

CHALLENGE OF EDUCATION

AN APPROACH TO NEW EDUCATION POLICY

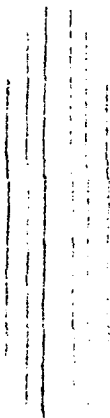


**DEPARTMENT OF EDUCATION
GOVERNMENT OF RAJASTHAN
JAIPUR**

DECEMBER, 1985

C H A L L E N G E O F E D U C A T I O N

AN APPROACH TO NEW EDUCATION POLICY



DEPARTMENT O F EDUCATION
GOVERNMENT O F RAJASTHAN
J A I P U R

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दो शब्द

भारत सरकार ने "शिक्षा की चुनौती" प्रकाशित कर राष्ट्र के सभी बुद्धिजीवियों को शिक्षा के विषय में विहंगम दृष्टि से विचार-विमर्श हेतु आमंत्रित किया है। इस संदर्भ में प्रदेश के कौन-कौन से परिचर्चाओं, गोष्ठियों एवं सम्मेलनों का दौर चला, जिनमें शिक्षाविदों के अतिरिक्त समाज के अन्य वर्ग के लोगों ने भी उत्साहपूर्वक भाग लिया।

विचार मंडल के दौरान शिक्षा प्रणाली में व्यापक परिवर्तन करने की प्रबल आवश्यकता महसूस की गयी। दूर-दराज के ग्रामीण क्षेत्रों से लेकर प्रदेश की राजधानी तक, प्राथमिक-शिक्षा से लेकर उच्चतम शिक्षा तक एवं नैतिक शिक्षा से लेकर व्यावसायिक शिक्षा तक शिक्षा के क्षेत्र में समयबद्ध तरीके से परिवर्तन लाना यद्यपि एक बहुत ही दुरुह कार्य है, फिर भी इस प्रदेश में नई शिक्षा नीति पर हुई चर्चाओं के आधार पर जो निष्कर्ष तथा सुझाव उभर कर आये हैं, उन्हें आपके समक्ष प्रस्तुत करते हुए मुझे प्रसन्नता है।

(दीरालाल दंतपुरा)
शिक्षा मंत्री
राजस्थान सरकार

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CHAPTER - I

INTRODUCTION

1.1. The document, circulated by the Department of Education, Government of India on the challenge of education facing the nation today has been debated and discussed in various forums through out the length and breadth of Rajasthan. These debates have focussed on the wide spread concern of all sections of society about the inadequacy of the present educational system. The question before us is how to translate this concern into effective action so that we can give to the country an educational system which is more meaningful, relevant and acceptable than the present one.

1.2. An analysis of the recommendations of seminars held in the State reveals that there is very little that can be added to the ideas generated by various commissions, committees and bodies which have gone into the question of educational reforms since the country gained independence. In fact, the debate has high-lighted our national weakness to take hard decisions which are required for bringing about lasting reforms in the existing system. The time has come to get down to the implementation of the core recommendations in a given time frame. There is no point in wasting scarce resources in debating and discussing endlessly issues on which there is a broad national consensus.

Could we think on the lines of setting up high-power task forces consisting of educational planners and administrators, public representatives and teachers who have devoted their life to the cause of education to ensure that recommendations to revitalise our educational system are brought into effect with minimum delay? This should not be left to the discretion and judgement of legions of ministerial employees in State Secretariats and Central Ministers.

1.3. The deliberations on the new educational policy have focused on the following issues which need to be re-iterated here :-

- (i) The impressive progress made in the field of education in quantitative terms cannot be ignored. However, it is necessary to focus our attention on the qualitative aspects of education in future.
- (ii) The regional imbalances which exist between progressive and back-ward States are fraught with dangerous consequences for the Nation. It is, therefore, obvious that future development of education cannot be left to the States to the extent to which it has been done in the past. The Government of India has to step in by providing liberal financial assistance to the most back-ward

blocks and districts throughout the country.

Planning should focus on ways and means to bring these neglected areas at par with other areas in the same State and across the country. A system of rigorous planning and monitoring of educational activities in these areas be introduced at regional, State and National levels.

(iii) The percentage of literacy is also adversely affected by low percentage of literacy among girls and students belonging to scheduled castes and scheduled tribes. Unless special attention is paid to their needs and requirements, it would be difficult to achieve the target of universalization of education. Even among these categories certain castes and communities have done better than others. Micro-level planning for identification of caste and communities which are more back-ward in this respect is called for.

(iv) (a) The share of education in plan out-lays should be gradually increased so as to ensure that around 6% of the GNP is invested in this sector by 1990.

(b) At the same time there is no escape from the fact that budgetary allocations alone would

never be adequate to achieve the desired goal. Therefore an all out effort has to be made to raise non budgetary resources through donations, gifts, endowments etc.

- (c) There is also agreement on the fact that we cannot go on subsidising the education of the elite to the extent we have been doing. Therefore, the elite must be made to pay a greater share of the cost of education. On the other hand the subsidisation of education for the under-privileged sections of society should be enlarged and the delivery system of free-ships and scholar-ships to these students must be streamlined to ensure prompt and timely payments.
- (d) The State should optimise investment for universalisation of elementary education and technical, professional and vocational education. This can only be done by reducing State investment in general higher education which should gradually pay for itself.
- (e) The internal efficiency of the educational system has to be improved to ensure optimum utilisation of the available resources and infrastructure. Recognition should be given to

those who are able to ensure the best pooling of resources and sharing of physical facilities at the district level.

- (v) (a) For bringing about the desired improvement in the management of educational institutions, it is urgently necessary to professionalise the administration of education. The managers should be equipped with professional skills, management abilities and indepth knowledge to enable them to be more innovative, enterprising and broad-minded.
- (b) At the Secretariat and Directorate levels something drastic needs to be done to relieve politicians and administrators from the burden of posting and transfer of teachers and routine establishment matters. Statutory tribunals may be set up to look into these matters so that educational administrators can devote their energies to planning and management at the macro level and concentrate on bringing about qualitative changes.
- (c) Planning and management of education suffers from lack of upto-date information, relevant statistics and effective monitoring. To overcome

these draw-backs at least one computer should be established in each State for storage of data, analysis of statistics and monitoring of physical and financial progress of on-going schemes.

- (vi) Something concrete has to be done to improve the social status and economic position of school teachers and instructors in technical institutions like ITIs.
- (vii) Universalisation of elementary education and the education of illiterate adults should become a national commitment like family planning and afforestation.
- (viii) The content of education has to be revised to make it more meaningful and relevant. The emphasis on bookish knowledge and on rote learning should be minimised. Instead we should concentrate on inculcation of moral values, respect for Manual labour, development of communication skills, acquiring proficiency in at least two languages, developing critical and analytical abilities and creating the desire for life-long learning. The crushing burden of the school curriculum should be

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drastically reduced so that children have more time to observe life and interact with society outside their class rooms.

