



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

NIEPA DC



D08481

RECOMMENDATIONS

379
IND-CR

D-6481
8-11-91

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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 human 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.

NOTE : Paragraph numbers of the Report are retained in this Chapter.

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 have 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 originally 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, woman, 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 Scheme. “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 levels. 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 over-tones 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 an enlightened and humane society in the country.

* 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.

RECOMMENDATIONS

EQUITY, SOCIAL JUSTICE AND EDUCATION

Education and Women's Equality

Access to Water, Fuel and Fodder

1. 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. (4.1.10)

2. '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. (4.1.10)

3. The Department of Education should coordinate with the other concerned departments and secure adequate resource allocation for the abovementioned 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. (4.1.10)

4. 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. (4.1.10)

NOTE : The number given in brackets at the end of each recommendation is the paragraph number of the Report of the Review Committee under which that recommendation appears.

5. 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. (4.1.10)

Early Childhood Care and Education (ECCE)

6. The policy framework on women's education must bring out the criticality of the link between ECCE and girls' accessibility to elementary education. (4.1.13)

7. Comprehensive and effective ECCE services should be provided in proximity to every primary and middle school and be programmatically linked with elementary education. (4.1.13)

8. Priority should be given to child-care programmes catering to the 0—3 age group, particularly among the under-privileged sections of society. (4.1.13)

9. 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. (4.1.13)

10. While the Anganwadis (ICDS) should continue to be given importance, other models which are sensitive to local needs should also be encouraged. (4.1.13)

11. The management of Anganwadis and other ECCE programmes should be decentralised and be made participative, as recommended in the chapter on ECCE. (4.1.13)

12. 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. (4.1.13)

Regional Disparities

13. The issue of regional disparities needs to be incorporated into the operational design for universalising girls' access to elementary education. (4.1.16)

14. Any effective strategy for raising the educational status of women in India would have to give priority to the educationally backward districts. (4.1.16)

15. 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. (4.1.16)

16. 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. (4.1.16)

Content of Education and the Gender Bias

17. 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. (4.1.19)

Stereotypes in Text-books and the 'Hidden Curriculum'

18. 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. (4.1.22)

19. 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. (4.1.22)

20. 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. (4.1.22)

Role of the Media

21. 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. (4.1.23)

22. In the specific context of gender, advertisements displaying women as sex symbols and using them for sales promotion should be seriously dealt with. (4.1.23)

23. 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. (4.1.23)

24. An awareness of the need for Women's education, especially elementary and vocational education, should also be spread. (4.1.23)

25. 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). (4.1.23)

26. 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. (4.1.23)

27. A National Policy on Communication, giving a gender perspective to all forms and processes of mass communications, should be formulated urgently. The National Commission on Women should play an active role in this exercise. (4.1.23)

Vocational Education

28. Vocational Training for women should be planned and implemented at the State level, partly through the proposed Educational Complexes. (4.1.27)

29. Vocational Training for women should be encouraged in non-traditional occupations, following an undifferentiated curriculum. (4.1.27)

30. Concerted efforts should be made towards discouraging the existing biases in vocational courses for women. (4.1.27)

31. 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. (4.1.27)

32. 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. (4.1.27)

Training of Teachers and Other Educational Personnel

33. 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. (4.1.30)

34. 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. (4.1.30)

35. 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 alongwith educational institutions, Women's Study Centres, educators and grassroot 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. (4.1.30)

36. Teachers' training institutes should adopt the revised curriculum so that all teacher trainees, male and female, are exposed to the restructured training programme. (4.1.30)

37. A separate training and sensitisation programme for the teacher educators would have to be undertaken on a priority basis. (4.1.30)

38. 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. (4.1.30)

39. 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. (4.1.30)

40. 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. (4.1.30)

Research and Development of Women's Studies

41. Women's Study Centres should be organised in all the Universities and recognised social science research institutions within the Eighth Plan. (4.1.32)

