institutions, particularly at the primary and middle levels, are to be made accountable to the Village Education Committees consisting of representatives of Panchayats, Cooperatives, Scheduled Castes, Scheduled Tribes, minorities, Women, local development functionaries and parents.

14.1.4 School complexes are visualised in the POA as a flexibly organised network of institutions "to provide synergic alliances to encourage professionalism amongst teachers" to serve as the "lowest viable unit of area planning". These complexes are to facilitate exchange of resources, personnel, material and teaching aids. In the long run, the school complexes are to take over inspection functions.

Committee's Perspective

14.2.0 In the view of the Committee, decentralisation is not a mere question of creating structures at different tiers. It is a matter of devolving authority, functions and resources all the way down the structural hierarchy from the Centre to the States, from the States to the Districts, and so on down to the villages/habitations as brought out in the chapter on 'Approach'. Decentralisation should also be reflected in all aspects of educational management planning, resource allocation, implementation, coordination, monitoring and evaluation. Decentralisation is also to be all pervasive not confined to governmental structures alone but to educational institutions as well - universities, colleges and schools down to the primary level. Within the educational system, decentralisation should be perceived in terms of autonomy for the departments, faculties, heads of institutions and teachers in their respective areas of competence.

Post-policy Implementation

14.3.0 Pursuant to NPE/POA the CABE Committee on Management Education has prepared proposals for constitution of State Advisory Boards of Education, District Education Boards and Village Education Committees. They have not as yet been discussed in the full body of the CABE.

Disaggregated Target Setting

14.4.1 The country being very large, marked by striking diversities in terms of language, culture and resource endowments, blanket policy options, strategies, investment patterns and targets do not help in tackling the problem of regional and sub-regional disparities. Any attempt to formulate a uniform policy for the educational development of the entire country on the basis of national averages for different parameters would be a method of perpetuating and even accentuating the existing disparities. The consequence of such an attempt would be that relatively more advanced regions would remain ahead of others.

14.4.2 The phenomenon of inter-State disparities is reflected in figures 1 and 2.

Figure 1

PRIMARY ENROLMENT - 1980 AND 1987
ENROLMENT PER HUNDRED THOUSAND OF POPULATION
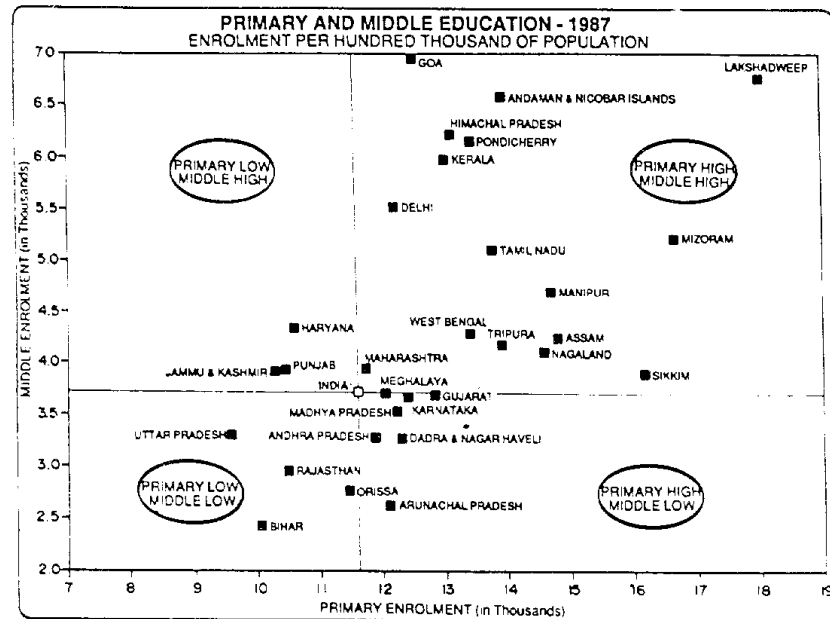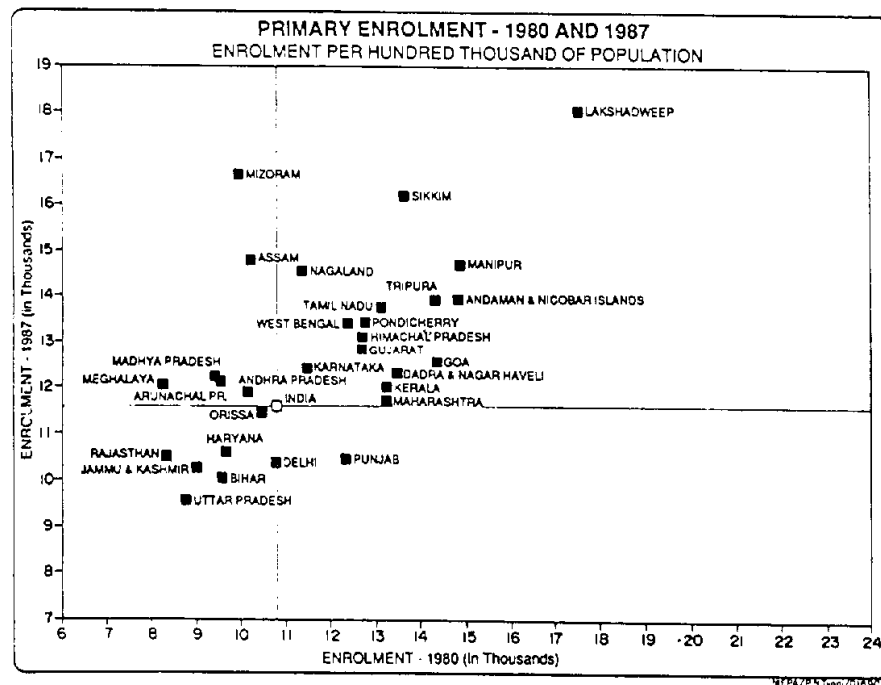
Figure 2

14.4.3 No doubt, efforts have been made in the past to deal with the problem of inter-State disparities by special planning and allocation of funds for educationally backward States/UTs. For example, at present Andhra Pradesh, Orissa, Bihar, Assam, Arunachal Pradesh, West Bengal, UP, Madhya Pradesh, Rajasthan and J&K have been identified as educationally backward States. This has been done based on the advice of the Sixth Plan Working Group on Elementary Education. The reason for identifying these States as educationally backward was that they accounted for more than 75% of those who were not enrolled for Elementary Education. This by itself is not an appropriate criterion for determining educational backwardness. Apart from this, consequent on State being the level at which backwardness has been determined, backward districts even as per this criterion in other states have been left out. Even in these States identified as educationally backward, there are districts which do not come under this definition. In other words, while the acceptance of the concept of educationally backward States/UTs, inter-State disparities have begun to inform educational planning and allocation of funds, the phenomenon of inter-district and inter sub-district disparities is yet to gain due recognition in planning, though these are of specially greater significance than inter-State disparities in the area of education.

14.4.4 No doubt an area of concern in this context is the lack of easily available sub-district and area specific data on disparities. With the clear and right emphasis on decentralised planning in the Approach Document to the Eighth Five Year Plan, preparation for the same cannot be further postponed. It is the balanced development through disaggregated target setting that will constitute the appropriate' developmental

response to regional social movements such as those in Jharkhand, Uttarkhand, Bodoland etc.

Recommendations:

(i) While broad goals like universalisation of elementary education and vocationalisation of school education and education for illiterate adults have to be spelt out in terms of being achieved by certain deadline years, numerical target setting should not be an exercise flowing top downwards. Target should be fixed in a disaggregated way at the base level, keeping in view the levels of educational development and disparities reflected therein, and thereafter collated to state levels.

(ii) Disaggregated target setting, besides being area specific should even be for different socioeconomic segments and ethnic groups, particularly in the context of fulfilling the constitutional mandate for ensuring equality and social justice.

(iii) Educationally backward areas should be identified at the district and sub-district levels according to the criteria acceptable to all the States. The States on their part should prepare district, block and village level profiles to facilitate meaningful planning for educational development.

(iv) 'Educational content planning should be diversified providing full' scope for alternative learning strategies, models of non-formalising the schools etc. This should be done within the overall framework of national core curriculum.

Educational Complexes

14.5.1 The idea of School Complexes was mooted as an innovation in the school education system by Education Commission (1964-66) which observed that such an orqanisation would have several advantages in helping to promote educational advances. Firstly, it would break the benumbing isolation under which each school functioned; it would enable a small group of schools working in a neighbourhood to make a cooperative effort to improve standards; and it would enable the State education departments to devolve authority to functional levels.

14.5.2 The State Governments of Rajasthan (1967) , Haryana (1969- 70) , Punjab, UP, Tamil Nadu, AP (1970) and Bihar (1975) introduced the scheme in one form or the other. The Punjab Education Department formed school complexes by attaching one or two middle schools to High or Higher Secondary schools falling within a radius of eight kilometres. This was only to disburse salaries on time. Maharashtra Government started RAPPO Based Programme of school improvement (1977- 78). All the States have given up, except Maharashtra.

14.5.3 The POA speaks of school complexes as already brought out earlier. But it is apparently a limited concept of bringing schools together for sharing and exchanging of resources including personnel. While they have been envisaged as institutions with wide ranging functions relating to the running of schools, they are not apparently conceived within an autonomous framework. The inspection functions of the school complex, according to the POA, are also to be in addition to the normal inspection functions of the district/block level inspecting authorities.

14.5.4 In the opinion of the Committee, net working of the institutions should be much more broad based not confined to schools alone, rather, they should be Educational Complexes, as distinct from school complexes. The Committee views the concept of Educational Complexes within the framework of 'local area planning' commended by the Approach Document for the Eighth Five Year Plan approved by the National Development Council. The long term objective is to liberate the schools from the line hierarchy and the policing by the bureaucratic inspectorate systems. This objective is assigned because, as of now, the teachers and heads of schools routinely blame the management structure for their inability to perform. Consequently accountability is shifted to those who are expected to manage and supervise education from a distance. The Committee is aware that there could be expression of considerable cynicism about the chances of the Educational Complexes working satisfactorily. But is is only fair that this innovation is given a reasonable chance for a trial. The justification is that, in any case, far too many educational institutions are stagnating at a low or higher level of attainment because of lack of opportunities for interaction and the consequent absence of synergic alliance. There are also cases of successful experiments of local area development through synergic alliances of parallel institutions and convergence of related services.

Recommendation:

On a pilot basis, at least one Educational Complex may be established in every district during the Eighth Five Year Plan so as to develop a functional model. At the pilot stage full administrative and financial support should be given to these Complexes. The features of these Complexes are described below:

- The Management model may be that of a local college, a high school or group of high schools and the associated middle and primary schools coming together in a cluster. The Complex may work in co- ordination with Panchayati Raj institutions as well as local development and social welfare agencies, voluntary or Government. The university serving the region may affiliate itself with this Complex. The university may help in the development of the Complex through its faculty, students and technical resources. There could be a memorandum of understanding between the Complex and the university on the one hand, and the Complex and the local body, on the other. The Complex will follow its own self-monitoring system. Parallel systems of monitoring through the university, District Board of Education, local body, resource agencies (SCERT/SIE/DIET) etc. could coexist. The Complex should be provided with adequate intellectual resources as well.

- In the long term, these Educational Complexes may come under the umbrella of Panchayati Raj institutions/local bodies. The details of devolution of responsibilities at different tiers of education will no doubt depend upon the legal framework that may be designed by the State for the purpose.

- The management of education in the Complexes should be the job of professionals, i.e. the teaching community. Various aspects like curriculum, syllabi, content and process, evaluation, monitoring, teacher training and modes of delivery of education to different segment of the society will be the responsibility of the teaching community itself.

- In discharging this responsibility, teachers will closely interact with the community they are serving. In this arrangement, the quality of education will not be determined by a body of inspectors or functionaries external to the educational system. Consequently, education being directly in the hands of those for whom it is a matter of day-to-day concern, its quality should significantly improve.

- While the running of the Educational Complexes will be the joint concern of the community and the teachers who are internal to the system, their funding will necessarily come from the State Governments and other local bodies that may have jurisdiction. For the purpose of ensuring that the financial resources deployed by them really result in efficient delivery of education, the State Governments. and the local bodies may interact with the Educational Complexes through District Boards of Education and Block-level and village-level Education Committees. These bodies will consist of educationists, teachers, social workers, representatives of voluntary organisations, trade unions and official development agencies as well as representatives of disadvantaged sections such as Scheduled Castes and Tribes, Other Backward Classes, women etc.

- The Head of the educational institution, the Headmaster /Headmistress/Principal shall have meaningfully delegated authority with the teachers being centre-stage.

- The community also will need to be made aware of simple parameters with reference to which they can make their own assessment of the learning outcome from the schools, in both the cognitive and the affective domains.

- The Educational Complexes should be autonomous registered societies in structures and they should be vested with the following powers:

* To take decisions, in Council, on all matters on which powers have been delegated which should include powers for recruitment of teaching and non-teaching staff, their transfers within a well defined transfer policy, discipline, control finance etc.

* To organise professional orientation and updating of all the teachers and administrators, so as to make them perform better on the job and to increase their sense of professionalism.

* To develop suitable support materials and teaching aids.

* To engage in mutual and on-going administrative and academic supervision of schools, through a systematic and agreed programme of action, using the resources of DIETs and SCERTs, where available.

* To mobilise resources from within the community, to supplement and complement the Government grants. -

* To prepare and implement the action plans for universalisation of education, for those who come within the area of the Complex.

* To plan action programmes for adult and continuing education, aiming at functional education for all and where possible also literacy; and accordingly, to organise programmes of skill, aptitude and knowledge education for the various sections in the area of the Complex.

Indian Education Service

14.6.1 NPE, 1986 advocates establishment of the Indian Education Service as an All-India Service in the following words:

"A proper management structure in education will entail the establishment of the Indian Education Service as an All-India Service. It will bring a national perspective to this vital sector. The basic principles, functions and procedures of recruitment to this service will be decided in consultation with the State Governments". 14.6.2 This was further elaborated in the Programme of Action as follows:

"The establishment of an Indian Education Service will be an essential step towards promoting a national perspective on management of education. Basic principles, functions and procedures for recruitment to this service will call for detailed consultation with the States so that the States adequately appreciate the need and benefit of this structure, particularly in the context of attracting talented personnel and giving them a stature commensurate with their responsibilities. Detailed proposal inclusive of alternate career paths for the cadre, processes of selection and induction of existing manpower engaged in education, arrangements for mobility and secondment vis-a-vis the academic system will require to be worked out in consultation with the State Governments".