(ix) A work ethos in all educational institutions is necessary for the creation of a proper learning atmosphere. Greater interaction between the community, industry, business etc. and educational institutions must be achieved to bring about accountability and responsibility among teachers.

(x) As far as possible uniformity should be achieved in the structure of education throughout the country and a core national curriculum should be evolved to reduce regional disparities.

1.4. The fact that education is in the Concurrent List has to a great extent resulted in either over-lapping concern in some areas or in complete neglect in some others. Besides the UGC, the Central and the State Governments are the two main funding agencies for the growth and development of formal and informal educational activities. There are many other agencies also which are concerned with academic research, curricular and extra-curricular activities in educational institutions like NCERT, DST, CSIR, ICAR, ICSSR ICHR etc. This inclusion of education in the Concurrent

List has landed education in the twilight zone and therefore clear and clean image with crisp direction and decisions for implementation rarely emerges except weak and vague recommendations with no legislative backing to enforce the implementation. While one agency agrees the other disagrees and this results in endless meetings and unending correspondence. Coordination between different participating agencies from the Centre, the State and Educational institutions is an area which needs immediate action.

1.5. Creation of a State level perspective planning division in Education Department with specific advisory committees for different and non over-lapping areas and with representatives, from involved departments, who are competent to take on the spot-decisions based on deliberations at the meeting is urgent and imperative. This would lead to effective and expeditious Implementation- a task which calls for major attention in all our areas of activity today.

1.6. The precipitous decline in values in all walks of life throughout the country is a matter of great concern for educationists. In our pursuit for material comforts modern education has become a tool of spiritual retrogression and brought with it a surfeit of selfishness. Education should seek to perfect physical, intellectual,

emotional, psychic and spritual aspects of an individual's personality. Our educational institutions can take a lead in this sphere by paying greater attention to extra-curricular activities and by utilising their facilities and infrastructure to organise short evening courses on various aspects of India's cultural heritage, comparative study of different religions, lives of great Indian personalities etc. Similarly efforts ought to be made to develop the ability to appreciate classical music, art, literature and poetry in our youth for enrichment of their lives.

1.7. The following chapters contain detailed recommendations on various aspects of the new education policy in the light of the recommendations/suggestions made in the seminars held in Rajasthan and deliberations in the Department of Education.

C H A P T E R - I I

ELEMENTARY EDUCATION

2.1. Universalisation of elementary education is not only our constitutional commitment but an essential ingredient of national, social and economic development. Therefore, it must be given top priority among all sectors of education.

2.2. Time Frame for universalisation of Elementary Education :

A realistic time frame-work to achieve the goal of UEE should be decided. Looking to the present circumstances, the enrolment and retention targets for UEE may be achieved in two phases :

Primary stage (6-11) = 1990

Upper primary (11-14) = 1995

2.3. Structure of Elementary Education

The structure and duration of elementary education is not uniform in the country. This creates numerous difficulties. A uniform pattern of elementary education be adopted on the following pattern :

Primate Education : I-V classes/6-11 years

Upper primary/
Middle Education : VI-VII classes/11-14 years

2.4. UNIVERSAL ENROLMENT :

A. Accessibility :

The provision of a school within easy distance from the home of every child is the first necessity. Every village or habitation having population of 250 or more, should be provided with a regular primary school. The ratio of upper primary to primary schools should be 1:4. Facility of upper primary education should be provided within a radius of 4 kilometers to every child.

For small habitations, scattered houses, mobile population or remote habitations, special efforts should be made to provide educational facilities, such as mobile schools, seasonal schools, use of existing facilities for mobile population and provision of other non-formal facilities.

Residential school facilities particularly at the middle stage of education may be provided wherever cost effective.

To provide educational facilities to working children, variety of approaches may be adopted e.g. providing non-formal education centres, changing school timings, setting up three-hour schools etc.

B. Compulsory Attendance

A programme of increasing enrolment should be organised side by side with attempts to provide primary

schools in the remotest parts of the country.

Compulsory education can never become effective in rural areas until the local community is actively involved in the management of local schools and is made statutorily responsible for the enforcement of compulsory attendance. The management of local primary schools be assigned to village school development Committees consisting of enlightened persons and the Sarpanch/Panch in the village.

The following responsibilities should be placed on village committees for the enforcement of compulsory attendance :-

- (a) Preparation of annual list of school-going children.
- (b) Publication of list of non-enrolled children.
- (c) Efforts to persuade parents to send non-enrolled students to school and issuing notices to defaulting parents.
- (d) Taking suitable action against the defaulting parents, if persuasion fails through enactment of appropriate legislation.

The village panchayat should be responsible for providing adequate accommodation to primary schools, for over-seeing the welfare of students and supervising other activities of the school.

C. Village School Development Committee

The village school development committee should be authorised to raise resources for the development of the school.

Services of Sarpanches and Headmasters who succeed in mobilising resources for their schools through their own initiative and enterprise should be recognised and rewarded publicly.

D. Universal Retention :

It is essential to see that every child progresses regularly from year to year and that he does not leave school until he completes the prescribed stage. Present emphasis from mere enrolment should now be shifted to retention and the success of the system should be judged from this angle. This should be achieved by active involvement of the local community and by providing suitable incentives.

E. School Environment :

Special efforts should be made to make the physical environment of the schools attractive enough to make children feel at home. It should be the joint responsibility of the local representatives and the Head Master to provide minimum facilities like Black-Boards, Drinking water, chalks, Maps, and Tat-Patties. Outstanding efforts in this field should be recognised through grant of special development funds to the area on the pattern of the family welfare programme.

F. Incentives for retention :

- (I) Free books, stationary, Uniforms, Mid-Day Meals and financial incentives should be provided to encourage reluctant parents to send their wards to school.
- (II) The present pattern of granting awards on the basis of enrolment only should be modified and performance in retention be given weightage.
- (III) Special incentives should be granted to girl students in rural areas whose attendance is more than 75% in a session on the following

pattern :-

Class I	- Rs. 50/-
Class II	- Rs. 60/-
Class III	- Rs. 70/-
Class IV	- Rs. 80/-
Class V	- Rs. 100/-

Incentives be given only at the end of the academic year.

- (IV) People, specially in educationally backward areas, should be made aware of the advantages of education and disadvantages of illiteracy through presentation of case studies in the Mass-Media.