42. 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. (4.1.30)

43. 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. (4.1.32)

Women's Studies Courses

44. 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. (4.1.33)

45. 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. (4.1.33)

46. All issues related to curricular revision and development on Women's Studies should be extended to the orientation of teachers as well. (4.1.33)

Extension Services

47. Women's Development Centres, such as the ones existing in some University Colleges should be extended to all colleges and higher educational institutions. (4.1.34)

48. These Centres should also be given funds to conduct awareness workshops/seminars etc. at both the school and community levels. (4.1.34)

Representation of Women in the Educational Hierarchy

49. 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. (4.1.36)

50. 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 women are fairly represented in decision-making bodies in teaching and educational administration. (4.1.36)

51. 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 women are not prevented by socio-cultural factors from rising in educational hierarchy. (4.1.36)

52. 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. (4.1.36)

Empowerment of Women

53. 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. (4.1.40)

54. Implement *Mahila Samakhya* in such a way as to establish organic linkages with the ECCE programme and the efforts towards universalisation of girls' elementary education. (4.1.40)

55. Build a component of closely working with men in the community also, as part of the process of women's empowerment. (4.1.40)

56. 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. (4.1.40)

Adult Education

57. For imparting adult education to women and thereby empower them, the Mahila Samakhya model should be tried out. (4.1.41)

Resources

58. Fifty per cent of the elementary sector allocation for measures to increase girls' participation and be earmarked this allocation be made non-divertible. (4.1.42)

59. A share of all developmental allocations for secondary, vocational and higher education be earmarked for measures to improve girls' access thereto and the quality of education in these sectors be improved. (4.1.42)

60. There should be special earmarking for girls within the Special Component Plan for Scheduled Castes and Tribal Sub-Plan. (4.1.42)

Management

61. 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. (4.1.44)

62. 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 timeframes. (4.1.44)

Education for the Scheduled Castes Scheduled Tribes and other
Educationally Backward Sections

Incentive Schemes

63. 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. 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. (4.2.5)

Status of Access to Education

64. The Fifth All India Education Survey shows that a number of habitations predominantly populated by SCs and STs are not served by schools within walking distance. 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. (4.2.6)

Improvement of Capability and Educational Environment

65. 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. (4.2.7)

66. A strategy to enrich learning environment and the socio-economic conditions in the tribal regions as distinct from mere

remedial coaching should be evolved and brought under implementation. (4.2.7)

67. In the backward areas 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. (4.2.7)

68. 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. (4.2.7)

69. 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) (4.2.7)

70. 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). (4.2.7)

Recruitment of SC/ST Teachers

71. 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. (4.2.8)

Curriculum and Tribal Culture

72. 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. (4.2.8)

Special Component Plan and Tribal Sub-Plan

73. Special Component Plan and Tribal Sub-Plan should be specifically exhibited in the budget document, schemewise. (4.2.9)

74. To the extent feasible, schemes meant exclusively for the Scheduled Castes and Scheduled Tribes should be prepared and included under SCP/TSP. (4.2.9)

75. 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. (4.2.9)

76. 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. (4.2.9)

Intensive Area Approach

77. 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. (4.2.10)

78. 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. (4.2.10)

Monitoring

79. 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. (4.2.11)

Minorities

80. 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. (4.2.12)

81. 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

NOTE : The forty-one districts identified in the POA as being of minority concentration.

districts based on initial bench mark surveys to assess the status of literacy therein and to build programmes thereon for further improvements). (4.2.12)

82. The twenty-five 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. (4.2.12)

83. 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. (4.2.12)

84. Special coaching should be organised through reputed and progressive voluntary organisations, particularly those operating for the benefit and welfare of the minority communities. (4.2.12)

85. Open universities including the IGNOU should establish distance education programmes for imparting special coaching. (4.2.12)

Education of the Handicapped

86. 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. (4.3.6)