14.6.3 In order to examine the case for formation of the Indian Education Service, the Committee went into its whole history which is as follows:

- This service was first constituted in British India in the year 1886. It ceased to exist from 1924 as a result of the fact that education had become a 'transferred' subject. In independent India the proposal to constitute the service was first made in 1961. This followed, so to say, the advice of the States Re-organisation Commission (1955) for constitution of more All-India Services. Over the years, subsequently, the need for creation of the IES has been urged repeatedly as per details furnished below:

By --

National Integration Conference, 1961

National Education Commission, 1964-66

Rajya Sabha, 1965

Chief Minister's Conference, 1965

Ninth Education Ministers' Conference, Madras, 1966.

National Commission on Teachers I, 1984.

Estimates Committee of the Seventh Lok Sabha, 1983-84

Sarkaria Commission, 1983-87

NPE, 1986 (as already stated).

- In fact, during November, 1965, the Cabinet approved a proposal to introduce a law in the Parliament for the creation, inter alia, of the IES by carrying out necessary amendments to the All- India Services Act, 1955. This was in pursuance of action that had been taken by the then Ministry of Education by circulating to the States a draft outline of the proposed service and obtaining responses there to from them. This bill, to amend the All-India Services Act was also introduced in the Lok Sabha in November, 1965, but it lapsed. The question of re-introduction of the Amendment Bill was considered by the Cabinet in 1968 which decided that no further action need be taken.

- The rationale for the creation of the Indian Education Service had been spelt out on various occasions by the above bodies in terms of modernisation of administration, securing national integration, checking narrow parochialism and divisive tendencies within the national system of education, efficient implementation of all-India policies, securing uniformity in approach to education and educational standards all over the country, interchange of experience between the Centre and the States etc.

- With reference to the proposal circulated by the Government of India, State Governments had responded differently. The response had ranged between acceptance of the concept of the Service and reservations in regard to it. Reservations were largely on matters relating to encadrement of administrative posts at district level, inclusion of teaching and research posts, percentage of promotion quota for the State Service officers, ignorance of regional languages on the part of the functionaries, autonomy of States etc.

- After the formulation of NPE, 1986, the CABE Sub- Committee on Management of Education constituted a group consisting of Prof. Rais Ahmed, Prof. T.V. Rao, Shri V.P. Raghavachari and Prof. Satya Bhushan, Director, NIEPA to prepare broad

recommendations on the constitution of the Service. Accordingly, it gave its recommendations in a self- contained paper and presented the same to the Government in January, 1989. This was to have been discussed in a full meeting of the CABE. However, this has not so far been discussed- (It was also considered by the Government that it would be appropriate to take further action on the matter after knowing the final shape of the Constitution Amendment Bill concerning Panchayat Raj System).

14.6.4 Having examined all aspects of the matter in its historical and current perspective the Committee has come to the finding that creation of Indian Education Service need not be pursued for the following reasons:

* The very history of the case clearly brings out that there have been strong reservations in various quarters on its formation. This is evidenced by the fact that even after introduction of a Bill in the Lok Sabha for the purpose, it was allowed to lapse.

* There have been negative responses from the States in the past not merely on grounds of administrative details regarding encadrement of functionaries at various levels, but on grounds of autonomy of States as well.

* Even the Education Commission 1964-66 recommended constitution of the service only in a modified forum, that is, by creation of a cadre of educational administrators, teaching and research functionaries in universities and colleges being excluded. (For these functionaries the Commission recommended reasonable parity in scales of pay with those meant for educational administrators under the proposed Service) In any case, functionaries of the Indian 'Administrative Service, as of now are being deployed from time to time as educational administrators at the State and Central level.

* The basic approach of the Committee being one of strongly advocating decentralised mechanisms; it is unable to support the concept of an All-India Service for Education.

14.6.5 However, there should be arrangements for involvement of academics at all stages of educational administration. In the Government of India, this facility exists because of operation of an Educational Advisory Service. As of now, 37 posts in the 'Department of Education have been brought under the Educational Advisory Service in levels ranging from that of Under Secretary to Additional Secretary to the Government of India. This constitutes about 36 per cent of the total strength of the staff of the Department of Education at these levels. (It may be mentioned in this context that some of the reputed Secretaries to the Government of India in the Education Department were themselves academics). By operation of separate recruitment rules governing this Service, manpower is drafted on deputation and short term contracts from a fairly diversified recruiting ground including universities, colleges and educational resource institutions. The Advisory Service posts are operated largely in certain special areas like technical education, languages etc. This system has helped in taking sound administrative decisions on academic matters of a specialised nature. Operation of Educational Advisory Service of this nature at the state levels would also go a long way in toning up educational

administration. Members of this Service may also be seconded on deputation to positions in the University systems.

Recommendation

Instead of creating the Indian Education Service, Cadres of Educational Advisory Service should be created in the States on the model of the Government- of India. (In the Government of India, larger, number of posts should be operated under the Advisory Service.)

Involvement of Voluntary Organisations

14.7.1 As per NPE, non-government and voluntary effort including that of social activist groups is to be encouraged and financial assistance provided to them. The POA says that voluntary agencies and social activist groups will be involved in a much larger scale for the successful completion of programmes likes elementary education including non-formal education, ECCE, adult education, education for the disabled etc. While the Committee also does look upon voluntary organisations and activist groups as expressions of people's own initiatives and instrument of social change, it does not look upon them as mere implementing agencies of government for undertaking officially sponsored individual schemes and programmes.

14.7.2 The Department of Education has been operating fifteen schemes involving voluntary agencies in the areas of adult education, school education, non-formal education, higher education value education, book promotion, language development and international co- operation. During the year 1987-88, an amount of Rs. 12.78 crores was released to 1646 voluntary agencies, implementing programmes in the above mentioned areas. Bulk of these agencies are operating in the areas of adult education (670) and language development (909). In terms of financial assistance released, the highest share goes to voluntary agencies in the area of adult education. Out of a total grant of Rs.12.78 crores released during 1987-88, an amount of Rs. 9.44 crores was released to voluntary agencies in the adult education sector.

14.7.3 While liberal flow of funds of the above nature for securing people's participation through voluntary agencies is unobjectionable, care should be taken to see that the same does not dilute the voluntary spirit of these institutions or distract them from their originally chartered courses of action.

Recommendation

In the matter of securing participation of voluntary agencies, the Preferred path should be for the Government to respond to the initiatives of voluntary organisations with reference to their own programmes, rather than voluntary agencies being mobilised to respond to

patternised Government programmes, At the same time, it is equally important that voluntary groups realise the adverse impact that receiving large scale funds from government and foreign sources is likely to have on their own voluntary character. Transparency in the working of voluntary agencies should be ensured in order to make them accountable to the community. For this purpose, a system of social audit should be established. Decentralised mechanisms for monitoring the work of voluntary agencies at the local levels should be evolved.

Co-ordination and convergence services

14.8.1 In the context of decentralised management, coordination between the Department and agencies connected with education and convergence of services rendered by them are very vital in bringing about orderly development of education. it is in the context of these elements of decentralisation namely coordination and convergence of services that the concept of human resource development as envisaged in the NPE has been examined by the Committee.

14.8.2 Even before the formulation of NPE, 1986 the Ministry of Human Resource Development had been formed (September, 1985) under the charge of a senior Cabinet Minister. Portfolios having immediate relevance to human resource development, namely, Education, Youth Affairs & Sports and Women & Child Development headed by separate Secretaries to the Government of India were assigned to him. Yet another Secretary (Planning & Coordination) under the Minister of H.R.D. who was referred to as Secretary, H.R.D. by informal rules of practice.

14.8.3 The objective of the creation of a Ministry of H.R.D. would seem to have been the development of human resources as central to the efforts at accelerating economic development. A coherent approach towards creating institutions and policies to enable utilisation of human resources in the best way through effective coordination amongst various official and unofficial agencies was envisaged. Upgrading skills and productivity of the people to alleviate basic poverty in the economy, creation of a balance between the structure of skills available in the economy and its dynamic requirements, avoidance of waste of scarce resources by development of skills for the utilisation of which opportunities were available only abroad and the implications that all these specific steps had for the education system, would seem to have been overall rationale for the creation of the Ministry of H.R.D.

14.8.4 Prior to the Policy, a Cabinet Committee on Human Resource Development had also been constituted under the Chairmanship of the Prime Minister (1985-86). The Members of this Committee were Ministers of Human Resource Development, Agriculture, Labour, Health & Family Welfare and Welfare, and Deputy Chairman, Planning Commission. The terms of reference of the Committee were:

i) To consider all aspects of policies and programmes impinging directly on the development of human resource and its potential, and to review their implementation.

ii) To evolve broad guidelines for incorporation of a definite human resource development approach in various sectoral plans.

iii) To consider specific programmes of Ministries/ Departments relating to human resource development and to suggest steps to obtain optimum results.

iv) To assess th response of States to these policies and programmes and suggest appropriate measures for better development and utilisation of human resource.

v) To consider the problems in mobilising non- governmental organisations in programmes relating to human resource development.

vi) To consider special programmes for socially and economically disadvantaged and physically handicapped sections of the society.

14.8.5 The above mentioned terms of reference given to the Cabinet Committee on H.R.D. would also bring out that the intention of the Government was clearly to bring about coordination between the various Departments/Ministries engaged in some aspect or the other of human resource development coming within the areas of their competence.

14.8.6 The Cabinet Committee on H.R.D. did not meet at all. Coordination between the various Departments in the ministry so as to bring about human resource development through convergence of services rendered by them is also not seen to have taken place effectively. This is reflected by the simple fact that the parameters of NPE, 1986 relating to Early Childhood Care and Education (ECCE), Youth Affairs & Sports and Culture remain unfulfilled. Earlier on, the Department of Education used to operate a scheme for providing assistance to ECE Centres. With reference to the NPE 1986 stipulation that ECCE could be suitably integrated with the Integrated Child Development Services (ICDS) Programme this scheme was transferred to the Department of Women & Child Development. That Department concentrating as it does on expansion of ICDS as such to cover larger areas (as distinct from larger allocations for and emphasis on, any specific component of activities, has not been able to enrich pre-school education by itself significantly though there has been some expansion of the ECE scheme.

14.8.7 The fact that coordination as between the Department of Education on the one hand and Departments of Culture, Youth Affairs & Sports on the other has not been brought about pursuant to paras 8.1 to 8.3 and 8.22 of NPE has already been brought out in the chapter on 'Content and Process of Education'.

Recommendation

The Ministry of H.R.D. should undertake a serious review of the situation regarding inter-departmental coordination, to bring about convergence of services coming within the purview of the individual departments under the Ministry'. The Ministry should also lay down specific modalities of bringing about this coordination and convergence of

services. An appropriate institutionalised mechanism should be created for the purpose by the Ministry. Interdepartmental coordination should percolate down to the grass root levels for the purpose of bringing about convergence of services particularly, for facilitating girls' universalisation of elementary education through- support services such as-provision of access for them to water, fodder and fuel.

Central Institutions: Functioning style

14.9.0 Educational management within the Government is to be viewed afresh in the new decentralised perspective proposed above. All major resource institutions and standard setting agencies at the Central, State or District level may redefine their respective roles. so as to strengthen institutional capabilities at the local levels all along the line, rather than building themselves up into remote control agencies.

Recommendation

Institutions like the NCERT and UGC should bring about a sea change in their style of functioning, confining themselves to the role of co-ordination and providing resource support. They should allow institutions in the State and sub-State levels to take initiatives and bring about' educational reforms in the areas of their competence., In a way relevant to the local circumstances. (It As keeping this in view that recommendations have been given in the relevant chapters for local area planning on 'matters such as formulation of curriculum packages, preparation of designs and courses for vocational education, designing of university level courses etc.)

Centrally Sponsored Schemes

14.10.1 The NPE, having invited attention to the Constitution Amendment, 1976, including Education in Concurrent List, has spelt :Out its implications as substantive, financial and administrative. It has Also called for a new sharing of responsibility between the union Government And the States (para 3.13). Having mentioned that the resources, to the extent Possible, would be raised by mobilising donations calling upon the beneficiary communities to maintain school buildings and "supply consumable and effecting savings by efficient use of facilities, 'the Policy has emphasised (para 11.2) that the Government and the community in general would find funds for the crucial programes.

14.10.2 Pursuant,to the Policy and POA, several important Centrally Sponsored Schemes were taken up, particulars of which, are presented in the following Table:

Table 1

Name of the Scheme	Outlay approved for the Seventh Plan (for three years 1987-88 to 1989-90)	Assistance made available to the States during the Seventh Plan (for three Years 1987-88 to 1989-90)
	(Rupees in crores)	
Operation Blackboard	742.25	373.32
Restructuring and reorganisation of teacher education	38.40	
Establishment of DIETS	288.59	104.73
Strengthening of Secondary Teacher Training Institutes	132.19	
Strengthening of SCERTs	2.00	
Non-formal Education	230.45	92.46
Environment education	37.50	2.71
Science Education	161.18	78.61
Vocationalisation	409.84	125.65
Education technology	115.90	28.95
National Literacy Mission	340.00	159.24
Total ...	2,498.28	966.67

14.10.3 When the question of justifiability of continuance of Centrally Sponsored Schemes came up for detailed consideration in the Committee, particularly in the context of its general approach to bring about decentralised planning modalities, on behalf of the Government the following points were very strongly urged for their continuance:

- The avowed objectives of bringing education under Concurrent List by virtue of Constitutional Amendment of 1976 include removal of educational disparities, universalisation of elementary education etc.

- A group of officials (Baijal Committee) constituted by a Committee of the NDC has justified the continuance of Centrally Sponsored Schemes, particularly the on-going ones, in the area of education.

- In any case, the situation is not one of any over-centralisation. The on-going Centrally Sponsored Schemes account for an annual outlay of over Rs.300 crores. This is only 2% of the overall national outlay of Rs.14,000 crores per annum Plan and Non-plan for Education.

- Centrally Sponsored Schemes are confined to the crucial areas of elementary and school education. There are no Centrally Sponsored Schemes for Higher and Technical Education sectors.

- Earlier experience with the States in leaving education programmes to be funded by them without support from Centrally Sponsored Schemes showed that in crucial areas like vocationalisation of school education, no progress had been made. Education always tended to get relegated to background in the process of Plan formulation and budgeting by the States with the result that adequate resources were not being given for crucial areas. States most often ended up by providing for minimal expansions, virtually no maintenance of school infrastructure and mere payment of salaries to teachers and non-teaching staff.

- The Sarkaria Commission has specifically supported the continuance of the Centrally Sponsored Schemes.