G. Girls Education :

The basic problem in universalization concerns girls education. The traditional prejudices against the education of girls can be overcome if more lady teachers are appointed in primary schools. In rural areas where qualified lady teachers are not available, services of less qualified ladies who are locally available can be utilised for teaching on part-time basis in consultation with village education development committee. Special emphasis should also be paid to education of illiterate mothers under the adult literary programme.

2.5. Non-Formal Education :

It is very difficult to achieve universalisation of education through the formal system alone. Hence the system of non-formal education needs to be promoted and supported. The existing system of non-formal education should be evaluated and suitably modified. Honorarium should be raised to attract better instructors. Provision for one wholetime trained supervisor for every 30 N.F.E. centres should be made.

Refresher courses for the instructors should also be arranged. Evaluation of N.F.E. learners should be made to provide for their multiple point entry to the formal education system.

Though, there are many disadvantages of single teacher schools, yet in the present circumstances it would be difficult to do away with them totally due to financial constraints. In the first year, a new primary school may be a single teacher school but as students and class units increase, more teachers should be provided in a phased manner. In no case should schools with more than three classes be left to a single teacher. Pupil-teacher ratio should be kept at 1:30, as far as possible.

2.6. Curriculum :

The existing curriculum is very heavy and results in imbalanced development of a child's personality. Therefore the curriculum should be developed on pedagogical principles for the development of the total personality of the child and care should be exercised to make curriculum relevant and meaningful.

(a) At Primary level major emphasis should be on the development of functional literacy and numeracy. Therefore curriculum should include :-

1. Mother tongue
2. Mathematics
3. Environmental studies
4. Creative and Developmental Activities
5. Development of Moral Values.

(b) At upper Primary level, curriculum should include:-

1. Mother Tongue/Regional Language
2. Hindi/English
3. Mathematics
4. Social Studies with special emphasis on Indian History and Culture
5. General Science
6. Creative and Developmental Activities
7. Moral Values.

Note:-

- a) The students who choose Hindi as a first language may study English as a second language.
- b) There should be no separate text books or classes for inculcation of moral values. These should be imparted through co-related curriculum and co-curricular activities of the school.
- c) General Education should be provided at the elementary level and curriculum should be developed considering it as one unit with V and VIII as terminal points.

2.7. Administrative Set Up :

Elementary Education should be treated as one unit and it should be administered by one agency. For this

purpose a separate Directorate for Elementary Education should be established with its subordinate office at regional and district levels. All primary and upper primary schools in rural and urban areas should function solely under its administrative control.

2.8. Recruitment of Teachers/Instructors :

At present a large number of posts in schools in remote and inaccessible areas remain vacant for a long time. Such areas should be systematically and regularly identified. Separate applications may be invited for appointing teachers in such schools and appointments should be made on the condition that they shall serve in these schools for a minimum prescribed period. This approach will ensure regular teaching in schools in remote areas where normally teachers refuse to join or even if they join start seeking transfer immediately thereafter.

2.9. Central Assistance for Educationally Backward States :

Universalisation of Elementary education is the greatest challenge for the nation. Such a gigantic task requires heavy financial investments. It may not be possible for the States to bear the entire burden. Therefore, central assistance in a big way is a must for this purpose. Extra grants should be provided to those

States where the literacy percentage is far below the national average for accelerating their pace of universalisation. Each State should identify educationally backward blocks and provide them with special assistance so that they are able to come upto the National average in the shortest possible time.

2.10. Text Books :

Impact of good text books on the learning process of the child is immense. Therefore, talented authors should be encouraged to produce quality books which should be published in an attractive manner.

a) At primary level there should be only three text books :

1. Language
2. Mathematics
3. Environmental Studies

b) At upper primary level there should be one text book for each of the following subjects:-

1. First language (Mother tongue/
Regional language)
2. Second language (Hindi/English)
3. Mathematics
4. Social Studies
5. General Science.

2.11. Teaching Methodology :

Primary education should be imparted in play-way method and major emphasis should be on activity-oriented teaching learning process. For this purpose children play centres may gradually be developed in each school in a phased manner.

2.12. Evaluation :

- a) Upto IVth standard there should be no written examination and every student should be internally evaluated by oral examination and on the basis of observation and written work. There should be a provision of external examination in V standard. These examinations may be conducted at the Block level.
- b) Examinations for Upper Primary classes may be conducted on the pattern of common examination system at the Block Level instead of at the district level.

C H A P T E R - III

SECONDARY EDUCATION

3.1. Secondary Education is a terminal point for a majority of students and a preparatory stage for Higher Education for the rest. Its linkages, therefore, with Elementary Education on one hand and with Higher Education on the other are essential. It is suggested that diversification of courses and foundational courses for various vocations may be introduced after class VIII so that greater confidence, skill, efficiency and competence could develop in the learners during four years of study. This would lead to self-employment and reduce burden on higher education. The present plus 2 system for vocational stream has failed to achieve these objectives because at plus 2 stage diversification for vocations provides insufficient time for gaining basic abilities and skills.

3.2. Structure :

The Education ladder should be structured on 10 plus 2 at Secondary level and plus 3 at Degree level in all States. Liberal central assistance may be provided to those states which have not been able to introduce 10 + 2 system due to paucity of resources.

3.3. Accessibility :

Enrolment in rural area depends to a large

extent upon the walking distance . from home to the school. Keeping this in view, a phased programme should be chalked out to provide a Secondary school within the radius of 5 kilometers from every home. Residential schools may be opened in sparsely populated areas due to cost effective considerations. Residential facilities should be extended to all those students who do not have secondary schools within the suggested radius.

3.4. Girls Education :

Existing imbalances in secondary education can be reduced considerably by the expansion of girls education especially in rural areas. At present parents are reluctant to send their daughters to co-educational schools mainly due to socio-economic factors. Much of the problem can be solved if separate schools for girls are opened. Therefore, new schools for girls should be opened on priority basis. Wherever, new girl schools cannot be opened due to limited enrolment, efforts should be made to open separate sections for them in boys schools. Necessary physical facilities required for the girls and lady teachers should be provided in these schools to gain the confidence of parents. Efforts should also be made to tailor need-based courses for girls like dress designing, commercial art, textile designing etc.

3.5. Curriculum :

(1) Curriculum for Secondary stage of education may be restructured on the following lines :-

(A) Core subjects :

1. Two languages (first - Any regional language)
(Second - Either Hindi or English)
2. Mathematics
3. General Awareness
4. S.U.P.W.

(B) Optional subjects :

Any three elective subjects from any one group viz., Science, Arts, Commerce, Agriculture, Fine Arts etc.