87. 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. (4.3.6)

88. 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. (4.3.6)

89. 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. (4.3.6)

90. 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. (4.3.6)

91. 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. (4.3.6)

92. 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. (4.3.6)

93. 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. (4.3.6)

94. 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. (4.3.6)

95. In pre-service teacher training programme, education of the handicapped, should be made part and parcel of the pedagogy and methodology. (4.3.6)

96. 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. (4.3.6)

97. 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. (4.3.6)

98. At least one resource faculty should be provided in each DIET to provide teacher training inputs in the context of education for the handicapped. (4.3.6)

99. The role of the special schools should be clearly re-defined 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 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. (4.3.6)

100. 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 encyclopaedia on cassettes, printing conversion devices like 'tactacon' which facilitates presentation of printed material in vibrotactile 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. (4.3.6)

101. 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. (4.3.6)

Common School System

102. 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 :—

- 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 timeframe; 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. (4.4.8)

Navodaya Vidyalayas

103. 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 :

* redefinition 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 underprivileged 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). (4.5.10)

EARLY CHILDHOOD CARE AND EDUCATION

Scope of Article 45 of the Constitution

104. 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. (5.1.6)

Operational Design

105. Since ECCE is a cross-sectoral programme, addressing the inter-secting 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. (5.2.0)

Priority

106. ECCE should be included in the Minimum Needs Programme. (5.3.0)

Role and Responsibility of Various Departments

107. 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. (5.4.4)

108. This Department must also accept the nodal role of stimulating, co-ordinating and monitoring the ECCE work undertaken by other agencies/departments, such as Labour, Works & Housing, Tribal Welfare, Agriculture, Irrigation, Rural Development, Forest etc. (5.4.4)

109. 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, co-ordinating and monitoring the ECCE programmes. (5.4.4)

110. 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. (5.4.4)

Strategies and Models

111. 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. (5.5.4)

112. 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. (5.5.4)

113. Provision should be made for Statutory Cretches 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. (5.5.4)

114. Wherever possible, ECCE centres should be linked physically as well as programmatically with the primary school. (5.5.4)

ICDS

115. 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. (5.6.2)

Other Models and Strategies

116. 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 under-privileged 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. (5.7.4)

Content and Quality

117. The basic principles of curriculum and content of ECCE should be translated into localised content. (5.8.4)

118. 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. (5.8.4)

119. 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. (5.8.4)

Personnel and Training

120. 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. (5.9.9)

121. 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 and 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 co-ordination with the nodal and other related departments/agencies would be necessary. (5.9.9)

122. 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. (5.9.9)

123. 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, para-professional, 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. (5.9.9)

124. 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). (5.9.9)

125. 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. (5.9.9)

126. Measures should be initiated to re-structure the training programmes of elementary school teachers all over the country to integrate and emphasise the child-centered 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. (5.9.9)

Decentralisation

127. 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. (5.10.3)

128. The management of Anganwadis and other ECCE centres should be fully handed over to voluntary organisations and/or local 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. (5.10.3)

129. 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. (5.10.3)

130. 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. (5.10.3)

131. 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 executed bodies of the Complexes. (5.10.3)

132. 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. (5.10.3)

133. 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 Educational 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. (5.10.3)

134. 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. (5.10.3)

135. 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. (5.10.3)

Resources

136. A Central Fund for child care services should be set-up at the national level. (5.11.0)

137. 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. (5.11.0)

138. 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. (5.11.0)

139. 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 *Inter-Ministerial Committee* 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.

- (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. (5.11.0)

140. 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. (5.11.0)

Monitoring and Evaluation

141. 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. (5.12.0)

142. 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. (5.12.0)

143. 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 fora with a view to build up public pressure for programme efficiency. (5.12.0)

144. 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. (5.12.0)

UNIVERSALISATION OF ELEMENTARY EDUCATION

Right to Education

145. 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. (6.1.3)

Thrust Areas

146. 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. (6.3.2)

147. 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 of NPE. (6.3.2)

Lacunae in NPE 1985

148. 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 (NPE 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-modelling, 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 fora. The policy should have, instead, spelt out its strategy to mitigate the reasons that have not allowed this to happen so far.