14.10.4 While Centrally Sponsored Schemes may or may not be justifiable from the point of view of achieving the objectives of universalisation of elementary education, removal of educational disparities etc., in the overall framework of the Committee's recommendation for decentralisation and on account of the emphasis laid on 'local area planning' by the Eighth Five Year Plan Approach Document approved by the National Development Council, the Committee is unable to categorically support their continuance. However, the Committee is also conscious of the fact that sudden disruption of the initiatives already taken in crucial areas should be avoided. As a rule of practice, the Centrally Sponsored Schemes run for a full five year plan period. The on-going Centrally Sponsored Schemes started in pursuance of NPE, 1986 have been effectively under implementation only for a period of two years. In his address in the National Development Council meeting in June, 1989 the Union Finance Minister suggested classification of the Centrally Sponsored Schemes into the following three categories for the purpose of deciding on their future implementation:

a) Those which are to be continued;

b) those which should be transferred to the State Governments without any conditions; and

c) those which should be transferred to the State Governments with funds being provided on an earmarked basis - that is, without flexibility to the State Governments for diverting the funds for expenditure on other schemes.

Recommendations:

The on-going Centrally Sponsored Schemes started in pursuance of NPE, 1986 have been under implementation only for two years. They may continue till end of 1992-93. The status of implementation of these schemes may be reviewed well before the end of that year. In any case, no new Centrally Sponsored Schemes may be initiated unless they be for the purpose of securing decentralisation of education management at a grass-root level.

People's movement

14.10.5 The Committee has viewed education as a process that can make progress only if the people are empowered. The teachers, students, the academics-and the community will have constant interfac at every level and process of education. This is true of non-formalising the formal educational system, vocationalisation of school education, transformation of the university system into an instrument of social and economic change, pressing the technical education system into service for the community imparting adult education etc..

Making the system work

14.10.6 Any reform to be successful should have a system which is responsive and self-propelling. This is especially true of reform of the educational system in our country of diverse communities, languages and cultural traditions. It is keeping this in view that the Committee has designed its suggestions for revision of the Education Policy, particular mention should be made of the folowing features of the proposed modifications to the Policy:

- Decentralisation of planning and implementation and monitoring.

- Empowerment of the community, particularly women.

- A fair and equitable deal for Scheduled Castes/Scheduled Tribes, women, the handicapped and minorities.

- Participation, by wide ranging groups of people in the process of education.

- Functional autonomy for academic institutions and their staff.

The above features built into the system will invest it with the resilience required to respond to fast changing developments. They will also operate as self-triggering mechanisms which would make the system dynamic and work.

CHAPTER 15

RESOURCES FOR EDUCATION

Background

15.1.0 Education has tended to be given comparatively lower priority in the matter of sectoral allocation of resources. Allocation for education cannot be wholly treated either as investment outlay or as consumption outlay. Gestation period for investment in education to yield results is also too long. Difficulties are encountered in accurately estimating or quantifying the returns on investment in education. Reason is that the functional relationship between inputs and outputs in education is indeterminate. The net result is that, in India also as in other developing economies, education is treated as a social service sector and often gets for itself only the residual resources after allocations to the so-called productive sectors.

15.2.0 Though education has been in the Concurrent List in the Constitution since 1976, it remains primarily a State activity. Bulk of the investments is made by the State Governments. Free and compulsory education is expected to be provided by the States for all children upto 14 years of age. In most States education is free in the entire school stage. Upto class XII education is free for girls in all the States. The fee structure for higher education in the colleges and universities has virtually remained unchanged for many years. The pattern of educational development has, consequently, come to be dependent on the availability of public resources for education. On account of increasing resource crunch, however, share of Education in plan allocations has been declining over the years. Allocations have come to be sub-optimal. Table 3 below may be seen for share of Education in Five Year Plan outlays/expenditures.

Present Picture Regarding Funding of Education in India

15.3.1 Education is now funded by various sources - Central and State Governments, local bodies and private contributions. Data on source-wise contribution of finance to Education in India (as far as they are available) are furnished in Table 1 below :

Table 1

Source-wise Contribution of Finances to Education in India

(percent)

	1950-51	1960-61	1970-71	1980-81
Government Sector Central and State Governments	57.10	68.00	75.60	80.00
Local Governments (Zilla Parishads, municipalities, Panchayats)	10.90	6.50	5.70	5.00
Private Sector				
Fees	20.40	11.20	12.80	12.00
Endowments etc.	11.60	8.30	5.90	3.00
Total	100.00	100.00	100.00	100.00
	(114.00)	(344.40)	(1118.30)	(4687.50)

Note : Figures in brackets - in crores of rupees.

Source : Education in India: and Planning Commission for the year, 1980-81, quoted in NIEPA Journal, July, October, 1987.

15.3.2 It may be seen from the above Table that the Central and State Governments account for the bulk of the funding of Education in India. The share of the private sector is quite small and that of local bodies almost negligible.

15.4.1 Presented in the following Table is the picture regarding Central and State share in Plan expenditure :

<div align="center">

Table 2
Contribution of Centre and the States to Plan
Expenditure on Education in India

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<div align="right">

(percentage)

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Five Year Plan	Central Govt.	State Govt.	Total
First	25	75	100 (153)
Second	25	75	100 (273)
Third	26	74	100 (589)
Fourth	33	67	100 (823)
Fifth	30	70	100 (930)
Sixth	30	70	100 (2945)
Seventh	37	63	100 (6383)

Note : Figuress in () are in crores of rupees

Source : Five Year Plans

15.4.2 The above Table would show that during the Fifth and Sixth Plans, Central share came down from the level of the Fourth Plan. Of course, during the Seventh Plan, the share has increased.

15.5.0 More often, Plan expenditure is lesser than the original outlays as may be seen from the following Table.

Table 3

Differences* between Plan outlays and expenditure in Education

(Rupees in crores)

Five Year Plan	Outlay	Expenditure	Column (2)-(3)	Column (4) as % of (2)
1	2	3	4	5
First	170 (17.2)	153 (7.9)	-17	-10.00
Second	177 (6.2)	273 (5.8)	+96	+54.23
Third	560 (7.5)	589 (6.9)	+29	+5.20
Fourth	822 (5.2)	786 (5.0)	-36	-4.40
Fifth	1284 (3.3)	930 (3.2)	-354	-27.60
Sixth	2524 (2.6)	2835 (2.6)	+311	+12.30
Seventh	3230 (3.9)	2998 (3.6)	-232	-7.20

Note : () % to total plan outlay/expenditure.

: Difference occurred on account of more or less resources made available through the annual plans during the Plan periods and also on account of actual performance.

Source : A Handbook of Education and Allied Statistics; Economic Survey 1984-85 and Department of Education, Ministry of HRD.

15.6.1 The following Table brings out the position regarding Centre- State partnership in financing non-plan expenditre on Education :

Table 4

Centre-State Partnership in Financing
Non-plan Expenditure on Education

<div align="right">(percent)</div>

Five Year Plan	Central Govt.	State Govt.	Total
Second	14	86	100 (577)
Third	16	84	100 (1056)
Fourth	4	96	100 (4820)
Fifth	6	94	100 (8009)
Sixth	6	94	100 (23434)
Seventh	6	94	100 (44913)

Note : Figures in () are in crores of rupees.

Source : Department of Education, Ministry of Human Resource Development.

15.6.2 The above Table would show that the share of the Central Government in non-plan expenditure has come down to 6% during the Sixth Five Year Plan, State Governments' share having gone upto 94%.

15.7.0 While the share of Education in the revenue budget is reasonably high, on the Capital side its share is almost negligible. The share of Education in Central budget as a percentage of Revenue and Capital expenditure is only 1.7%. In the budgets of States and UTs, the share is 18.9%. In this context, the following Table may be seen :

Table 5

Budget Expenditure (actual) on Education by Education
and Other Departments, 1985-86

	Expenditure (Rs. in crores)	Total expenditure on all sectors (Rs. in crores)	% of total Budget
Centre			
Revenue.	528.50	33384.00	1.6
Capital	-	8899.60	-
Loans and advances	2.93	138.07615	-
Total	531.43	56090.75	0.9
State Union Territories			
Revenue	6928.47	33707.41	20.6
Capital	114.24	5064.30	2.3
Loans and advances	11.83	3711.29	0.3
Total	7054.54	42483.00	16.6
Total			
Revenue	7456.97	67091.41	11.1
Capital	114.24	13963.90	0.8
Loans and advances	14.76	17518.44	0.1
Total	7585.97	98573.75	7.7

Source : Analysis of budgeted expenditure on education, 1985-86 (Department of Education, Ministry of Human Resource Development)

15.8.1 The total Central and State Plan expenditure has also been falling. It was only 3.55% for the seventh plan. The below may be seen for data on intra-sectoral resource allocation for Education during the various plans

Table 6

Intra-Sectoral Resource allocation for Education in the Five Year Plans (Centre and States)

(Figures in crores of rupees) - (Figures in brackets are in %)

| | EXPENDITURE | | | | | | : Outlay | |
	1st Plan	2nd Plan	3rd Plan	Plan Holiday	4th Plan	5th Plan	:6th Plan	7th Plan +
Elementary*	85 (56)	95 (35)	201 (34)	75 (24)	239 (30)	317 (35)	906 (36)	1830 (29)
Secondary**	20 (13)	51 (19)	103 (18)	53 (16)	140 (18)	156 (17)	398 (16)	1000 (16)
University	14 (9)	48 (18)	87 (15)	77 (24)	195 (25)	205 (22)	486 (19)	750 (12)
Other General	14 (9)	30 (10)	73 (12)	37 (11)	106 (14)	127 (14)	457 (18)	2121 (33)
Total General	133 (87)	224 (82)	464 (79)	241 (75)	680 (87)	805 (88)	2247 (890	5710 (89)
Technical	20 (13)	49 (18)	125 (21)	81 (25)	106 (13)	107 (12)	278 (11)	682 (11)
Grand Total	153 (100)	273 (100)	589 (100)	322 (100)	786 (100)	912 (100)	2524 (100)	6383 (100)
% to total plan outlay	7.86	5.83	6.87	4.86	5.04	3.27	2.59	3.55

Note :   * includes pre-school education

** includes teacher education, social education (youth serv

+ Draft

Source   :   A Handbook of Education and Allied Statistics and Seventh Five Year Plan

The picture reflected by the above Table is :

15.8.2 The share of Elementary Education has come down from the level of 56% in First Plan to 29% in the Seventh Plan. The share of Secondary Education has remained somewhat stable with marginal differences between 13% and 18%. Higher (College and University Educaion) has expanded over the years from 9% during the First Plan to 22% in the Fifth Plan. (Of course, share of Higher Education as a percentage of outlay during the Sixth and Seventh Plans has come down to the levels of 19% and 12% respectively).

15.9.1 The status of household expenditure on Education in India is reflected in the following Table.

Table 7

Household Expenditure on Education in India

Expenditure (in Rs. Crores)			Per Capita Expenditure in Rs.		Total as %age of GNP
At current prices		At 1970-71 prices	At current prices	At 1970-71 prices	
1970-71	896	896	16.6	16.6	2.05
1976	1253	844	20.6	13.9	1.9
1981	1928	817	28.4	12.0	2.1
1982-83	2568	896	36.2	12.6	2.1
Rate of Growth %	9.2	0	6.7	(-)2.4	

Source : National Accounts Statistics (Central Statistial Organisation)

15.9.2 The above Table shows that at constant prices, growth of household expenditure between 1970-71 and 1982-83 has been nil. Per capita household expenditure has, in fact, had a negative rate of growth.

Resources for Education as envisaged in the National Policy on Education, 1986

15.10.1 The National Policy on Education, 1986 spells out the approach to mobilisation of resouces for Education as follows :

"The Education Committee of 1964-66, the National Education Policy of 1968 and practically all others concerned with education have stressed that the egaliterian goals and the practical, development oriented objectives of Indian society can, be realised only by making investments in education of an order commensurate with the nature and dimensions of the task.

"Resources, to the extent possible, will be raised by mobilising donations, asking the beneficiary Communities to maintain school buildings and supplies of some, consumables, raising fees at the higher levels of education and effecting some savings by the efficient use of facilities. Institutions involved with research and the development of technical and scientific manpower should also mobilize-some funds by levying a cess or charge on the user agencies,, including Government departments, and entrepreneurs. All these measures will be taken not only to reduce the burden on State resources but also for creating a greater sense of responsibility within the educational system. However, such measures will contribute 'only marginally to the total funding., The Government and the community in general will find funds for such programmes as the universalisation of elementary education; liquidating illiteracy, equality of access to educational opportunities to all sections throughout the country; enhancing the social relevance, quality and functional effectiveness of educational programmes; generating knowledge and developing technologies in scientific fields crucial to self-sustaining economic development; and creating a critical consciousness of the values and imperatives of national survival.

"The deleterious consequences of non-investment or inadequate investment in education are indeed very serious. Similarly, the cost of neglecting vocational and technical education and of research is also unacceptable. Sub-optimal performance in these fields could cause irreparable damage to the Indian economy. The network of institutions set up from time to time since Independence to facilitate the application of science and technology would need to be substantially and expeditiously updated, since they are fast becoming obsolete.

"In View of 'these imperatives, education will be treated as a crucial area of investment for national development and survival. The National Policy on Education, 1968 had laid down that the investment on education be gradually increased to reach a level of expenditure of 6 per cent of the national income as early as possible. Since the actual level of investment has remained far short of that target, it is important that greater determination be shown now to find the funds for the programmes laid down in this Policy.

While the, actual requirements will be computed from time to time on the basis. of monitoring and review, the outlay on, education will be stepped up to the extent essential for policy implementation, in the Seventh Plan. It will be ensured that from the Eighth Five Year Plan onwards, it will uniformly exceed 6, per cent of the National Income."

National Policy on Education, 1986 and Contra-State Partnership in Education

15.10.2 In the following words, the National, Policy on Education, 1986, calls for a "Meaningful" partnership between the Centre and the States in regard to Education.

"The constitutional Amendment of 1976, which included Education in the Concurrent List, was a far-reaching step whose implications substantive, financial and administrative require a new sharing of responsibility between the Union Government and the states in respect of this vital area of national life. While the role and responsibility of the States in regard to education will remain essentially unchanged, the Union Government, would accept a larger responsibility to reinforce the national and integrative character of education, to maintain quality and standards (including those of the teaching profession at all levels), to study and monitor the educational requirements of the country as a whole in regard to manpower for development, to cater. to the needs of research and advanced study, to look after the international aspects of education, culture and Human Resource Development and, in general, to promote excellence at all levels of, the educational pyramid throughout the country. Concurrency signifies. a partnership which is at once meaningful and challenging; the National Policy will be oriented towards giving effect to it in letter and spirit."