- (2) Teaching days should not be less than 180 days in an academic year.
- (3) National Core Curriculum should be developed and it should cover 70% of the course contents. Remaining 30% of the curriculum should be developed by the States to accommodate regional requirements.

3.6. Medium of Instruction :

The medium of instruction at secondary stage should be the regional language.

3.7. Quality of Education :

1. Since nearly 95% of the budget for school education is spent on payment of salaries to teachers, very little is left for qualitative development of infrastructural facilities. Physical conditions of the schools are deplorable. Therefore, massive investments for provision of minimum physical facilities in every school are called for.
2. Desirable maximum strength of a school should be 1000 students for a congenial academic environment. The teacher pupil ratio for effective learning in a class room should not be more than 1:40.
3. At a place where educational institutions of different categories exist, efforts should be made for pooling of their available local resources to ensure their optimum use.
4. The optimum growth of an institution and maximum utilization of financial and human resources can be ensured through institutional planning. Therefore, institutional planning should be resorted to for qualitative improvement in schools.
5. Extra-curricular activities focussing on moral values should be encouraged in schools to meet the present challenge of deterioration of values in life. In this context Yoga, Sports and games should be made compulsory and they should form a part of the curriculum.
6. Promotion of educational technology and use of mass media (TV, Radio, VCR etc.) can help in big way to improve the

quality of education. "Doordarshan" should come forward with a separate channel for school educational programme.

7. It is being observed that the talented students of rural areas do not get sufficient opportunities to join good schools. To cater to their needs, one school should be set up at each district headquarters. Highly motivated and competent teachers should be posted in such schools. Admissions should be based on screening tests. Sufficient number of scholarships and freeships must also be provided as incentives to attract poor but talented young boys from rural areas to such schools.

3.8. Educational Administration :

If education is to be productive and output oriented, it must have good leadership, direction, coordination and constant evaluation. For effective and successful implementation of educational policies and programmes, the following measures are suggested :

1. Indian Education service should be created and intensive training should be given to Educational Administrators and Planners on the pattern of All India & Central Services.

2. In service training for teachers, supervisors and senior administrative officers should be made compulsory at all levels.

3. Keeping in mind the number of educational institutions, requirement of teachers and enrolment of

students at all levels, there is a need for decentralisation. The Directorate of Education should largely confine itself to policy making and general coordination of education at the State Level. More financial, administrative and executive powers should be delegated to the range, District and Block levels Education officers.

4. In order to ensure effective administration, supervision of education in schools, educational districts on the pattern of Kerala and Tamil Nadu States should be formed, on the basis of the number of schools and manageable establishment.

3.9. Centre State Relations :

1. Education is now a concurrent subject. Under this constitutional arrangement, the Central Government should shoulder greater responsibility for the acceleration of the rate of educational growth and for providing qualitative education in the States. It is desirable that there should be a clear demarcation of State and Central responsibilities.

2. The Central Government should set up a School Grant Commission on the pattern of University Grants Commission.

C H A P T E R - I V
V O C A T I O N A L E D U C A T I O N

4.1. It is felt that vocational education has not been able to make much headway owing to major constraints such as the absence of proper assessment of manpower requirement, resistance by certain castes and classes to certain types of vocational training, absence of vertical and horizontal mobility of those who opt for vocational stream and lower social status of vocationally trained persons. Lack of adequate financial resources has also been a major problem. We have not been able to link schools imparting vocational education with production centres. As such public certification of the quality of products of vocational training institutions has not been possible.

4.2. Vocational education through conventional schools has not been a success due to lack of adequate attention and absence of infrastructural facilities and equipment required for vocational training. The vocational stream is neglected as an unwanted appendage in conventional schools. In the present system of vocational education, vocational subject is one of the elective subjects at the plus 2 stage. In addition to this, a student is required to study 3 additional elective subjects besides languages. In this situation, students are not able to develop sufficient skills and self-confidence to be able to gain self-employment or wage-employment. It is also pertinent that due to socio-economic reasons a large number of students drop out of schools years before passing the

tenth standard and take to different vocations to earn their livelihood.

4.3. In these circumstances, it is recommended that the facility to opt for vocational stream should be available at plus 3 stage. Students who opt for vocational education after 8 years of general schooling, should be admitted to separate vocational schools which can be established at regional/district level. The existing infrastructure of I.T.I. and Polytechnics can be used for setting up such schools, wherever feasible. Four years of specialised vocational training would equip the students with sufficient knowledge and skills to branch out on their own with self-confidence instead of suffering from an inferiority complex vis-a-vis students who opt for the academic stream.

4.4. There should be provisions for horizontal and vertical mobility for vocationally qualified students. They should be given preference for admission to polytechnics and engineering colleges. On the other hand, students who take vocational education at an early age and are desirous of obtaining formal educational qualifications later, should be allowed to do so through the open education system.

4.5. Courses offered in vocational training schools should be need based, relevant and flexible. Vocational schools in different areas should not replicate stereo-typed courses available in other

vocational institutions. Instead, courses should be designed after taking micro-level needs and socio-economic conditions of the region into consideration. Courses should be diversified in a manner that they cater to requirements of industry, trade, agriculture etc. as well as various services. The man-power needs of the region should be kept in mind while introducing and designing courses.

4.6. In addition to the theory and practice of the vocation chosen by a student, the curriculum should concentrate on development of communication skills which would benefit the students throughout their life. The trainees should also develop a sense of social commitment and the right values.

4.7. At present vocational schools do not utilise the services of local technicians and craftsmen who excel in their trade. On the other hand professionally trained technical teachers are scarce and expensive. Therefore, it is suggested that a core faculty should be employed in vocational schools on a permanent basis and services of locally available technicians should be utilized on a part-time basis. Traditional craftsmen should be identified and selected to teach in such schools as part-time instructors for short durations.

4.8. At the same time, formally untrained but skilled craftsmen, artisans and technicians should be provided with opportunities to get their skills tested and certified in vocational

schools so as to gain social recognition and further their career prospects. Short term courses should also be offered to upgrade skills of traditional craftsmen, artisans and technicians.

4.9. Vocational schools should be encouraged to establish linkages with on-going development programmes by providing counselling services to beneficiaries in clusters.

4.10. In view of the paucity of resources, vocational schools could re-cycle waste products for use as raw material for imparting production-training to students.

4.11. The success of vocational education and manpower planning will depend to a large extent upon placement of vocationally trained candidates. Placement divisions in each vocational school should be entrusted with the responsibility of ensuring that their products are absorbed in the market and perform their role effectively.