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. (6.3.3)

149. 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. (6.3.7)

150. 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. (6.3.7)

151. 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. (6.3.7)

152. 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. (6.4.9)

Non-Formal Education

153. Over a period of time non-formalise the formal school in the following ways :

- (a) Shifting of the school timings to early morning hours, after-noons 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-lore and folk-arts would enrich the pedagogic practices.
- (d) Linking at least 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 play-way 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). (6.5.11)

154. 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

* The concept of a 'para-teacher' is somewhat similar to the concept of *Shiksha Karmis* practised at present in Rajasthan on an experimental basis with a view to reach-out to unserved habitations.

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;
- (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 sandwich 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. (6.5.11)

155. In order to non-formalise the formal school, the following package of measures would have to be adopted as a '*pre-condition*' :

- (a) handing over the effective control of the school, including the appointment, posting and promotion of teachers, to a co-ordinated management system involving the school, Village Education Committee and the Educational Complex;

- (b) empowering the local community, especially under-privileged 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. (6.5.11)

156. 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 teachers-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

157. 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. (6.6.6)

158. 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. (6.6.6)

159. 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. (6.6.6)

160. 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. (6.6.6)

161. 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. (6.6.6)

Measure to 'Reach Out' to Children

162. 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. (6.9.0)

163. 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. (6.9.0)

164. 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. (6.9.0)

165. 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. (6.9.0)

166. In starting 'para-schools', whether at primary or middle level, priority should be given to the habitations having

enrolments and retention rates for girls below the State average. (6.9.0)

167. 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. (6.9.0)

168. 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-school' 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. (6.9.0)

Strategies and Measures for Achieving UEE

169. Make each school, primary or middle, fully responsible accountable or 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. (6.13.0)

170. 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. (6.13.0)

171. 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. (6.13.0)

172. 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. (6.13.0)

173. 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. (6.13.0)

174. 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 collection and integration of the disaggregated targets. (6.13.0)

175. Monitoring of the move towards UEE shall be integral to the planning process and may operate at three independent but co-ordinated 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 fora with a view to build up public pressure for achieving UEE within this century. (6.13.0)

176. 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. (6.13.0)

Monitoring and Data Gathering

177. 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.

ADULT AND CONTINUING EDUCATION

Adult Literacy as a Felt Need

178. 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. (7.9.0)

Mass Campaign Strategy and Mahila Samakhya Model

179. 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. (7.9.0)

180. The mass campaign strategy as well as the Mahila Samakhya model may be objectively evaluated to look for meaningful lessons for the future. (7.9.0)

Voluntary Efforts

181. 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 by voluntary agencies, community groups, political parties and their mass organisations should be facilitated. (7.9.0)

Evaluation of NLM

182. 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. (7.9.0)

Imparting of Vocational Skills

183. 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 Poly-technics 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. (7.9.0)

Continuing Interface with Literacy

184. The neo-literates should be placed in an environment in which they have constant interface with the challenge of the written word. (7.9.0)

UEE and Adult Education Programmes

185. 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 train-

ing 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. (7.9.0)

EDUCATION AND RIGHT TO WORK

Scheme of Vocationalisation of Education

186. 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.