Funding for Education According to Envisaged Perspective & Strategies

15.11.1 The perspective for Education, as for other Sectors, has been presented upto the year 2000 A.D. by the Seventh Plan document Under the chapter on "Development Perspective: Towards the year 2000" as follows: - "By the year 2000, illiteracy would be eliminated and universal elementary education would have been provided for all. children upto the age of 14. It is expected that drop-outs in the age group 6-14 would be reduced to negligible levels. Extensive provision would be made for continuing and recurrent education and Use of modern communication technology. There will be substantial vocationalisation of secondary education by the turn of the century. Non-formal education using a variety of means and methods, including video technology and computers, would play a significant role."

15.11.2 The Seventh Plan document lays down the strategy and pattern of growth of Education as follows: "Enrolment in elementary, education (Class I-VIII) is expected to increase by 25 million and cover 92 per cent of the population in the age-group 6-14 years by 1989- 90. In addition, non-formal systems will be used to bring closer the objective of universalisation of elementary education. Secondary school enrolment is expected to go up by 5 million partly through better utilisation of existing schools, and with a special emphasis on vocationalisation. Special efforts will be made to improve the quality of education. As part of this drive, model schools will be set up in each district to impart quality education to promising children, particularly those coming from rural areas. Adult literacy programmes will be pursued with the objective of covering all illitertes in the age-group 15-35 by 1990. In higher education and technical education, the emphasis will be on consolidation and improvements in quality."

Recommendations of The Eighth Finance Commission

15.12.1 Though Education- is conventionally treated as a developmental sector, the Eighth Finance Commission considered it as a non-developmental sector which deserved to be upgraded. For the purpose of upgradation, physical norms were followed by that Commission.

15.12.2 The State Governments gave requests to the Eighth Finance Commission aggregating to nearly Rs.4000 crores for appointment of additional teachers, provision of furniture and equipment, construction of buildings, provision of mid-day meals etc. The then Ministry of Education also emphasized the need for clearing the backlog of pucca buildings for primary and middle schools, conversion of single teacher schools into two-teacher schools, provision, of adequate inspecting staff and administration facilities. The 'Ministry also assessed the financial requirements for this purpose as over Rs.3000 crores. The Eighth Finance Commission disposed of the matter as follows:

"It seems to us that lack of pucca buildings for the primary schools and the existence of single-teacher primary schools constitute two basic weaknesses in the education system. Presently, 1,85,666 primary schools accounting for 40.88 per cent of total number of primary schools in all the 22 States are functioning in thatched huts, tents, etc. We- have decided that the States in which the percentage of primary schools without pucca buildings exceeds 40 per cent, should be helped with upgradation outlays to bring down the percentage of such primary schools to the all-India average, i.e. 40 per cent. We have assumed a unit cost of Rs. 40,000 for a school building of two class-rooms. We have added 30 per cent to the unit cost for the hill States. We have thus allocated Rs. 164.39 crores for the construction of 38,946 additional school buildings in 11 States to bring them to the all-India average of 60 per cent building satisfaction in respect of primary schools.

"Another facet of the-education sector, which caused us concern, was the preponderance of single-teacher primary schools in some States. Out of the 4,54,213 primary schools in the 22 States, 1,65,848 schools function as single-teacher schools. Thus, they form 36.5 per cent of the total number of primary schools. We have decided to extend our support to those States where the proportion of single-teacher schools exceeds 35 per cent, which is the all-India average. The States wherein the proportion of single-teacher primary schools exceeds 35 per cent are Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Mahrashtra, Meghalaya, Orissa, Rajasthan and Tripura. We have provided outlays for the appointment of 45,255 additional teachers to bring these States to the all-India level. In the computation of upgradation outlays, we have adopted State specific emolument-levels for each of the 11 States. We have thus provided Rs.122.01 crores. With this provision, it should be 'possible to raise the number of primary schools with two teachers or more, in the 11 States, to 65 per cent, which is the all-India average. We have provided a total sum of Rs.286.40 crores for upgradation of the education sector."

15.12.3 The upgradation grants were also to be monitored, as per the recommendation of the Eighth Finance Commission. The monitoring mechanisms suggested were State-level and Central level empowered committees of inter-departmental/ inter-ministerial nature, the former headed by chief Secretaries of States and the latter being convened by the Finance Ministry. The Central level Empowered Committee was also given flexibility in terms of transfer of grants from one scheme to another within each sector, alter physical targets depending upon escalation in prices or alterations in physical norms etc. Release of money was designed to be 10% as initial on account advance; 30% after receipt of intimation regarding institutional arrangements; and the balance according to actual physical progress.

15.12.4 Upgradation assistance provided to the state Government's as per the recommendations of the Eighth- Finance Commission has been confined to four 'Years commencing from 198586, A detailed statement of release of assistance to the State.' Governments, for upgradation in terms of provision of school buildings and teachers may be seen in Table 8 below:

Table 8
STATEMENT OF RELEASE OF ASSISTANCE FOR UPGRADATION OF SCHOOLS BASED ON RECOMMENDATIONS OF THE VIII FINANCE COMMISSION 1985-86 TO 1987-88

(Rs. lakhs)

	1985-86 Capital 1985-66 on A/C	1986-87 Revenue P	Revenue F	Capital P	Capital F	1987-88 Revenue P	Revenue F	Capital P	Capital F On A/C	For completed works
1. Andhra Pradesh	299.20	3900	232.00	148	44.40	6000	522.00	327	385.08	65.40
2. Assam	576.10	-	-	-	-	-	-	-	806.54	-
3. Bihar	968.80	-	-	802	304.36	-	-	-	1214.29	-
4. Goa	-	-	-	-	-	-	-	-	48.00	-
5. Himachal Pradesh	175.35	-	-	-	-	-	-	-	245.49	-
6. Jammu & Kashmir	174.18	-	-	-	-	-	-	-	243.85	-
7. Madhya Pradesh	-	7000	110.15	-	-	7000	449.85	-	-	-
8. Manipur	208.54	-	-	-	-	-	-	-	291.95	-
9. Meghalaya	168.11	300	5.00	-	-	-	-	-	235.35	-
10. Nagaland	61.23	-	-	-	-	-	-	70	72.99	27.30
11. Orissa	398.30	1600	115.68	-	409.72	1600	16.08	-	311.79	-
12. Rajasthan	-	-	-	-	-	2812	394.14	-	-	-
13. Tripura	98.67	-	-	-	-	21	2.25	-	138.14	-
14. West Bengal	775.90	-	-	920	291.44	-	-	905	921.25	181.00
TOTAL ALL STATES	3904.38	12800	162.83	1870	1049.92	17433	1284.32	1302	4914.72	273.70

SOURCE : Finance Commission Wing, Ministry of Finance

P = Physical Unit - Buildings/Teachers in numbers

F = Financial - Amounts released in lakhs of rupees

A summary of actual release of assistance is furnished in the Table below:

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Table 9
Upgradation assistance for Education based on recommendations of Eighth Finance Commission

(Rupees in crores)   (1985-86 to 1987-88)

	1985-86	1986-87	1987-88	Total for 1985-86 to 1987-88
Capital	39.04	10.50	49.14	98.68
Revenue	-	1.63	12.84	14.47
Total	39.04	12.13	61.98	113.15 @

Source : Finance Commission Division, Ministry of Finance

@ : includes on account payments.

15.12.5 It may be seen from the above Table that over the three year period from 1985-86 to 1987-88 the total release of upgradation assistance under both Capital and Revenue account has been only of the order of Rs.119 crores including on account payments. In physical terms the States were helped, during the three year period, to provide over 30,000 teachers and over 3,000 school buildings as may be seen from the Table below:

Table 10
Number of teachers and buildings provided under upgradation assistance for Education based on recommendations of the Eighth Finance Commission

(Units in numbers)

	1985-86	1986-87	1987-88	Total for 1985-86 to 1987-88
Teachers	-	12800	17433	30233
Buildings	-	1870	1302	3172

Source: Finance Commission Division, Ministry of Finance.

15.12.6 As has been brought out earlier, the Eighth Finance Commission had recommended upgradation assistance for putting up school buildings based on an

estimate of Rs.40,000 per school building. Subsequently, in the three year period from 1985-86 to 1987-88 there was cost escalation. The Empowered Committee in the Ministry of Finance itself in two spells allowed an escalation of costs for putting up school buildings to the extent of 50% (30% initially in 1985-86 and 20% later in March, 1988). Consequent on this, the number of buildings that could be provided with upgradation assistance over these three years came down from the level orginally envisaged when the Eighth Finance Commission gave its recommendations.

Recommendations of the Ninth Finance Commission in its first report (1989-90) and second report (1990-95)

15.12.7 The cost of upgradation of standards of administration so far as it concerns education as per the proposals furnished by the States to the Ninth Finance Commission was of the order of Rs.1723.21 crores. In its first report the Commission indicated that it was making available to the States grants for completion of the task which was 'likely to remain unfulfilled by 1988-89 out of that charted by the Eighth Finance Commission for the five years 1984-89. The Commission found that the physical targets as regards upgradation of capital works having been escalated to the extent of 30% for the three year period 1985-88 and 50% for the year 1988-89. On this basis the Ninth Finance Commission recommended in its first report a financial provision for the year 1989-90 for upgradation of standards of administration in the area of education to the extent of Rs.41.92 crores. Over and above this the Ninth Finance Commission in its first report also recommended a financial provision of Rs.200 crores for equalisation of social and community services for elementary education specifically considering that 'provision of school buildings under Operation Black Board from the NREP and RLEGP sources to be inadequate.

15.12.8 In its second report (for 1990-95) the Ninth Finance Commission has followed the normative approach according to which needs and capacities of different governments are assessed normatively and such normative assessments are taken as the basis far determining the volume and pattern of federal transfers. So for as education is concerned the factors that have been taken into consideration for the purpose of assessing expenditure are the following:

Primary Education

- Expenditure per child in the age group of 6- 10 (taken as a dependent variable).

- Proportion of enrolment in primary stage to the population in the age group 6-10.

- Student-teacher ratio in primary stage.

- Differences in the average salaries of primary school teachers across the States.

- Price difference across the States.

Secondary Education

- The expenditure on secondary education per child in the age group of 11-18 (taken as a dependent variable).

- Enrolment in secondary stage as a proportion of children in the age group of 11-18.

- Proportion of private unaided secondary schools to total number of schools.

- Salary differences of trained graduate teachers in the States.

- Student-teacher ratio in the States.

Higher Education

- Per capita expenditure on higher education.

- Proportion of enrolment in higher stages of education to total population.

- Student-teacher ratio.

- Difference in price levels amongst States.

- Population density and proportion of enrolment in private college to total enrolment.

15.12.9 Based on the above parameters, econometric formulae have been worked out, normative expenditures assessed with reference to them and built into the overall requirements of the States. Upgradation grants as per previous practices have not been specifically recommended.

15.12.10 The direct consequence of this is that allocation for Education from out of the grants-in-aid recommended by the Finance Commission would be dependent on the priority for Education assigned by the respective States. States may or may not assign adequate priority. If adequate priority is not assigned, from the point of view of Education there would be retrogression from the earlier practice of allowing specific upgradation grants tied to Education. In fact, Shri Justice A.S.Qureshi, Member of the Ninth Finance Commission, in his dissenting note, has made the following valid observations:

"In our first Report, we had given the upgradation grants for improvement of certain beneficial services. We had also given grants for the special problems of the States. Those grants were separate and identifiable. The advantage of such grants is that they could be tied grants for specific purposes. It was possible to insist upon the performance relatable to the grants from the concerned States. In the present Report,, we have departed from that practice and instead of giving upgradation grants or special problem grants they have been built in the requirements of the States in this regard which is assessed on

normative basis by the use of econometric models and algebric formulae. In my opinion, this is not correct. We should have followed the same method as we followed in our first Report and should have recommended grants for special problems and upgradation of services, so as to make abundantly clear how much is given, for what purpose and to ascertain the compliance of the objectives of the grants."

Strategies for raising resources

15.13.1 As brought out elsewhere (Table 6) intra-sectorally, allocations have shown a marked preference for Higher Education in spite of low rate of literacy, though over the sixth and seventh plans, a comparatively lesser priority has been shown for Higher Education. Primary Education is yet to reach the level attained during the first plan. This pattern is not consistent with the Constitutional mandate for achieving universalisation of Elementary Education. Nor is it consistent with the need for providing a meaningful vocational bias for School Education. Continued high levels of investment in Higher Education is contradictory to the results of studies on returns from investment in Education which have brought out that lower levels of education have a higher average rate of return. Research findings are also to the effect that investment in lower levels of education contributes more to income distribution and reduction of poverty, besides to economic growth.

15.13.2 It is in the above background of ever increasing involvement of the Government in educational financing and distortions in terms of intra-sectoral priorities that mobilisation of resources and their deployment should be considered.

15.13.3 Public expenditure on Educatin as a proportion of GNP, over the years, has been as indicated in the Table below which shows that while it has increased, as of 1986-87, it fell far short of 6%.

Table 11

Share of Education in GNP (%)

1950-51	1.2
1960-61	2.5
1970-71	3.1
1984-85*	3.7
1985-86**	4.0
1986-87@	3.9

* Budget expenditure (actual).

** Budget expenditure (Revised Estimates).

@ Budget expenditure (Budget Estimates).

15.13.4 The Central Statistical Organisation has recently released the quick estimates of National Income (GNP) for the year 1988-89 which has been placed at Rs.3,06,822 crores at current prices on the basis of which the plan and non-plan budget of Education Departments at the Centre and the States as a percentage of national income comes to 4.2% for the year 1989-90.

15.13.5 India ranks 115th in the world in terms of investment in Education as a percentage of GNP. Amongst the countries with a population of 10 crores above, India is at the very bottom, barring Bangladesh. That India's educational expenditure as a proportion of GNP compares very unfavourably vis-a-vis world-wide expenditure on Education is brought out by the following Table:-

Table 12

Expenditure on Education as % of GNP

Country Groups	1982		
Africa	4.9	Developed Nations	6.2
America	6.4	Developing Nations	4.3
Asia	5.1		
Europe (incl USSR)	5.6		
Oceania	5.8		

Recommendations

i) The first step, therefore, should be to provide for at least 6% of the GNP for Education which has not so far been provided, though this has been repeatedly urged for over quarter of a century. (The figure of 6% of GNP was suggested by the Education Commission 1964-66 on the basis that, that was the level of investment which had already been reached even by certain developing countries of Asia. An estimate of investment required for implementing the recommendations of the report of Education Commission 1964-66 was made. Coincidentally, it was noted that this amount approximated to 6% of GNP. It had also been noted that the economic growth rate per annum for 20 years since then was envisaged at 6%. A quarter of a century has since passed by considerable changes have come about in the economy. Therefore, in the changed context, there is need for reviewing the proportion of GNP that should go into Education as on date). Even providing 6% of GNP means substantially larger allocations for Education in the budgets of the Central and State Governments. (In this context, the following table which speaks for itself may be seen).