CHAPTER - V

ADULT EDUCATION

5.1. Overview :

With about 64% of India's population being illiterate after 38 years of independence, adult education is one of the major challenges before the nation. Removal of illiteracy at the earliest is an essential pre-condition for meaningful participation of the masses in the process of political decision making and national reconstruction. Hence the national adult education programme deserves to be given high priority in terms of political will, financial allocation and effective linkages with various developmental programmes.

5.2. So far the adult education programme has not made a major impact on the minds of the people. Lack of sufficient motivation has prevented illiterates from continuous participation in adult education programmes. Developmental agencies and educational institutions at the grass-roots have not been sufficiently involved in the programme. The positive co-relation between illiteracy and poverty, high infant mortality and high rate of growth of population, is yet to be fully understood. Potential of teachers, college and university students and educated housewives has not been tapped for eradication of illiteracy. The problem of adults relapsing into illiteracy has also not been tackled effectively so far.

5.3. There is a school of opinion in the country that instead of investing scarce resources in adult education, the problem of illiteracy can be tackled by concentrating on universalization of

elementary education. However, the impact of adult education programmes on universalization of elementary education needs to be highlighted. It has been pointed out by UNESCO that an adult literacy level of 70% is the critical threshold for universalization of elementary education. Illiterate parents are prone to avoid enrolling their children and also withdraw them from school at the slightest pretext.

5.4. Wider Participation :

It is high time that adult education is made a national commitment at par with family planning and afforestation programmes. Instead of being confined to the Education Department, it should be made the responsibility of a larger cross-section of society. In this context, the following suggestions are made :

- (1) Each educated adult in the country would have to assume the responsibility of teaching atleast one illiterate adult in a year.
- (2) (a) Making three adults literate should be a pre-condition for the award of the first degree. Extra credit marks should be given to students whose performance exceeds this norm.
(b) Adult education ought to be a compulsory activity under N.S.S. and N.C.C.
- (3) Appropriate legislation should be enacted for making employers in the organized and semi-organized sectors responsible for providing functional literacy to illiterate employees within a period of 3 years of their employment.

(4) Every Government official should be required to educate atleast one illiterate adult in 3 years. Outstanding work in this field should be rewarded by grant of advance increments.

(5) At the field level, functionaries of all development departments should be assigned specific responsibilities in respect of the adult education programme. They should be required to visit adult education centres in their jurisdiction and disseminate information about the functioning of their departments and the on-going development programmes.

(6) University, College and school teachers should be actively involved in the organisation of adult education centres. They should be given specific assignments during summer cacations

(7) Voluntary agencies should be provided with financial and administrative support to enable them to make a positive contribution in the field of adult education.

(8) Wherever Nehru Yuvak Kendras exist they should be entrusted with the responsibility of managing some adult education centres.

5.5 Motivation :

In order to motivate adults to make best use of the facilities for their education, the benefits of literacy and the advantages of being literate should be demonstrated effectively through the mass media. Case studies of individuals and families who have benefitted through adult literacy should be prepared on a selective basis and propogated widely on T.V. and Radio.

5.6. Beneficiaries of poverty-alleviation programmes should be encouraged to enrol in adult education centres so that they are able to make optimum use of the benefits provided to them under such programmes.

5.7. As an incentive the benefits of poverty-alleviation programmes may be extended, on a preferential basis, to potential illiterate beneficiaries who become literate.

5.8. Contents :

It is felt that the adult education programme should concentrate on functionality with emphasis on courses relevant to rural needs and the environment. Adults should also be given information about services being provided for their benefit by the Government so that they are in a position to avail of the benefits of development schemes being implemented in their region. Adults should be helped to reach a stage of non-relapsable literacy through provision of brief repeater courses at regular intervals.

5.9. Financial Pattern :

At present there is a difference in the pattern of financial assistance provided to adult education centres under the Centrally sponsored and State sponsored schemes. This is undesirable. It is recommended that pattern of financial assistance should be uniform.

5.10. It should be ensured that provisions for learning-teaching material, training etc. are not reduced under any

circumstances. The present practice of meeting the cost of enhanced salaries of officials out of these provisions has an adverse impact on the functioning of these centres.

5.11. Administrative set up :

The organizational set up for adult education and formal education should be unified.

5.12. Buildings and other infrastructure facilities of educational institutions should be utilized for running adult education centres.

5.13. There should be better and more effective coordination between the formal education set-up and the adult education wing. This would lead to improvement in supervision of adult education centres at the village level.

5.14. It is a moot point whether the functional literacy programme can be left to young and inexperienced instructors who have passed only class V or class VIII and are looking for better prospects in life. In the Indian tradition where experience and age are respected, it would be useful to involve more experienced persons in the programme. In this context the centre approach should be supplemented by the household approach for imparting functional literacy. Enlightened citizens in towns and villages would be willing to participate as Honorary Instructors if they are properly motivated and provided with teaching kits. For this purpose special efforts should be made to involve educated house-wives, un-married educated girls, retired military personnel, army officers

serving in peace stations and retired government servants as they would be able to devote sufficient time to this programme. Great care should be taken to ensure that the right kind of people are selected as part-time and full-time instructors as the success or failure of the programme depends on them.

5.15. The number of centres should be kept to a manageable limit so that quality does not suffer.

C H A P T E R - V I

H I G H E R E D U C A T I O N

6.1. Higher education trains people for a wide variety of increasingly sophisticated and ever-changing capabilities needed in the industry, agriculture, administration and services. Quality and efficiency of higher education has an impact on the rest of the system. However, institutions of higher education in the country today do not inspire much confidence. On the one hand they suffer from lack of adequate infrastructure and on the other hand their internal management and efficiency leave much to be desired. Many universities have become a hot-bed of intrigue, conspiracy and indiscipline. To meet the challenge of an increasing number of aspirants for higher education, action has to be taken on many fronts.

6.2. Planning :

Universities should have their own planning boards. For effective coordination and to reduce present delays between approval and implementation, there should be a State Level Perspective Planning Division, which, in turn, should have 2 wings--(i) Education-planning wing and (ii) Manpower-planning wing.

The Manpower planning wing would serve as a limb of the Education-Planning-wing and feed it with the latest data on manpower requirements in different areas based on potential investment as per plan proposals. It would maintain a computerized data base with a provision for regular updating.