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. (8.4.8)

Work Experience/Socially Useful Productive Work

187. Work Experience/Socially Useful Productive Work should be integrally linked with various subjects both at the level of content and pedagogy. (8.6.0)

Integrated Design of Vocational Education

188. 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 Academic Academic	Vocational Vocational Vocational	Academic Academic Vocational	Academic Vocational Vocational

Flexibility should be provided for children to opt for different mixes of academic and vocational subjects as per the pattern exhibited above. (8.7.0)

Structural Changes in Secondary Education

189. 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. (8.7.0)

Vocational Programmes in NFE

190. 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. (8.7.0)

Removal of Anomalies in Vocational Courses

191. Several vocational courses get sex stereotyped. That is, they are considered predominantly relevant in the domain

of women. This stereotyping should be carefully avoided; 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 Equity.) 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'.) (8.7.0)

Work Benches and Practice Schools

192. 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 'classroom'. Here the training would revolve around real problem—solving and on-the-job development of skills. Whereas '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 'work benches', 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 vocational courses, preparation of text materials and evaluation—in a sense in the entire process of education. (8.8.4)

Redesigning Teacher Education Courses

193. Teacher education courses for vocational education at both the secondary level and post-secondary level should be re-designed 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. (8.9.0)

Decentralisation of Planning and Management

194. 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. (8.9.0)

195. 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. (8.9.0)

196. 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. (8.9.0)

197. 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. (8.9.0)

HIGHER EDUCATION

Maintenance of Standards in Higher Education

198. 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. (9.4.0)

199. 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. (9.4.0)

Restructuring of UGC

200. 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.

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. (9.6.0)

Selectiveness in Admission

201. 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). (9.6.0)

202. 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. (9.6.0)

Autonomous Colleges

203. 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. (9.7.2).

New Management for Universities

204. Government, should facilitate early decisions on the report of the Gnanam Committee, the same having been received as early as January, 1990. (9.7.3)

Curriculum Development

205. For the redesigning of courses the UGC has set up twenty-seven Curriculum Development Centres in different disciplines. The emphasis is on modernising and restructuring courses in modular form. Reportedly, twenty-two 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 Chairman 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.

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. (9.8.0)

Decentralisation

206. 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. (9.9.0)

Teacher Training

207. 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. (9.9.0)

Research

208. 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. (9.11.0)

209. 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. (9.11.0).

210. 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). (9.11.0)

211. 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. (9.11.0).

212. 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. (9.11.0)

213. 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. (9.11.0)

Extension in Universities

214. 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 system should rather be "Vishwa Gyan Gaon mein Dhyam". (9.12.6)

National Testing Service

215. 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 rest 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. (9.13.3)

Rural Universities

216. 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. (9.14.2)

217. 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. (9.14.2)

Agricultural Universities

218. 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. (9.14.3)

National Council of Higher Education

219. 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.

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. (9.15.0)

Grievance Redressal

220. 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. (9.17.0)

TECHNICAL AND MANAGEMENT EDUCATION

Thrust Area Schemes

221. 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. (10.4.3)

Community Polytechnics

222. The report of Kalbag Committee estimated the financial requirements of the Community Polytechnics 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.

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. (10.4.6)

AICTE

223. 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

224. The report of the IIT Review Committee should be carefully considered and decisions taken emergently. (10.6.0)

Future Perspective and Measures

225. *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. (10.7.0)

226. *Upgrading of infrastructural facilities.*

Action :

- Strengthen the programmes of 'modernisation', 'removal of obsolescence', 'thrust areas' etc.
- Enhance computer facilities through appropriate net-working.
- 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. (10.7.0)

227. *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. (10.7.0)

228. *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). (10.7.0)

229. *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.
- 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. (10.7.0)

230. *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 post-graduate teaching and research institutions are properly screened and pre-evaluated. (10.7.0)

231. *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. (10.7.0)

232. *Special programmes for SC/ST, women and the physically 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, freships, 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. (10.7.0)

233. *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. (10.7.0)

234. *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 retaining technical personnel already in employment. (10.7.0)

LANGUAGES IN EDUCATION

The Three-Language Formula

235. 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. 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 Foreign 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.