Table 13

Share of Education in
Five Year Plan Outlays/Expenditures (%)

Plans	Share of Education in Total Plan Outlays/Expenditure (%)
First Five Year Plan	7.86
Second Five Year Plan	5.83
Third Five Year Plan	6.87
Annual Five Year Plan	4.86
Fourth Five Year Plan	5.04
Fifth Five Year Plan	3.27
Sixth Five Year Plan	2.70
Seventh Five Year Plan	3.55

ii) <u>All technical and Professional education should be made self- financing, education being viewed as involving the use of resources (inputs) that should be necessarily paid for by the beneficiaries as it confers on them greater employability (output).</u>

Other than public funding, the alternative methods of funding Higher Education are:-

i) Graduate taxes

ii) Increase in fees and

iii) Student loans

Graduate taxes, if any, are to be imposed upon the beneficiaries i.e., the users of services of graduates, namely, employers. However, the employers are likely to resist imposition of such taxes on grounds of economic viability of their own operations getting adversely affected. This is also likely to result in discouragement of employment of the qualified.

The tuition fees now prevalent in educational institutions, by and large, are those fixed many years ago. In 1950-51, income from fees accounted for 20% of the total expenditure on education. This proportion has now come down to 5%. The following table brings out the picture regarding low levels of fees charged in the University System.

Table 14

Type of Higher Education Institution	Nature of courses	Fee charged per annum
Central Universities	Under-graduate level general courses	Between Rs.120/- in Banaras Hindu University and Vishwa Bharati and Rs.180 in Delhi University.
Central Universities	Post-graduate level general courses	Between Rs.144/- in Vishwa Bharati and Rs.300/- to Rs.400/ in the North Eastern Hill University.
Central Universities	Professional courses like B.Ed., LL.B etc.	Between Rs.120/- in Vishwa Bharati and Rs.1,440/- in Delhi University.
State Universities	Under-graduate level general courses.	Between Rs.40/- to Rs.180/- in Rajasthan University and Rs.400/- in Gujarat, Bombay & Nagpur Universities.
State Universities	Post-graduate level general courses.	Between Rs.100/- to Rs.200/- in Rajasthan University and Rs.500/- to Rs.600/- in Bombay University.
State Universities	Under-graduate professional courses like B.Ed., LL.B etc.	Between Rs.100/- to Rs.200/- in Rajasthan University and Rs.500/- in Bombay University.
State Universities	Engineering courses.	An average of Rs.533/-

The disparity between the cost of Higher Education and fees is also rather high. To give an example, in Engineering Colleges, the anual recurring expenditure alone comes to Rs.2,000/-.

iii) <u>In the circumstances, a justifiable strategy is bringing about an appropriate increase in the fees payable by students going in for Higher Education. This increase should be</u>

appropriately linked to at least the cost., of recurring expenditure and levels of income of the parents of the beneficiaries. The richest quartile of the people can bear 75% of the cost of the education; the next richest quartile 50% of the cost; and the next richest quartile 25%. The last quartile of the economically weak (to be appropriately defined) need not bear any part of the cost.

iv) Besides tuition fees, fees charged for specific purposes in the Higher Educational Institutions like laboratory fees, library fees, building fees, magazine fees, games fees etc. also have to be increased on a rational basis with reference to the costs of providing the relevant facilities/services.

v) With the ever increasing number of examinees, examination fees can also be an important means of raising internal resources to meet the cost of Higher Education.

While student loans have the advantage of bringing down government investment in Higher Education, they do involve certain problems. They are: Psychologically, people are against loans. Credit markets are not developed. There are difficulties in securing repayment of loans even as the government experience of operating loan scholarship shows. (Reference has been made to this later.) The poor could face difficulties in having access to loans.

vi) However institutional loans as a strategy for releasing the pressure on government resources and as a means of putting resources in possession of those aspiring for Higher Education is indispensable. Problems in administration of loans should not result in the easy solution of opting out of them.

Nationalised banks and financial institutions, as a rule of practice, generally concentrate on industrial financing and financing of commercially viable activities. However, there are examples like the State Bank of India advancing loans for Higher Education.

vii) Therefore, there is need for a committed programme of the nationalised banks for providing loans for recipients of Higher Education.

Viii) Term lending institutions like the Industiral Development Bank of India (IDBI) , Industrial Finance Corporation of India (IFCI) and Industrial Credit and Investment Corporation of India (ICICI) should launch programmes for promoting research in universities. This could ease the burden on the University Grants Commission which, in turn, is provided funds by the government of India. The IDBI has to its credit several promotional activities with a view to helping the process of industrialisation. It has, for example, set up the Enterpreneurship Development Institute of India. It has also provided assistance to voluntary agencies engaged in imparting production and vocational training. Assistance has also been provided to the National Association for the Blind to set up a polytechnic at Bombay. The IDBI and ICICI have had chairs instituted for specific projects in various universities. This activity could be expanded in an organised way with reference to the merits of individual programmes of the respective Higher Educational Institutions.

An analysis of institutional costs of education reveals that educational infrastructure development, and consequently quality of education, has suffered, as brought out in the following Table:-

Table 15

Institutional costs of Education (1978-79)

Percent

Item	Recurring	Non-recurring	Total
Salaries	85.8	--	80.6
Buildings	1.3	36.8	3.5
Furniture & Equipments	0.8	27.3	2.4
Consumables	1.3	--	1.2
Libraries	0.5	9.2	1.0
Hostels	0.5	--	0.5
Stipends/Fellowships and Concessions	2.9	--	2.7
Games & Sports	0.4	--	0.4
Miscellaneous	6.7	26.7	7.7
Total	100.0	100.0	100.0

On the other hand, it has been estimated that about 46% of the total non-recurring institutional expenditure on Education is required for fixed assets like buildings, libraries etc. (An analysis of expenditure by levels of Education also reveals that the share of salary goes down as the level of education' rises. Share of costs of capital assets also increases with increase in the level of education. The proportion of' non-recurring costs to the total institutional costs of education is less than 5% at the primary level and about 11% for higher levels).

ix) Institutional finance for infrastructure needs to be raised in the circumstances. Housing Finance Institutions, therefore, could take up programmes for creation of capital assets in the educational sector i.e. for buildings for schools, colleges, universities as also

hostels for the students, staff and teachers. Repayment of loans may have to be guaranteed by the appropriate Governtments. (It is worthy of mention, in this context, that Housing Development Finance Corporation (HDFC) has already financed schemes for construction of staff quarters and ownership houses for University staff in Gulbarga, Karnataka. The Universities and Educational Societies, on their part, could consider investment of their provident fund money in the bonds of Housing Finance Institutions approved under Section 36 (i) (viii) of the Income Tax Act.

The contribution of Life Insurance Corporation to housing efforts has been quite significant. At present, the annual average accretion to the total investible funds of the LIC is approximately Rs.3,000 crores. The current pattern of the allocation of LIC's investments between the sub-sectors of the socially oriented sector brings out that housing component is receiving about 21% of its total plan allocations, the rate of return ranging from 10.5% to 13.5%. In the non-plan investment of the LIC in the socially oriented sector, 97% (with a rate of return ranging from 12% to 14%) goes for housing schemes.

x) There is a strong case for LIC's investment in the area of housing going for hostel facilities for the students, staff and teachers in the educational institutions. However, diversion of these resources for the education sector would mean doing so at the expense of other development schemes, 90% of the accretions of the LIC already being committed to socially oriented sectors. Therefore, this is a matter on which the Government as well as Planning Commission will have to take a conscious decision regarding the reallocation; of the LIC's investible resources with substantive priority for the Education sector.

xi) Economically weaker sections of the people going for Higher Education who cannot afford the enhanced fees or loans from financial institutions could be provided appropriate scholarships.

xii) Funds provided in the Central sector for scholarships during the Seventh Plan period was of the order of Rs.22.26 crores. This would have to be considerably enhanced for the benefit of the economically weaker sections in the interest of equity and providing access to Higher Education for them. There is also need for rationalisation of the whole programme of awarding scholarships. The National Loan Scholarship Scheme, for example, has not been capable of proper implementation. States to which funds for provision of these scholarships are provided by Central Government have not been repaying the dues to the Government of India promptly. Out of a total of Rs.84.36 crores provided to the States under this Scheme since 1963- 64, an amount of Rs.69.4 crores is still outstanding repayment.

xiii) The Government of India scheme of scholarships in approved residential secondary schools benefit only a small number of 500 students per annum in the whole country. Serious malpractices in the selection of scholars have also reportedly come to the notice of the Government, the benefits, of late, being cornered apparently by manipulations on the part of those hailing from a very few centres in India. This scheme could as well be

discontinued and the number of scholarships enhanced for meaningful programmes like for upgradation of merit of SC/ST students,

xiv) one of the modalities for securing better implementation of scholarship schemes with more direct and responsible involvement on the part of the States, no doubt, would be for the administration of the scholarships being left totally to the States themselves necessary outlays being provided to the States as part of the State Plan Outlays on an earmarked basis.

xv) Certain other means of raising resources for education are presented below:-

- A sustained programme to be implemented every year right down to the Panchayat levels for raising community contribution (Rules for grants-in-aid provided to the educational institutions could be modified to provide for built-in incentives such that Government assistance is related to contributions raised from the community on matching basis. In the course of interactions with the Ministers and Secretaries of States, a suggestion was made that there could be funds created for educational development. Like relief funds created in the names of Prime Minister of India and the State Chief Ministers/ there could be Prime Minister's and Chief Minister's Educational Funds into which the community contributions, educational cess (about which reference is made later) etc. could be credited. These funds could be operated for the purpose of building up infrastructure for educational institutions upto the elementary levels).

- Institution of innovative programmes like the Savatribhai Phule Foster Parent Scheme of Maharashtra for promoting primary education of girls under which registered foster parents pay Rs.25/- p.m. in cash or kind to the needy girls from weaker sections.

- Removal of restrictions on the investment of surplus income of educational institutions like the stipulation that such income should be invested in low yielding Government securities/bonds etc.

- Collection of educational cess related to revenue sources such as land revenue, excise duties, charges on cash drops, charges on buildings in urban areas etc. (The sources on which cess could be charged naturally will be quite diversified and different for different States. It would be for the respective States to identify the sources on which cess is to be levied).

- Educational institutions being permitted to let out on rent their facilities like conference rooms, auditoriums, etc.

- Consultancy services being rendered by higher, general and technical institutions.

- Levying of a direct assessment on developed host countries which utilise the services of professionals from the country. This assessment could be related to the total number of professional personnel migrating, the amount of their income and the taxes they pay to the host countries. (In fact, this is one of the suggestions made in the U.N. Report on 'The

Reverse Transfer of Technology' (1979). This strategy would naturally involve entering into bilateral or multilateral tax treaties with the beneficiary developed countries.

- Broad basing distance education.

- Introduction of shift systems in schools, so that the existing infrastructure can be utilised better.

- Identification or surplus teachers in schools and colleges and their deployment otherwise.

EPILOGUE

National Policy on Education (NPE) 1986 and the programme of Action (POA') based on the Policy are documents comprehensively dealing with various facets of education. No doubt, serious resource constraints have stood in the way of vigorous implementation of the Policy. This constraint may continue to be felt in the foreseeable future. Especially keeping this in view, the NPE Review Committee has attempted in this report to recomend new approaches and modalities many of which may be cost effective, apart from facilitating better utilization of available infrastracture.

The Committee hopes that the Government may like to bring out a revised Policy in the light of its recommendations.

APPENDICES I

I. TEXT OF GOVERNMENT OF INDIA RESOLUTION
NO. F.1-6/90- PN (D.I) dated 7TH MAY, 1990

Despite efforts at social and economic development since attainment of Independence, a majority of our people continue to remain deprived of education, which is one of the basic needs for human development. It is also a matter of grave concern that our people comprise 50 per- cent of the world's illiterate, and large sections of children have to go without acceptable level of primary education. Government accords the highest priority to education both as a human right and as the means for bringing_ about a transformation towards a more humane and enlightened society. There is need to make education an effective instrument for securing a status of equality for women, and persons belonging to the backward classes and minorities. Moreover, it is essential to give a work and employment orientation to education and to exclude from it the elitist aberrations which have become the glaring characteristic of the educational scene. Educational institutions are increasingly being influenced by casteism, communalism and obscurantism and it is necessary to lay special emphasis on struggle against this phenomenon and to move towards a genuinely egalitarian and, secular social order. The National Policy on Education 1986 (NPE), needs to be reviewed to evolve a framework which would enable the country to move towards this perspective of education.

2. Government have, therefore, decided to set up NPE Review Committee with the following composition:

1. Acharya Ramamurti   Chairman
PO Khadigram, Distt. Munger
Bihar.

2. Prof. C N R Rao   Member
Director
Indian Institute of Science
Bangalore.

3. Dr. Sukhdev Singh   of   Member
Formerly Vice-Chancellor
Punjab and MP Agricultural
Universities.

4. Dr. M. Santappa   Member
Formerly vice-chancellor
Madras University.

5. Dr. Obaid Siddiqi   Member
Tata Institute of Fundamental
Research, Bombay.

6. Dr. Bhaskar Ray Chaudhuri   Member
Vice-Chancellor,
Calcutta University
Calcutta.

7. Shri M.G. Bhatawdekar   Member
Formerly Principal
Maharaja College Jaipur

8. Prof. Usha Mehta   Member
Political Scientist and
Teacher Bombay.

9. Prof, Satchidanand Murty   Member
Sangam Jagarlamudi
Guntur.

10. Dr. Anil Sadgopal   Member
Kishore Bharati
Hoshangabad.

11. Father T.V. Kunnunkal   Member
chairman, National
Open School New Delhi.

12. Prof. Mrinal Miri   Member
Professor of Philosophy,
North Eastern Hill University
Shillong.

13. Dr. Vidya Niwas Misra   Member
Vice-Chancellor
Kashi Vidyapeeth
Varanasi.

14. Shri S.Z. Qasim   Member
Vice-Chancellor Jamia Millia
Islamia New Delhi.

15. Shri Veda Vyasa   Member
Chairman
DAV College Management Committee
New Delhi.

16. Shri Manubhai Pancholi   Member
Lok Bharati, Sanosara
Distt. Bhavnagar.

17. Shri S. Gopalan   Member-Secretary
Additional Secretary
Ministry of Human Resource Development
Department of Education
New Delhi.