6.3. Administration :

There is a feeling through out the country that the present lot of educational administrators are not equipped to deal with the multifarious problems faced by the institutions of higher education. It is time that Administration of higher education is professionalised and modern management techniques introduced on a large scale. It is, therefore, suggested that recruitment of officers of universities should be made at the national level on the basis of an all-India test. Their services may then be placed at the disposal of various States for appointment to any of the Universities in the State with provision for inter-university transfers. Before these officers are given substantive postings they should be trained professionally in a National Academy for Educational Administrators for at least one year. This Academy should also provide training for educational administrators who are required to manage schools. Administrators working in the universities should also be required to attend short-duration orientation and refresher courses on a regular basis.

Recruitment of ministerial and other supporting staff in the universities should be done by an external agency on the basis of competitive tests at State level.

In order to facilitate smoother administration universities the following areas also need attention :-

- (i) Participation of university employees particularly teachers in active politics creates numerous day-to-day problems for university administrators. Genuine and honest efforts of Vice-Chancellor to improve the state of affairs and streamline administration are thwarted by vested interests.

There is a general feeling that a developing country like India can ill afford to tolerate such unhealthy situation. The prevailing circumstances call for serious rethinking over this sensitive issue.

- (ii) Unions of teachers, karamcharis and students have become a menace. They make it virtually impossible for university administration to work in a fair objective and impartial manner. By adopting intimidatory tactics these unions have succeeded in taking over many management functions from the administration. This has vitiated the atmosphere on university campuses and created a situation in which employees are involved in group rivalries, petty politics and destructive activities at the cost of their official duties. In fact, honest and upright officers feel insecure and unsafe. Therefore, serious thought should be given to free the administration of universities from the clutches of these unions and to enable them to perform the duties without any hindrance from them. In this respect the following suggestions are made :-
- a) Membership of students unions ought to be voluntary
 - b) Students who have excelled in academics, extra-curricular activities and sports should be nominated as office-bearers of unions.
 - c) Students who have been enrolled in a university for more than six years or are over 28 years of age should be ineligible for membership of student unions.
- (iii) Election to various university bodies should be abolished and replaced by nomination and rotation system. Wherever students are to be invited, the criterion should be academic merit. The membership of academic and executive bodies should include outside experts and representatives from professional bodies, industry, trade etc.
- (iv) The Senate has powers to review from time to time broad policies, to consider and pass resolutions on the annual report, the annual accounts of the University and the audit report on such account. At one time the Senate performed link-functions between the university and the society. The link function has now been taken over by State Legislatures and the Parliament. The provision for the Senate should, therefore, be deleted from the Acts of the Universities.

6.4. Resources :

i) Since the UGC and the State Government are the main sources of funding for the universities, their role should be clearly defined regarding directions of development of a university in consonance with national objectives and specific regional needs.

ii) The Universities should review their structure, including fees charged for various kinds of services and certificates, for upward revision to raise their revenue.

Simultaneously the universities should provide for more free-ships for weaker sections of society and more scholarships for deserving and meritorious students which should be disbursed regularly and timely.

(iii) The universities should be empowered to accept donations, endowments and contributions for which facility of exemption from income tax should be granted.

(iv) The universities should develop closer contacts with industries and business houses with the purpose of providing R & D facilities and undertaking sponsored research. This exposure of teachers and students to live situations would lead to advancement of knowledge and provide support to fundamental investigations that may otherwise be too costly to undertake. The charges for the services to industry should be sufficiently high to ensure a suitable contribution to the educational and research programmes as a whole.

6.5. Norms and Utilization of Resources :

- (i) For efficient performance of Universities and colleges optimum size should be assessed and prescribed. For universities enrolment of 50,000 and for colleges 2,500 is suggested.
- (ii) The minimum number of working days i.e. the days on which lectures, tutorials, seminars or practicals are or may be conducted, should not go below 180 and efforts should be made to raise it to 200.
- (iii) Teachers should normally be available in university/college premises for at least six hours every day.
- (iv) The existing infrastructural facilities in terms of buildings (which have blocked capital worth crores of rupees) equipment and library should be repeatedly used during the day by shift system. The college/university buildings should be used for need-based and professional evening courses on rental basis by accredited agencies.
- (v) Services of teachers should be profitably utilised during summer vacations for Adult & Continuing Education.
- (vi) The universities could be brought under the purview of Public Undertakings Committee for ensuring financial accountability.

6.6. Recruitment and Training of Teachers :

In the educational process, success depends to a very large extent on the character and ability of the teacher, because it influences the moral and intellectual growth of his students. It is essential that their selections are made in a most objective

fashion, avoiding inbreeding which results in narrow parochialism, applying strictly the criteria of merit, which should include besides academic attainments, qualities of leadership, ability to cultivate the spirit of independent enquiry and sensitivity to moral obligations.

The following suggestions are made for the recruitment and training of teachers :-

- (i) The selection for permanent appointments should be made on an all-India basis through open advertisement and by an all-India Agency like All India University and Colleges Services Commission (AIUSC). Appointments be made on contract basis with provision for renewal/termination after every five years,
- (ii) The Ph.D. should neither be essential nor a preferential qualification for recruitment at the level of Assistant Professor (Lecturer). The insistence on Ph.D. has resulted in a great rush for research and a resultant dilution of standards.
- (iii) The probation period for newly recruited faculty members in universities and colleges should be uniformly made as two years, during which they should be required to successfully undergo a training and orientation programme. While part of the training and orientation should be exclusively for deepening knowledge in the discipline, including acquaintance with recent and important developments in the subject of specialisation, the other part should be for the development of qualities, capacities and skills with special thrust on theories of learning, psychology of youth, communication skills and value education.
- (iv) The job of a teacher does not end but begins with his appointment. Their performance should be regularly evaluated with the help of systematically kept record of :-
 - (a) research publications
 - (b) editorship of scholarly publications
 - (c) attendance at professional meetings or conferences

- (d) offices held in professional organizations
- (e) participation as a speaker or discussion leader in a conference or symposia.
- (f) participation in community organizations
- (g) examination results and research supervision
- (h) students' and peer evaluations
- (i) evaluation on prepared and impromptu tape recording of class lectures (3 to 6 in a session)

- (v) The provision of Annual Appraisal Reports should be introduced.
- (vi) The provision of compulsory retirement in case of continuous in different performance should be introduced.

6.7. Admissions :

- (i) The admissions at Under-graduate level should be made on the basis of merit.
- (ii) The group at the top, number being commensurate with facilities available, should be provided place for full-time education.
- (iii) The next group should be admitted to evening courses.
- (iv) The remaining students if they wish to continue studies, should be encouraged to join correspondence/open university courses. However, on the basis of the results achieved transfer from one group to another should be possible.
- (v) At the P.G. and Research levels admissions should be made on the basis of a National Test.