- (c) 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 teachers 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.
- (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 (1964—66) 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 uniformly 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, Headmasters 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.
- Surveys 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.) (11.4.6)

Language Media for Higher Education

236. 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. (11.4.6)

237. 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 post-graduate students.) (11.4.6)

238. 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. (11.4.6)

Development of Hindi as per Article 351 of the Constitution

239. 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.) (11.4.6)

240. 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. (11.4.6)

Sanskrit Maintenance and Co-ordination of Academic Standards

241. 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 Rashtriya Sanskrit Sansthan 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 Rashtriya Sanskrit Sansthan as an institution of national importance.) (11.4.6)

Article 350A : Instruction in the Mother Tongue—Problem of the Urdu Speaking People and Development of Urdu

242. 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 Jafri 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.
- (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 additionally.

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;

* 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.

** 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.

- (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. (11.4.6)

243. 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. (11.4.6)

Development of Sindhi and other Inter-State Languages

244. 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. (11.4.6)

National Level Facility for Training in Translation

245. 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 Department 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.

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. (11.4.6)

A Fresh Linguistic Survey of India

246. 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. (11.4.6)

Use of Technology for Language Development

247. Within the umbrella of the project entitled Technology Development for Indian Languages undertaken by the Department of Electronics, 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. (11.4.6)

CONTENT AND PROCESS OF EDUCATION

Cultural Content

248. 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. (12.3.2)

249. 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. (12.3.2)

250. 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. (12.3.2)

Value Education

251. 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. (12.4.0)

252. 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. (12.4.0)

253. 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'. (12.4.0)

Languages

254. In order that the language Policy which has already come to be established and established is meaningfully implemented, the following measures should be taken :

- Universalisation of imparting instruction in the mother tongue at the primary stages 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). (12.5.2)

Educational Technology

255. The Educational Technology Programme as a whole should be reviewed by the Government in the light of the past 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. (12.6.11)

Computer Education

256. 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]. (12.7.0)

257. 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. (12.7.0)

Work experience, environment awareness and mathematics and science education

258. 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

259. 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 with the Department of Education. (12.9.0)

260. 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 Lakshmbai National College of Physical Education (LNCPE) and educational authorities of different levels for drawing up a plan for reorientation of teachers etc. This package of measures should be implemented. (12.9.0)

261. 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. (12.9.0)

262. 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. (12.9.0)

263. 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 inter-State 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. (12.9.0).

264. 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. (12.9.0)

265. 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. (12.9.0)

266. 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. (12.9.0)

Examination Reforms

267. 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); with in 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 exist for students which in effect facilitates *opening up* and *non-formalising* the school system. (12.10.7)

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.

268. 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 time-frame 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, NIPEA, 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 may be 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 time functionaries. (12.10.7)

Load of the School Bag

269. The knowledge in different disciplines needs to be viewed in an integrated manner, rather than in water-tight compartments. By doing this it is would be possible to avoid unnecessary repetition of facts. (12.11.0)

270. 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. (12.11.0)

271. 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 students would be in a position to learn throughout life according to his/her needs. (12.11.0)

272. 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. (12.11.0)

273. 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. (12.11.0)

274. 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. (12.11.0)

275. 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 up with textbooks. (12.11.0)

276. 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. (12.11.0)

TEACHERS AND STUDENTS

Teacher Education

277. Selection of students (for teacher training courses) should be regulated through stringent aptitude and attainment and not merely on University grade or mark. (13.1.4).

278. The training programme should be competence-based and there should be an integration of theory and practice for situational applications. (13.1.4).

279. Affective aspects to be taken care of so as to develop in students the qualities such as empathy, right attitude towards profession and society and develop values. (13.1.4).

280. In-service and Refresher 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 follow up 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 courses for elementary 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. (13.1.4).

281. 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. (13.1.4).

282. The first degree in teacher education should not be given through correspondence education. (13.4.0).

Preparing Teachers for the New Thrusts

283. 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.

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, disaggregated 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 singing, drawing, clay-modeling, folklore 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;
- *capacity 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.