3. The terms of reference of the Committee will be as follows:

(a) to review the National Policy on Education, 1986 its implementation;

(b) to make recommendations regarding revision of the Policy; and

(c) to recommend action necessary for implementation of revised policy within a timeframe.

4. The committee will devise its own procedure of work submit its report as soon as possible, but not later than six months from the date of issue of the order. It may submit interim reports as may be considered appropriate.

APPENDIX II

Composition of sub-Committees constituted by NPERC

i) Sub-Committee I: on Access, Equity and Universalisation.
Members

1. Dr. Anil Sadgopal   Convenor

Kishore Bharati, PO Bankheri, Distt. Hoshangabad, Madhya Pradesh-461 990.

2. Dr. M G Bhatawdekar, 41 Sangram Colony, Jaipur-302 001.

3. Fr. T V Kunnunkal, Chairman, National Open School, 39 Community Centre, Wazirpur Industrial Area, Delhi : 110 052.

4. Dr. S Z Qasim, Vice-Chancellor, Jamia Millia Islamia, Jamia Nagar, New Delhi : 110 025.

5. Dr. Sukhdev Singh, 51 Sector 11-A, Chandigarh-160001.

6. Dr. Bhaskar Chaudhuri, Vice-Chancelior, University of Calcutta, Calcutta : 700 073.

Co-opted Members

1. Shri Rana Pratap Singh, C/o Shishu Shiksha Prabandh Samiti, Kadam Kuan, Patna : 811 001.

2. Ms. Nandana Reddy, Executive Director, The Concerned for Working Children, Centre for Aplied Research and Documentation, No.22, 2nd Main, 1st Cross, Domlur 2nd phase, Bangalore-560038.

3. Prof. R D Munda, Department of Linguistics, University of Ranchi, Ranchi (Bihar)

4. Ms. Srilatha Batliwala, State Programme Director, Mahila Samakhya Karnataka, 3342, 6th Cross, 13th Main HAL IInd Stage, Indira Nagar, Bangalore, 'Declined membership)

5. Shri Natwar Thakkar, Nagaland Gandhi Ashram, At.& PO Chuchu Yimlang, Distt. Mokkokhung, Nagaland- 798614.

Special Invitees

1 Prof. S C Bhatia, Professor & Head, Department of Adult and Continuing Education, University of Delhi, Delhi : 110 007.

2. Prof. Vina Mazumdar, Director, Centre for Women's Development Studies,, B-43, Panchsheel Enclave, New Delhi110007.

3. Dr. Poromesh Acharya, Indian Institute of Management, Diamond Harbour Road, Joka, Post Box No.16757, Calcutta 700027.

4. Shri Jyotibhai Desai, Gandhi Vidyapeeth, Vedchhi, Via Valod, Distt. Surat, Gujarat : 394 641.

5. Shri B Mitra, Principal, All Bengal Teachers' Training College, HA-25, Sector-III, Salt Lake, Calcutta-700091.

Participants in the meeting held at the State Institute of Education, Jehangirabad, Bhopal on July 18, 1990 for planning and executing a field based review of Navodaya Vidyalayas.

1. Shri Chitrangad Upadhyay, Lecturer, District Institute of Education & Training, Dashera Maidan, Ujjain-456010.

2. Shri Bhupendra Nath Bhatia, 286 Adarshnagar, Jaipur-302004.

3. Dr. Sharad C Bhand, Professor & Head, Physics Department, E1, Vikram University campus, Ujjain 456010.

4. Shri Omprakash Raval, 496, Sudama Nagar, Indore-452009.

5. Dr. P N Mishra, Professor of Management, Institute of Management Studies, Devi Ahilya University, Indore.

6. Shri Rohit Dhankar, Project Coordinator, Digantar, Vill. Todi Ramjanpura, PO Jagatpura, Teh. Sanganer, Distt. Jaipur.

7. Dr. Swati Sinha, Reader in Physics, Banaras Hindu University, Varanasi-221005.

8. Ms. Anjali Noronha, Junior Fellow, 'Ek1avya Nehru Colony, Harda, Distt. Hoshangabad, MP.

9. Sh. Dinanath Sharma, U D T, D3/14, M O G Lines, Indore 452002.

10. Dr. Bharat Poorey, Principal, DIET, Bijalpur, Indore.

11. Dr. Arvind Gupte, Principal, DIET, Deshera Maidan, Ujjain 456001.

375 12. Ms. Davinder Kaur Uppal, Lecturer, Deptt. of Communication & Journalism, Sagar University, Sagar-470 003.

13. Dr. R N Syag, Eklavya, Radha Ganj, Dewas (MP)- 455001.

14.Shri Shyam Bahadur Namra, Shram Niketan Vill.& PO Jamudi, Annuppur, Distt. Shahdol-484224.

15.Ms. Sonal Mehta, Science Collaborator, Vikram A Sarabhai Community Science Centre, Navrangpura, Ahmedabad : 380 009.

16.Dr. P K Ahuja, Asstt. Professor, State Institute of Education, Bhopal 462 008.

17. Shri Ramesh Dave, Lecturer, State Institute of Education, Bhopal : 462 008.

18. Shri Hari Prasad Joshi, Kishore Bharati, PO Bankhedi, Distt. Hoshangabad, MP-461 990.

19. Shri A K Mittal, Assistant Professor, State Institute of Education, MP Bhopal-462 008.

20. Dr. Ilina Sen, Rupantar, Bildi Bada, Handipara, PB.No.130, Raipur : 492 001.

21.Shri Aflatun, Research Scholar 33, Teachers Flats, BHU, Varanasi : 221 005.

22.Shri S S Gouri, Deputy Director (HQ) , Navodaya vidyalaya Samiti, New Delhi.

23.Shri H P Rajguru, Deputy Director, Navodaya Samiti, Bhopal.

24.Shri P V Subbaiah, Assistant Director, Navodaya Vidyalaya, Bhopal.

25.Shri Purshottam, Asstt. Director, Navodaya Vidyalaya, Bhopal.

26.Shri J B Sharma, Asstt. Director, Navodaya Vidyalaya, Bhopal.

27.Shri T N Srivastava, Secretary, Department of Education, Government of Madhya Pradesh, Bhopal.

28. Shri H S Pathak, Director, SCERT, Bhopal.

29. Dr.(Smt.) Indu Hevalkar, Director, SIE, Bhopal.

Participants in the meeting held at the Indian Institute of Education. Kothurd. Pune on August 10-11, 1990 for planning and executing a field-based review on Non-Formal Education Programme.

1. Dr. Chitra Naik, Hony. Director, State Resource Centre for Non-Formal Education, Indian Institute of Education, 128/2. J P Naik Road, Kothrud, Pune-411 029.

2. Shri R S Jambhule, Director of Education, Maharashtra State.

3. Shri Chitrangad Upadhyay, Sr. Lecturer, Distt. Institute of Education and Training, Ujjain-456010.

4. Shri Bhupendra Nath Bhatia, 286 Adarshanagar, Jaipur- 302004.

5. Dr. Sharad C Bhand, Professor & Head, Physics Department, E1, Vikram University Campus, Ujjain-452002.

6. Shri Omprakash Raval, 496, Sudama Nagar, Indore- 452009.

7. Dr. P N Mishra, Professor Management, Institute of Management Studies, Devi Ahilya University, Indore, MP.

8. Shri Rohit Dhankar, Project Coordinator, Digantar, Vill. Todi Ramjanpura, PO Jagatpura, Teh. Sanganer, Distt. Jaipur.

9. Shri Dinanath Sharma, D3/14, MOG Lines, Indore- 452002.

10. Dr. Bharat Poorey, Principal, DIET, Bajalpur, Indore.

11. Ms. Davinder Kaur Uppal, Lecturer, Department of Communication & Journalism, Sagar University, Sagar- 470003.

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13. Dr. R N Syag, Eklavya, Radha Ganj, Dewas (MP)-455001.

14. Shri Sanjeev Ghotge, D-2, Indraraj Apartment Near Sheetal Hotel, Fargusan Road, Shivaji Nagar, Pune.

15. Dr. Subhash Ganguly, B-22/8, Karunamoyee Housing Estate, Salt Lake City, Calcutta : 700091.

16. Shri Ram Gopal Vyas, Principal, Govt. H.S. School, Datahara, Distt. Morena (MP).

17. Shri S S Salgaonkar, Jt. Director of Education (School Education), Directorate of Education, Central Bldg., Pune-1.

18. Shri G A Shinde, Dy. Director of Education (Adult Education), Directorate of Education, 17 Dr. Ambedkar Road, Pune-1.

19. Dr. V S Deshpande, Dean, Faculty of Education, Poona University, A2/5, Gajendranagar, Dattawadi, Pune- 30.

20. Dr. S A Karandikar, Adarsh Comprehensive College of Education and Research, Karve Road, Pune-411004.

21. Prof. M B Pinjari, Professor of Botany, Cotton Project, Mahatma Phule Agricultural University, Rahuri, Distt. Ahmednagar, Maharashtra.

22. Ms. Purnima Pinjari, Mission Compound, Rahuri Nagar, Maharashtra.

23. Dr. John Kurrien, Director, Centre for Learning Resources, B-20, Gera Park, 15 Boat Club Road, Pune-411 001.

List of persons who were consulted by Sub-Committee I
1.   Prof D.S. Kothari, Delhi

2.   Prof. N.C. Nigam Director, Indian Institute of Technology, New Delhi

3.   Prof. P.V. Indirasan Centre for Advanced Research in Electronics, Indian 'Institute of Technology, New Delhi.

4.   Dr. John Kurrien,   Centre for Learning Resources, Pune

5.   Ms. Tripta Batra SAAR, New Delhi

6.   Shri S.C. Behar Principal Secretary Govt. of M.P.

7.   Shri Krishnavtar Pandey Director, Directorate of Adult Education Govt. of U.P., Lucknow

8.   Prof.   K.G. Rastogi,   Retired   Professor, N.C.E.R.T., New Delhi

9.   Prof. Amrik Singh, New Delhi

10.   Smt.   Meenaxi A. Chaudhary Jt. Secretary Dept.   of   Women   and Child Development Ministry of HRD, Govt. of India.

11.   Shri Rohit Dhankar Digantar School, Jagatpura Dist. Jaipur, Rajasthan

12.   Dr. (Smt.) Maithreyi Krishna Raj Director Research Centre for Women's Studies SNDT Women's University, Bombay

13.   Prof.   Kamalini H. Bhansali President   Indian Association for Women's Studies, Bombay

14.   Prof.   S.C. Shukla Dept. of Education University of Delhi, Delhi

15. Shri Anil Bordia, Secretary, Department of Education Ministry of Human Resource Development, New Delhi

16. Prof. J.S. Rajput, Jt. Educational Advisor Department of Education Ministry of Hunan Resource Development New Delhi

17. Shri A. Mukhopadhyaya, Deputy Secretary, Department of Education Ministry of Hunan Resource Development New Delhi

18. Shri L.N. Mishra Director General, National Literacy mission New Delhi

19. Ms. Anita Kaul Director Directorate of Adult Education, New Delhi

20. Prof. Satya Bhushan, Director, NIEPA, New Delhi

21. Dr. S.C. Nuna, Fellow, NIEPA, New Delhi

22. Dr. Y.P. Aggarwal, Fellow, NIEPA, New Delhi

23. Dr. Mukhopadhyaya, Senior Fellow, NIEPA, New Delhi

24. Dr. (Smt.) Kusum K. Premi, Fellow, NIEPA, New Delhi

25. Dr. J.B.G. Tilak, Senior Fellow, NIEPA, New Delhi

26. Dr. (Smt.) Venita Kaul Department of Pre-School and Elementary Education NCERT, New Delhi

27. Dr. N.K. Jangira Deptt. of Teacher Education, Special Education & Extension Services NCERT, New Delhi

ii) Sub-Committee II: on Education and Right to Work
Members

1. Shri Manubhai Pancholi   Convenor

Lok Bharati, Sanosara, Distt. Bhavnagar, Gujarat 364230.

2. Dr. T V Kunnunkal, Chairman, National Open School, 39,Community Centre, Wazirpur Industrial Area, Delhi : 110 052.

3. Dr. Anil Sadgopal, Kishore Bharati, PO Bankheri, Distt. Hoshangabad, Madhya Pradesh 461 990.

4. Shri Veda Vyasa, 64 Golf Links, New Delhi 110 003.

Co-opted Members

1. Shri Vijay V Mandke, School of Engineering and Technology, Indira Gandhi National Open University, New Delhi.

2. Dr S Kalbag, Vigyan Ashram, P O Pabal, Distt. Pune M---- 412 403

3. Shri Navalhai Shah (Ex-Education Minister, Gujarat), Samaj Gopalak ---ty, Nava Wadaz, Ahmedabad 380 013.

4. Smt. Radhabahen Bhatt, P O Kosani, Distt. Almora, U.P,

Special Invitee---

1. Prof. Purushottam, A Patel, Profssor of Education, Gujarat Vidyapeeth, edabad - 380 014.

Shyam Bahadur Nan, Shram Niketan Jumudi - 484 224.-our, Distt. Aha---

iii Sub-committee III: on Quality and Standards in Education
Members

1. Dr. M Santappa   Convenor

73, 3rd Main Road, Kasturba Nagar, Madras - 600 020.

2. Prof. Mrinal Miri, Deptt. of Philosophy, North Eastern Hill University, Shillong - 793 003.

3. Dr. C N R Rao, Director, Indian Institute of Science, Bangalore - 560 001.

4. Dr. S Z Qasim, Vice-Chancellor, Jamia Millia Islamia, Jamia Nagar, New Delhi 110 025.

5. Dr. Obaid Siddiqi, Molecular Biology Unit, Tata Institute of Fundamental Research, Homi Bhabha Road, Bombay - 400 005.

Co-opted Members

1. Prof. G J V Jagannadha Raju, Chairman, A P State Council of Higher Education, P B No.34, Saifabad, Hyderabad - 500 004.

2. Dr. M P Chhaya, Educational Consultant, Navodaya Vidyalaya Samiti, A-39, Kailash Cology, New Delhi.

3. Shri S C Behar, Principal Secretary to the Government of Madhya Pradesh, Bhopal & Chairman, SCERT, Jahangirabad, Bhopal.