6.8. Curricula :

By and large universities have not responded to external pressure for modernising their curricula. As a result syllabi in many subjects have remained more or less the same. The rigidity of the existing system has prevented timely changes even when university authorities have deemed these to be necessary. Board of Studies in universities have the primary responsibility for framing curricula.

However, due to their domination by elected representatives of teachers, these Boards have been riven with factionalism. Mostly members are interested in distribution of examinerships and prescribing text books rather than in revising curricula to make it more relevant and meaningful. Therefore, it is necessary to amend the constitution of these bodies to provide for membership of experts who are not party to local politics. Procedures should also be evolved for the involvement of external agencies to update and revise the curricula from time to time. University bodies should be provided with greater flexibility to respond to demands from society to introduce job-oriented and vocational courses when they are required.

6.9. Research :

(ii) The Universities should establish a close liaison with the State Government, industries and agricultural and allied organisations, which will be the main beneficiaries of the research findings.

(ii) Since the Government is the main agency, which is involved in the development programmes, a committee consisting of the officers of the government and the university be constituted to identify constraints in development and problems which need immediate attention. Such co-ordination between the government and the university would prove helpful in identifying problems on which research is required to be undertaken on priority basis.

(iii) The pattern of research in universities and national laboratories be given a fresh look so that duplication could be avoided.

(iv) The number of students that a supervisor can guide, should not be more than 5 in any case to ensure quality work.

(v) The recognition as a research supervisor should not be just on the basis of Ph.D. and teaching experience of post-graduate classes. It should be after rigorous assessment on the recommendation of a committee which may include one outside expert.

6.10. Role of U.G.C. :

The primary responsibility of the UGC according to 1956 Act is to look-after co-ordination and determination of standards -

- (ii) As observed by the UGC Review Committee, there is no legislation on co-ordination and determination of standards in the total sphere of higher education and research, which covers universities and other non-university institutions, though there are bodies like AICTE, MCI, ICAR, CSIR. This has resulted in higher education and research getting compartmentalized. Appropriate legislation should be enacted and implemented.
- (iii) UGC should play a pivotal role in effective co-ordination between research institutions and the universities.
- (iii) UGC should be empowered to get their subject panel recommendations on curricula implemented by all universities for maintenance and co-ordination of standards.
- (iv) UGC should evolve an effective system to oversee prompt and efficient implementation of plans and programmes and evaluate their impact.

- (v) UGC should establish regional offices so that its interaction with the State universities in the region and the State Government improves and expeditious implementation of national policy is ensured.
- (vi) UGC should ensure that corrective measures are taken to reduce the present wide-range variations and regional imbalances amongst State universities.

6.11. Open and Non-Formal Systems :

An Open University in a State should share the burden of the existing universities and stem the indiscriminate opening of new colleges and continuous pressure for more seats in the University departments/colleges. This would be possible only when the creditability of this mode of education is equivalent in all respects to the formal system and is in no way inferior to the established one. Also the products are assured that the future opportunities are as much available to them as to formal graduates/post-graduates and in fact they have more options open because of their diversified curricula. The following suggestions are made with regard to non-formal system of higher education :-

- (i) With appropriate planning and adequate funding, Distance Education Centres could by the end of the VII plan take over 35 to 40 per cent of the total students' population in higher education.
- (ii) There should be two independent bodies dealing with higher education at the national level. One of the University Grants Commission for the conventional university system and the other for the non-formal system, which should cover under its purview the open universities, Distance Education Centres, Correspondence institutes, Adult Education programmes etc. The UGC like the universities is over-burdened with the

conventional system. The Act of 1956 for the establishment of University Grants Commission (UGC) was for the purpose of coordination and determination of standards in universities. The scope of non-formal system and its inherent potentialities, was hardly visualized or its emergence as an effective, economical and alternative channel for fulfilment of the objective of democratization in education was hardly envisaged then. The creation of a UGC like establishment for Open University system will provide a potential service for its development.

- (iii) This national level coordinating agency could look after coordination between Distance Education centres in the country. The agency could also explore possibility of preparing some across-the-country courses.
- (iv) The prevailing notion that Correspondence Institutes should be self-supporting as opposed to the conventional system which is funded by a 'Block Grant' ought to be discarded. The net return from this system may be far more economical and effective than through the formal system.
- (v) Admission, instead of being formal 'one point entry' should be made a 'multiple point entry' system. This would ensure that these in the stream could at any point leave to take up employment or engage in home assignment and re-enter when circumstances become favourable, without losing the benefit of credits already earned.
- (vi) The duration for completing a particular course as degree programme should be flexible.
- (vii) More job-oriented courses could be framed in consultation with experts in the field of technical education.
- (viii) Efforts may be made to involve the community particularly members of industry, trade and commerce in the scheme for improving the distance learning programme, because as a major beneficiary of the product, they have an important stake in this non-formal but flexible educational process which alone can help in keeping persons engaged in different vocations upto-date with the latest developments in their fields of specialization.
- (ix) All non-formal Departments like NSS, Adult Education, Continuing Education should be merged with Distance Education Centre/Institute of Correspondence Studies.

6.12. DeLinking Degrees from Jobs :

Due to the large number of students passing out from colleges and universities, degrees have been greatly devalued. As a result most employers in Government, Public Sector and private sector have evolved their own testing systems for making recruitments. In this manner degrees to a great extent, already stand delinked from jobs. However, to do away with the formal qualification of degree for a majority of jobs would pose practical problems for employers who would be faced with a situation akin to searching haystacks, for needles. On the other hand if the admissions to institutes of higher education are properly regulated, the value of a degree would increase and the graduates would be better qualified. Diversification of courses to provide for need based and vocational oriented courses would also reduce the rush to universities. The institutes of higher education should also cater to in-service training programmes for mid career professionals to ensure better on the job-performance.

6.13. Medical Education :

One of the problems facing the country today is the shortage of medical doctors in rural areas, particularly backward and tribal belts. Graduates and post-graduates in Medicine and Surgery are unwilling to serve in villages due to a number of reasons. The problem could be resolved by introduction of three year

courses in general medicine and surgery on the pattern of the erstwhile L.M.P. course. Admissions to this course may be made through regional selections of socially-committed individuals who have passed Higher Secondary with science subjects.

CHAPTER - VII

TECHNICAL EDUCATION

7.1. So far the education and training of technical manpower has been the responsibility of the Technical Education system. This system at present has weak linkages with the general system of education and with man-power planning. As such these institutions in many cases, are providing manpower, which is of no relevance to contemporary society. The educational system must have a positive co-relation with economic policy and should be in a position to produce competent professionals to cater to the needs of development. For realising these objectives, it is recommended that technical education system should have better linkages with general education system on the one hand and with manpower planning on the other. Here it would be worth-while to consider creation of perspective planning divisions in each State headed by an expert-educational planner, with functional manpower planning as its sub-system. It would be the duty of this organisation to prepare a comprehensive and integrated plan for development of human resources at the State level.