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

284. 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 be co-ordinated 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. (13.6.11).

285. The Internship Model may also be explored as a possible way of training other types of teachers as well. (13.6.11).

Training High School Teachers

286. 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. (13.7.2).

287. Encourage more institutions to open the 4 year integrated course along the lines of Regional Colleges of Education. (13.7.2).

Preparing Teacher Educators for Leadership Role

288. Give the teacher educator a leadership role in all aspects of the educational system, including policy making, strategy formulation, implementation and monitoring. (13.8.4).

289. 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. (13.8.4).

Continuing Teacher Education

290. The proposed Educational Complex may be given the responsibility for co-ordinating 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. (13.9.0).

Faculty of Teacher Training Institutions

291. 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. (13.10.3).

In-service Education Programme

292. 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. (13.10.3).

Powers of Heads of Schools

293. 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. (13.10.3).

District Institutes of Education and Training (DIETs)

294. The State Governments must ensure full autonomy to DIETs for embarking upon its their programmes of research and training so that these are able to play their expected role in bringing about quality improvement and reform. (13.11.2).

295. 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 on giving a gender perspective to the entire educational process;
- (d) Education for promoting equity and social justice among SCs/STs and other educationally backward sections of society, including minorities;
- (e) Vocationalisation of the entire educational process; and
- (f) Examination reforms, modularisation, multiple entry and exit points. (13.11.2).

Implementation of the Scheme of Teacher Education

296. 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. (13.12.0).

297. 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. (13.12.0).

298. 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. (13.12.0).

Teachers' Welfare

299. 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

300. 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.

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.

Teacher Mobility

301. 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

302. 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 cooperation 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.

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. 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.

DECENTRALISATION AND PARTICIPATIVE MANAGEMENT

Disaggregated Target Setting

303. 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. (14.4.4).

304. Disaggregated target setting, besides being area specific should even be for different socio-economic segments and ethnic groups, particularly in the context of fulfilling the constitutional mandate for ensuring equality and social justice. (14.4.4).

305. 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 and educational development. (14.4.4).

306. 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. (14.4.4).

Educational Complexes

307. 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. (14.5.4)

Indian Education Service

308. 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). (14.6.5)

Involvement of Voluntary Organisations

309. 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 could be evolved. (14.7.3)

Co-ordination and Convergence of Services

310. 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 co-ordination 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. (14.8.7)

Central Institutions Functioning Style

311. 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 is 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). (14.9.0)

Centrally Sponsored Schemes

312. 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. (14.10.4)

RESOURCES FOR EDUCATION

Strategies for Raising Resources

313. 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. (15.13.5)

314. 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). (15.13.5)

Increase in Fees

315. 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%. 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 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. (15.13.5)

316. 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 cost of providing the relevant facilities/services. (15.13.5)

Institutional Loans

317. 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. (15.13.5)

318. 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.

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. (15.13.5)

Financing Education by Nationalised Banks and Financial Institutions

319. 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.

Therefore, there is need for a committed programme of the nationalised banks for providing loans for recipients of Higher Education. (15.13.5)

320. Term lending institutions like the Industrial 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 Entrepreneurship 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. (15.13.5)

321. 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 Governments. (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.) (15.13.5)

322. 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 (15.13.5)

Scholarships

323. 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. (15.13.5)

324. 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. (15.13.5)

325. 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. (15.13.5)

326. 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. (15.13.5)

Other Means of Raising Resources

327. Certain other means of raising resources for education are presented below :—

- A sustained programme to be impemented every year right down to the Panchayat levels for raising community contribution (Rules for grants-in-aid provided to the educational instituions 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 Stae Chief Ministers, there could be Prime Minister's and Chief Minister's Educational Funds into which the community contributions, educational ces (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 Scleme of Maharashtra for promoting primary education of girls under which registered foster parent pay Rs. 25/- p.m. in cash or kind to the needy gils 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. (15.13.5)

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