4. Prof. P K Srivastava, Director, Centre for Science Education & Communication, University of Delhi, 10 Cavalry Lines, Delhi - 110 007.

5. Dr. J S Rajput, Jt. Educational Advisor, Ministry of Human of Resource Development, Department of Education, Government of India, New Delhi - 110 001.

iv) Sub-Committee IV: on National Unity, Value Education and Character Building.

1. Prof. K Satchidananda Murty Convenor APARAJITA, Sangam jagarlamuai, Guntur District, Andhra Pradesh - 522 213

2. Dr. Bhaskar Ray Chaudhuri, Vice-Chancellor, University of Calcutta, Calcutta - 700 C73.

3. Dr. M G Bhatawdekar, 41 Sangram Colony, Jaipur - 302 001.

381 4. Prof. Mrinal Miri, Department of Philosophy, North Eastern Hill University, Shillong - 793 003.

5. Prof. Usha Mehta, Mani Bhawan, Gandhi Museum, 19 Laburnum Road, Gamdevi, Bombay - 400 007.

6. Dr. Vidya Niwas Mishra, M-3, Badshah Bagh, Varanasi - 221 002.

Co-opted Members/Special Invitees

1. Shri E Gonsalves, Director, India International Centre, New Delhi.

2. Dr. H B N Shetty, 17, 1st Cross Road, Indira Nagar, Madras - 600 020.

3. Prof. Mandan Mishra, Vice-Chancellor, Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, Katwaria Sarai, N Delhi -16.

4. Prof. G J V J Raju, Hyderabad.

5. Dr. D Batra, Kurukshetra.

6. Dr. S P Duggal, Abohar (Punjab).

7. Shri Nikhil Chakarvarty, Editor, Mainstream, F-24, Bhagat Singh Market, New Delhi - 110 001.

8. Smt. Mrinal Pandey, Editor, Saptahik Hindustan, The Hidustan Times Bldg., Kasturba Gandhi Marg, New Delhi - 110 001.

9. Pro-Jr. M S Agwani, Vice-Chancellor, Jawaharlal Nehru University, New Mehrauli Road, New Delhi - 110 067.

10. Prof. V Kulandaiswami, Vice-Chancellor, Indira Gandhi National Open University, Maidan Garhi, New Delhi

11. Prof. S K Khanna, Secretary, U G C, Bahadurshah Zafar Marg, New Delhi.

12. Prof. Agrawala, Secretary, Association of Indian Universities, 16 Kotla Marg, New Delhi - 110 002.

13. Prof, Yogendra Singh, Jawaharlal Nehru University, New Mehrauli Road, New Delhi - 110 067.

14. Prof. S N Sinha, Vice-Chancellor, Rajasthan University, Jaipur - 302 004.

15. Late Dr. Gopal singh, Ex-Governor of Goa.

16. Prof. J S Grewal, Director, IIAS, Shimla.

17. Prof. Shakeelur Rehman, MP, Vice-president, Janata Dal. New Delhi.

18. Prof. Wazir Singh, Punjabi University, Patiala.

19. Janab Maulana Wahiduddin Khan, Maktaba Al-Risala, N. Delhi.

20. Dr. S A Ali, Director, Jamia Hamdard Institute of Islamic Studies, New Delhi.

21. Dr. Margaret Chatterjee, D2: 29-30, Chhatra Marg, University of Delhi, Delhi - 110 007.

22. Dr. Paulos Mar Gregorios, Delhi Orthodox Centre, 21 Institutional Area, Tuglakabad, New Delhi - 110 062.

23. Shri A L Rallia Ram, TTC, New Delhi.

24. Shri Chandran, Director, Bharatiya Vidya Bhawan, New Delhi.

**V) Sub-Committee V: on Resources and Managament
Members**

1. Dr. S Z Qasim   Convenor

Vice-Chancellor, Jamia Millia Islamia, Jamia Nagar, New Delhi - 110 025.

2. Dr. Bhaskar Ray Chaudhuri, Vice-Chancellor, University of Calcutta - Calcutta - 700 073.

3. Dr. C N R Rao, Director, Indian Institute of Science, Bangalore - 560 001.

4. Dr. Anil Sadgopal, Kishore Bharati, P O Bankheri, Distt. Hoshangabad, Madhya Pradesh - 461 990.

Co-opted Members

1. Prof. Satya Bhushan, Director, NIEPA, 17-B, Sri Aurobindo Marg, New Delhi - 110 016.

2. Shri Amarjeet Sinha, Director of Adult Education, Department of Education, New Secretariat, Patna - 15.

3. Smt. Chitra Naik, Indian Institute of Education, 128/2, J P Naik Road, Kothurd, Pune - 411 029.

4. Shri Prem Bhai, Banwasi Sewa Ashram, Gobindpur District. Mirzapur (Uttar Pradesh)

5. Smt. Kumud Bansal, Secretary, Adult Education, NFE and Vocational Education, Education Department, Government of Maharashtra, Mantralaya, Bombay - 400 001.

vi) Sub-Committee VI: on Rural Education
Members

1. Shri Manubhai Pancholi   Convenor

Lok Bharati, Sanosara, Distt. Bhavnagar, Gujarat - 364 230.

2. Dr. Anil Sadgopal, Kishore Bharati, P O Bankheri, Distt. Hoshangabad, Madhya Pradesh - 461 990.

3. Dr. Sukhdev Singh, 51, Sector 11-A, Chandigarh - 160 011.

4. Prof. Usha Mehta, Mani Bhavan, Gandhi Museum, 19, Laburnum Road, Gamdevi, Bombay - 400 007.

Co-opted Members

1. Prof. Ramlal Parikh, Vice-Chancellor, Gujarat Vidyapeeth, Ahmedabad

2. Shri Dunu Ray, Vidushak Karkhana, P O Anuppur, Distt. Shahdol, Madhya Pradesh - 484 224.

3. Dr. Devendra Oza, Vice-Chancellor, Gandhi Gram Rural University, Gandhi Gram, Distt. Madurai, (Tamil Nadu).

4. Prof. D Ramakotaiah, Vice-Chancellor, Nagarjuna University, Nagarjuna Nagar, Guntur - 522 510.

5. Prof. B K Roy Burman, Centre for Studies for Developing Societies, 29 Rajpur Road, Delhi.

special Invitee

Prof. Purushottam A Patel, Professpr of Education, Gujarat Vidyapeeth, Ahmedabad - 380 014.

APPENDIX III

List of Background Documents obtained from Government

1. Government of India Resolution No.F.1-6/90-PN(D.I) dated the 7th May, 1990, regarding the setting up of the NPE Review Committee

2. National Policy on Education - 1986, Ministry of Human Resource Development, Government of India, (Department of Education), New Delhi. (May, 1986).

3. Programme of Action : National Policy on Education 1986, Government of India, Ministry of Human Resource Development, Department of Education, New Delhi. (November, 1986).

4. Ministry of Human Resource Development Annual Report 1989-90 Part-I, Department of Education, Government of India. (1990).

5. Challenge of Education - a policy perspective, Ministry of Education, Government of India, New Delhi (August, 1985).

6. Education for All by 2000 : Indian Perspective (Working Paper) , National Institute of Educational Planning and Administration, New Delhi. (March, 1990).

7. Towards Social Transformation : Approach to the Eighth Five Year Plan 1990-95. Meeting of the National Development Council (18-19 June, 1990), Planning Commission, Government of India. (May, 1990).

8. Report of the Review Conference "Four Decades of Development" (April 15-17, 1989) organised by Ministry of Human Resource Development and National Institute of Educational Planning and Administration, New Delhi (1989).

9. Education In India - Graphic Presentation, National Institute of Educational Planning and Administration, New Delhi (July, 1989).

APPENDIX IV

ListoOf Government Papers (GP Series).

1. G.P.1 A paper on Adult Education presented by Joint Secretary (Adult Education) & Director General (National Literacy Mission), Department of Education, Ministry of Human Resource Development.

2. G.P.2 National Front Manifesto as compared to. National Policy on Education (NPE) 1986.

3. G.P.3 A paper on Book Promotion and Scholarships presented by Joint Secretary (Book Promotion and Scholarships) , Department of Education, Ministry of Human Resource Development.

4. G.P.4 A paper entitled Challenges of Technical Education in India' prepared by the Technical Education Bureau, Department of Education, Ministry of Human Resource Development

5. G.P.5 Review of National Policy on Education, 1986 relating to Elementary Education and Teacher Education presented by Joint Educational Adviser (Elementary Education & Technical Education) , Department of Education, Ministry of Human Resource Development.

6. G.P.6 Review of NPE 1986 schemes relating to School Education presented by Joint Secretary (School) , Department of Education, Ministry of Human Resource Development.

7. G.P. 7 i) Report of the Committee for Promotion of Urdu.

ii) Summary of conclusions and recommendations of the Committee for Promotion of Urdu, 1975, and

iii) Resolution adopted by the Committee of Experts under the Chairmanship of Shri Ali Sardar Jafri in its meeting held on April 9- 10, 1990.

8. G.P.8 Status Paper on National Literacy Mission

ii) Adult Education Programme

iii) National Literacy Mission

iv) Scheme of Assistance to Voluntary Agencies in Adult Education.

v) Scheme of Jana Shikshan Nilayam

vi) Literacy Mission' (April 1990 issue

9. G.P.9 Summary Record of Discussions of the meeting of the Consultative Committee of Parliament attached to the Ministry of Human Resource Development held on the 17th May, 1990.

10. G.P.10 Summary Record of Discussions of the meeting of the Consultative Committee of Parliament attached to the Ministry of Human Resource Development held on 22nd May, 1990.

11. G.P.11 Note on the Scheme of Community Polytechnics.

12. G.P.12 Report of the Group of Officials on Centrally Sponsored Schemes, Planning Commission (April 1987)

13. G.P.13 Management of Education for Minority Nationalities/Tribes in India' (UNESCO sponsored Diagnostic Study) by Shri K K Khullar.

14. G.P.14 i) Review of NPE schemes regarding Higher Education presented by Joint Secretary (Higher Education), Department of Education, Ministry of Human Resource Development.

ii) UGC Guidelines on Terms & Conditions of Affiliation of Colleges by a University.

iii) Revised Guidelines on the Scheme of Autonomous Colleges.

iv) Revised Guidelines on the Scheme of Autonomous Department/Institutes/Centres/ Schools within the University set up.

v) U G C Guidelines regarding the Minimum number of Actual Teaching Days, Programme of Examination Reform and workload for Teachers in Universities and Colleges.

vi) Report of the Task Force on Performance Appraisal of Teachers.

vii) Report of the Task Force on Code of Professional Ethics for University and Colleges Teachers.

viii) Report of the Committee on setting up State Council of Higher Education.

ix) Guidelines for formulating proposals for the Eighth Plan Development Schemes of Universities.

15. G.P.15 An Extract from the Rajya Sabha Debate dated Sept. 7, 1990, regarding discussion on Perspective Paper on Education.

APPENDIX V

List of Papers of Government Organisations (GOP Series)

1. GOP-1 A Paper on 'The NPE-86 and its Implementation as Perceived by the Common Man and the School Functionaries' prepared by the NCERT, New Delhi.

2. GOP-2 'Financing Higher Education in India' by Shri Jandhyala B.G. Tilak and Shri N V Varghese, NIEPA.

APPENDIX VI

List of Non-Government Papers (NGP Series)

1. NGP-1 Presidential Address by Dr. Sukhdev Singh, V.C, Punjab Agricultural University, Ludhiana at 64th AIU Annual Meeting on Oct. 8, 1989.

2. NGP-1A Letter dated 14.12.1989 from Dr. Anil Sadgopal addressed to the Prime Minister.

3. NGP-2 Letter dated 22.03.1984 from Dr. Anil Sadgopal to Prof. D.P. Chattopadhyaya, Chairman, National Commission on Teachers -I.

4. NGP-3 Article on 'Vocational Education- the changing scene' by Shri Veda Vyasa published in the August 1989 issue of 'Aryan Heritage'.

5. NGP-4 Article entitled 'on Secularism' by Prof. Mrinal Miri

6. NGP-5 New Education Policy:' Some Reflections and Reactions' by Prof. K. Satchidananda Murty.

7. NGP-6 Excerpts from the convocation addresses of 1988 and 1989 by Prof. Bhaskar Ray Chaudhuri.

8. NGP-7 Article on 'Vocational Education at the +2 stage' By Shri E.J. John published in the October 1989 issue of 'Aryan Heritage'.

9. NGP-8 Article on 'Vocationalisation of Education' by Shri C.P. Khanna published in the March 1989 issue of 'Aryan Heritage'.

10. NGP-9 Report of the Dr. Zakir Hussain Wardha Education Committee (1937).

11. NGP-10 Article on 'Dethroning Growth Rate' by Shri J D Sethi.

12. NGP-11 Note on 'Value Education' presented by Akhil Bharatiya Vidyarthi Parishad, Delhi Branch.

13. NGP-12 Letter dated 4th June, 1990 by Dr. Karan Singh Convenor, Education Group addressed to the Education Secretary regarding Education of the Handicapped.

14. NGP-13 Article on 'Vocationalisation of Education: Why, When and How' by Dr. S.S. Kalbag, Vigyan Ashram, Pabal, Pune.

15. NGP-14 Article on 'Linking Education Work for National Development, Educational Strategy for Training of Learning Entrepreneur' by Shri Vijay V. Mandke.

16. NGP-15 A Note on Changes in Higher Education by Shri H.K. Trivedi, Professor & Director, School of Commerce, Gujarat University, Ahmedabad.

17. NGP-15A 'Assessment of Democracy in India: Education' by Professor Usha Mehta.

18. NGP-16 'National Unity, Values and Character Building' by Dr. Bhaskar Ray Chaudhuri.

19. NGP-17 A Note on Value Orientation in Education by Dr. Vidya Niwas Misra.

20. NGP-18 A Brief Note on Restoring Sanskrit and reinforcing its role in Educational System by Dr. Vidya Niwas Misra.

21. NGP-19 Between 'Question and, Clarity': Vikram Sarabhai Memorial Lecture, 1981 delivered by Dr. Anil Sadgopal.

22. NGP-20 'The Hoshangabad Vigyan': Article in 'Science Today' December, 1977.

23. NGP-21 'Madhya Pradesh: The Lessons of Change' Article in India Today' : July 15, 1984.

24. NGP-22 'Towards A People's Policy on Education: An Alternative to NPE 1986' by All India Save Education Committee, Calcutta.

25 NGP-23 Ethics, Education, Indian Unity and Culture' by Prof. K. Satchidananda Murty.

26 . NGP-24'on national crisis' by Prof. K. Satchidananda Murty.

27. NGP-25 Dr. M G Bhatawdekar's letter dated 16.07.90 addressed to Dr. Vidya Niwas Misra.

28. NGP-26 'Navodaya Vidyalayas' by Dr. Bhaskar Ray Chaudhuri.

2 9 . NGP-27Note on Task Force to review the educational problems and policies in the tribal areas under the Fifth and Sixth schedule of the Constitution.

30. NGP-28 Note on 'A Frame of Reference' by Fr. T.V. Kunnunkal.

31. NGP-29 Letter dt. 18.07.90 from Prof. Bhaskar Ray Chaudhuri addressed to Shri Manubhai Pancholi.

32. NGP-30 Some Suggestions for improvement in Teacher Education for consideration of the Review Committee -for NPE submitted by Rajasthan Shiksha Mahavidyalaya Parishad.

33. NGP-31 Notes on Education and Right to work, Value Education and Rural Education prepared by Bharatiya Shikshan Mandal.

34. NGP-32 An extract of the Presidential address delivered by Shri S W Dhabe in the second Indian Physical Education Congress held from 4th to 6th August 1990 under the aegis of the All India Physical Education and Allied Teachers' Association.

35. NGP-33 Report of the Workshop to 'Review the National Policy on Education' held in the Academic Staff College, University of Rajasthan, Jaipur.

36. NGP-34 A set of three notes prepared by Prof. R.G. Takwale V.C. Yashwantrao Chavan Maharashtra Open University, Nasik regarding Non-Formal Education through Open University and Modular Degree Education Programme.

37. NGP-35 A set of comments prepared by a People's Science Group in Calcutta on 'Challenges of Technical Education in India.'

38. NGP-36 A paper entitled 'Rural Community Oriented Work Experience Programme - a Proposal' by Dr. S.S. Kalbag, Vigyan Ashram, Pabal, Pune.

39. NGP-37 A paper entitled 'To Begin a Revolution, with a Revolution' by Shri J P Naik.

40. NGP-38 New approach to Vocational and Technical Education' by Prof. P R Sengupta.

41. NGP-39 Mopping the Floor without closing the Tap' by Dr. Vasudha Dhagamwar.

42. NGP-40 Some Suggestions for a Structured Review of the Draft Perspective Paper' by Fr. T.V. Kunnunkal.

43. NGP-41 'A note for NPERC' by Prof. K. Satchidananda Murty.

44. NGP-42 Letter dt. 31.08.90 from Prof. K. satchidananda Murty to Chairman, NPERC.

45. NGP-43 A Brief Note on Reintroducing Sanskrit in Educational System' by Vidya Bharati Akhil Bharatiya Shikhsa Sansthan, Lucknow.

46. NGP-44 New Ideas on Education Policy' script of an AIR broadcast in the Spotlight programme on 06.09.90 by Shri Lalit Sethi, Spl Rep., The Statesman.

47. NGP-45 A Note regarding Operation Blackboard prepared by Education Department, Government of West Bengal.

48. NGP-46 A Brief Note for the perspective Paper by Dr. Vidya Niwas Misra.

49. NGP-47 Prof. K. Satchidananda Murty's letter dt. 11.09.90 addressed to Member-Secretary, NPERC.

50. NGP-48 Prof. K. Satchidananda Murty's letter dt. 13.09.90 addressed to Chairman, NPERC.

51. NGP-49 Dr. O. Siddiqi's letter dt. 10.09.90 addressed to Chairman NPERC.

52. NGP-50 'Gender bias in NCERT text-books:' A presentation by the saar group for the Committee to review the National Policy on Education.

53. NGP-51 Using unorganised sector as places to learning: A case study of repair and assembly workshops a report prepared by NISTDS, New Delhi.

54. NGP-52 Select Press write-ups (including editorials) on Education Policy Review.

55. NGP-53 Reactions to Perspective Paper in the Panel discussion organised by Department of Foundations of Education, Jamia Millia Islamia, New Delhi.

56. NGP-54 Letter dt. 24.09.90 from Dr. M G Bhatwdekar reg. Prespective Paper on Education.

57 . NGP-55 Group Reports of Workshop on Perspective Paper on Education organised by the University of Bombay on September 26, 1990.

58. NGP-56 Comments of Bharathidasan University on the Perspective Paper on Education.

59. NGP-57 Recommendations of the 19th Annual Conference of Council of Boards of School Education held from 17th to 19th September, 1990 on matters relating to examination reforms, common school system and vocationalisation of education.

60. NGP-58 Select Press Write-ups (including editorials) on Education Policy Review (Second Set)

61. NGP-59 Education for Development - Points emerging from a panel discussion held in Jamia Millia Islamia, New Delhi on 26th September, 1990.

62. NGP-60 Towards an Enlightened and Humane Society - From a Democratic and Scientific Viewpoint: Resume of the Comments at a seminar on the Perspective Paper of Committee for Review of National Policy on Education held under the auspices of University of Calcutta on 19th and 20th September, 1990.

63. NGP-61 Shiksha ke Sambandh me Paripreksh Parcha' par Sangosthi ka partivedan, Prashashan Akademi, Madhya Pradesh, Bhopal.

64. NGP-62 Dr. Anil Sadgopal's letter dated 21.10.90 to Acharya Ramamurti regarding criticisms about the Perspective Paper.

65. NGP-63 Report of Discussion meeting held at Bangalore on 8th October, 1990 under the auspices of A.C. Dave Gowda Educational Trust and Human Resource Developmen2652HCentrefor Teachers. Rashtreeya Vidyalaya Teachers College, Bangalore.

66. NGP-64 Proceedings of the special meeting of the Bangalore South District Secondary School Head Masters' & Junior College Principals' Association, Bangalore held on 4th October, 1990.

67. NGP-65 Proceedings of one-day discussion held in Delhi on 13th October, 1990 under the auspices of the University of Delhi through its Department of Adult, Continuing Education and Extension, the Council for Social Development, and the Indian University Association for Continuing Education, Delhi.

68. NGP-66 Report of the Seminar held on October 13-14, 1990 under the auspices of Rajya Vidwat Parshad, Rajasthan at Jaipur.

69. NGP-67 Proceedings of the one-day discussion held in Hyderabad on 20th October, 1990 under the auspices of the Southern Regional Centre of the Council for Social Development, Hyderabad and the Indian University Association for Continuing Education, New Delhi.

70. NGP-68 Proceedings of the one-day discussion held in Madras on 21st October, 1990 under the auspices of University of Madras and the Indian University Association for Continuing Education

71. NGP-69 Report of the Seminar sponsored by the Institute of Education and Culture, Hyderabad, University of Hyderabad, Hyderabad and the Osmania University, Hyderabad held at the Central Institute of English and Foreign Languages, Hyderabad on October 21-22, 1990.

72. NGP-70 Extracts from Dr. M G Bhatawdekar's letter dated 12th October, 1990: A few points on the Perspective Paper.

73. NGP-71 Prof. K Satchidananda Murty's letter dated 25th October, 90 regarding preparation of final report.

74. NGP-72 Views on the Perspective Paper on Education recorded by the Indore Discussion Group.

75. NGP-73 Proceedings of the one-day discussion on a Perspective Paper on Education organised by the Centre for Adult and Continuing Education, University of Kerala at Trivandrum on Saturday, the 27th October, 1990.

76. NGP-74 Literacy - An Unending Debate by Prof. Ramlal Parikh.

77. NGP-75 Following papers furnished by Dr. (Mrs.) Jaya Kothai Pillai, Vice-Chancellor, Mother Teresa Women's University, Madras:

i) Report on Teacher Education of NPE'

ii) A Perspective Plan for Reorganising Teacher Education.

iii) Dr. (Mrs.) Jaya Kothai Pillai's keynote address on 'Teacher Training I at the Vice-Chancellors' conference held at Osmania University in 1988.

iv) Dr. (Mrs.) Jaya Kothai Pillai's article on 'Appraisal of Teacher Effectiveness'.

78. NGP-76 Note dated 22.11.90 on Role of Teacher Education in the New Education' by Anwar-ul-Uloom College of Education, Hyderabad.

79. NGP-77 Teacher Education for Teacher Transformation Preliminary report of the Seminar on Teacher Education held at Bhopal on 29-30 November, 1990.

APPENDIX VII

List of Studies Commisoned by NPE Review Committee

1. Gender Bias in NCERT Text-Books:

A Presentation by the Saar Group, New Delhi

2. Using Unorganised Sector As Places of Learning:

A Case Study of Repair and Assembly Workshops by the National Institute of Science, Technology and Development Studies, New Delhi.

3. Teacher Eduction of NPE 1986 and A Perspective Plan for Teacher Education:

By Mother Teresa Women's University, Madras

4. Role of Teacher Education in the New Education:

By Anwar-ul-uloom College of Education, Hyderabad.

5. Internship Model of Teacher Training and Activity-based Classroom

By Smt. Mina Swaminathan, Forum for Creches and Child care services, Madras.

6. Language Teaching at Digantar

By Shri Rohit Dhankar, Digantar, Jagatpura, Jaipur.'

APPENDIX VIII

LIST OF SEMINARS/WORKSHOPS.

S.No.	Organising Agency	Venue	Date
1.	Council of Boards of Secondary Education, New Delhi	Nainital 1	7.09.1990 to 19.09.1990
2.	University of Calcutta Calcutta.	Calcutta	19.09.1990 to 20.09.1990
3.	University of Bombay, Bombay.	Bombay	26.09.1990
4.	Department of Foundation of Education, Jamia Millia Islamia New Delhi.	New Delhi	26.09.1990
5.	Indian Society for Public Affairs, Jaipur	Jaipur	30.09.1990
6.	Bharathidasan University, Tiruchirapalli.	Tiruch-irapalli	01.10.1990
7.	Academy of Administration, Madhya Pradeh, Bhopal	Bhopal	06.10.1990 to 07.10.1990
8.	Indore Discussion Indore	Indore	08.10.1990
9.	Human Resource Development Centre for Teachers, Rashtraya Vidyalaya Teachers College, Jayanagar, Bangalore and Dr. A.C. Devegowda Trust, Bangalore.	Bangalore	08.10.1990
10.	Bangalore South District Secondary Schools Head Masters' and Junior College Principals' Association, Kalasipalyam, Bangalore.	Bangalore	11.10.1990
11.	Gandhian Institute of Studies, Varanasi.	Varanasi	11.10.1990
12.	Indian University Association	New Delhi	13.10.1990

for Continuing Education, the Department of Adult, continuing Education & Extension, University of Delhi and the Council for Social Development, New Delhi.

13.	Gandhi Peace Foundation New Delhi.	New Delhi	13.10.1990 to 14.10.1990
14.	Rajya Vidwat Parishad, Rajasthan, and Bharatiya Shiksha Samiti, Rajasthan.	Jaipur	13.10.1990 to 14.10.1990
15.	Zakir Hussain Centre for Educational Studies.' J.N.U., New Delhi	New Delhi	17.10.1990
16.	Southern Regional Centre of the Council for Social Development Hyderabad and Indian University Association for Continuing Education, New Delhi.	Hyderabad	20.10.1990
17.	Institute of Education and Culture Hyderabad, University of Hyderabad and Osmania University, Hyderabad	Hyderabad	20.10.1990 to 21.10.1990
18.	Indian University Association for Continuing Education and Deptt. of Continuing Education, University of Madras.	Madras	21.10.1990
19.	Centre for Adult and Eduction and Extention, University of Kerala and Indian University Association for Continuing Education	Thiruvanan-thapuram	27.10.1990
20.	Indian Association of Teacher Educators and University of Kanpur, Kanpur	Kanpur	28.10.1990 to 30.10.1990
21.	State Resource Centre, KANFED Trivandrum	Thiruvanan-thapuram.	01.11.1990

22.	National Law School of India University, Bangalore and Indian University Association for Continuing Education.	New Delhi	03.10.1990
23.	Indian Institute of Public Administration, Bihar Regional Branch, Patna	Patna	09.11.1990
24.	Bharatiya Shikshan Mandal, New Delhi	New Delhi	18.11.1990

APPENDIX IX

Acadmic Cell

1.Dr. J P Sharma, Lecturer, DIET, SCERT, Moti Bagh, Nanakpura New Delhi -110 021.

2. Smt. Sonal Mehta, Scientific Collaborator Vikram A. Sarabhai community science Centre, Navrangpura, Ahmedabad : 380 009.

3. Dr. Gautam Bhattacharya Consultant to the Planning commission C-12, Sector-14, NOIDA Uttar Pradesh 201 301.

APPENDIX X

List of Experts who helped the Drafting Committee

On chapter 4
- Equity, Social Justice and Education 1. Dr. (Smt.) Poonam Batra, Lecturer, Zakir Hussain Centre for Educational Studies., Jawaharlal Nehru University,New Delhi -110 067.

2. Dr. (Smt.) Geetha B. Nambissan, Lecturer Zakir Hussain Centre for Educational Studies, Jawaharlal Nehru University, New Delhi - 110 067.

On Chapter 5
- Early Childhood Care And Education

Smt. Mina Swaminathan, Forum for Creches and Child Care Services, Madras.

On Chapter 6
- Universalisation of Elementary Education

1. Dr. Umesh Vasisht Lecturer Department of Education Devi Ahilya Vishwavidyalaya Indore : 452 001.

2. Shri K.C. Sahu, U.G.C Research Fellow, Department of Education, Devi Ahilya Vishwavidyalaya Indore : 452 001.

APPENDIX XI

Names and Addresss of Chairman and Members of Committee for Review of National Policy on Education (NPE), 1986.

1. Acharya Ramamurti,   Chairman
P.O. Khadigram, Distt. Munger,
Bihar - 811 313.

2. Dr. C.N.R.Rao,   Member
Director, Indian Institute
of Science, Bangalore - 560 001.

3. Dr. Sukhdev Singh,   -do-
51, Sector 11-A,
Chandigarh - 160 001.

4. Dr. M. Santappa,   -do-
Scientific Adviser,
Tamil Nadu Pollution Control Board,
25, Dr. Radhakrishnan Salai,
Madras - 600 004.

5. Dr. Obaid Siddiqi,   -do-
Molecular Biology Unit,
Tata Institute of Fundamental
Research, Homi Bhabha Road,
Bombay - 400 005.

6. Dr. Bhaskar Ray Chaudhuri,   -do-
Vice-Chancellor,
University of Calcutta,
Calcutta - 700 001.

7. Dr. M.G. Bhatawdekar,   -do-
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APPENDIX XII

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