7.2. At the national level an apex body may be entrusted with the responsibility of coordinating the activities of the prospective planning divisions of different States and for maintaining uniformity of standards. In this respect, the following areas need attention :

(1) It has been observed that there are vast regional disparities in terms of investment in technical education and number of technical institutions existing in different States. The Government of India should try to bridge this imbalance by investing more in backward areas.

(2) I.T.I., Polytechnics and Engineering colleges are often opened in places and areas where they are least needed. In view of the heavy investments in such institutions, rational norms should be evolved on a national basis for opening such institutes only on the basis of manpower requirements and felt need.

(3) The apex body at national level should evolve a system for national evaluation and accreditation of institutes and programmes to reduce the wide variations in standards in institutes across the country.

(4) Engineering graduates in whom, the society has invested scarce resources to produce sophisticated technical skills, leave the country in large numbers for further education or employment abroad. It is felt that a country with scarce resources can ill-afford to watch this situation passively. It is suggested that engineering graduates should be required to execute a bond to serve in the country for at least 5 years before they are allowed to proceed abroad. Alternatively such students should be required to reimburse the subsidy component of the cost of their education in instalments.

(5) Regional and State engineering colleges should be provided with more funds and support to bring their products at par with those of I.I.Ts.

(6) At present, a student seeking admission to an engineering institution is required to appear at a number of entrance tests at more or less the same time, e.g. I.I.T. entrance test, P.E.T., Entrance test for Roorkee Engineering College etc. This puts undue strain on students. It is proposed that an national testing system for entrance to these institutes be evolved. Students may be assigned to different institutions on the basis of their merit and preferences.

(7) It is felt that engineering institutions are not being able to develop the right kind of attitude in Engineers. As a result most of them are keen on entering government service and shy away from manual work. Efforts have to be made to develop an entrepreneurial spirit among engineers and to create in them a respect for the dignity of labour.

Users of technical manpower are not paying for it. On the other hand, the fees paid by engineering students, are not commensurate with the investments made by society in producing technocrats. There is, thus, a case for rationalising the fee-structure and for imposing a cess on the profits of industrial undertakings for investment in engineering institutions.

(9) Vertical and horizontal linkages between I.T.Is., Polytechnics, Engineering Colleges and IITs should be provided so that a student.

if he is interested, can move to a higher institution and improve his qualifications along with professional skills.

(10) It is advisable to create a testing service for certification of skills of on-the-job technicians. After proper evaluation the skills of working technicians could be certified. This would create confidence among them and their clients.

(11) Unlettered skilled craftsmen and technicians should be identified to give practical training in I.T.E.s as guest instructors and paid as much as they earn in their trades daily. Why are not experienced contractors invited to talk to trainees?

7.3. Collaboration with Industry :

(1) Engineering is a profession where both skill and education are equally important. Technical institutes and industry should operate in close collaboration for a common purpose. No institute, whatever its level of development, can impart desired skills without field training in industry.

(2) The system should operate to have effective interaction and collaboration between industry and institution and a suitable exchange programme of a faculty.

(3) Sandwich-programmes in collaboration with industry should be organised at more centres.

(4) The training imparted by industry under different apprenticeship programmes should be properly supervised and improved.

(5) Industry liaison Boards be set up at National and State levels to coordinate industry-institute programme.

(6) Expenditure incurred by industry on technical training programmes should be given tax relief to encourage such activity.

(7) Continuing education programmes for industrial personnel should be arranged and for this consultancy centres be established in different technical institutions.

7.4. Curriculum Development :

(1) Technology is fast changing and therefore it requires constant updating and re-structuring of the curriculum and syllabus of the institutes by a team of experts drawn from teaching, industry and trade.

(2) So far most of our engineering curriculum have been drawn to meet the requirements of Government Departments and organised sectors of industry whereas insufficient attention has been given to self-employment, small scale industries and rural industries. Syllabi ought to be restructured suitably and should include courses in entrepreneurship.

(3) In order to prepare technicians for self employment some production centres/service centres (specially at diploma and craftsmen level) have to be attached to such teaching institutes, as hospitals are attached to Medical colleges, for giving practical exposure in selected areas.

(4) Teachers engaged in technical education need training at the entrance of the profession as well as refresher courses at suitable intervals both on professional technical education/skills as well as on pedagogical methods using latest teaching aids.

(5) Special attention should be paid to modernisation of machinery and equipment in the technical education institutions to deal with the problem of obsolescence.

(6) Courses catering to needs of rural technology should be introduced.

CHAPTER - VIII

TEACHER EDUCATION

8.1. The quality of education depends upon the quality of teachers. To produce good teachers, teacher-training is of vital importance but it is sorely neglected. The situation at present is extremely unhappy. Generally speaking, the teacher is ill-equipped. So is the teacher trainer. Training institutions are also neglected. Curriculum is stereotyped and outdated. There is no effective system for controlling training institutions. In-service training programmes are also inadequate and ineffective.

8.2. Admission Policy :

At present a teacher is trained before he is employed and due to the long wait for a job, the impact of the training gradually weakens and there is dissatisfaction. It is, therefore, suggested that first of all teachers should be selected for jobs. After that they should teach for sometime and then be deputed for training. By giving on-the-job and staggered training, it can be made more useful. To feed private institutions and to meet unanticipated demand a certain proportion of seats should be set aside for unemployed candidates.

8.3. Curriculum :

Our teacher-training curriculum is generally criticized for not being related to classroom teaching. This is partially true.

The whole training programme should be so organized that the teacher experiences the romance of teaching, feels the joy of loving the pupils, enjoys meeting challenges of educating young minds and develops a sense of pride in his profession.

The curriculum should be revamped to make the teacher competent to mould the pupils in such a way that they can solve problems, learn on their own, create beautiful things and display moral integrity. To make the teacher proficient, it is imperative to add new dimensions to the existing programmes of teacher education such as teaching techniques appropriate for meeting the new demands of population and environmental education, computerised teaching, educational technology, programmed instruction, open learning etc.

8.4. Teacher Educator :

To enthuse the teacher, it is necessary that he should be made to realise the nobility of his profession. To convert him into a light-house and to make him competent to mould his pupils as useful citizens, we will have to provide really proficient teacher-trainers, who are not only authorities in their fields but are also dedicated and committed to the cause of education. We should also think in terms of providing special incentives to attract the right type of teacher-trainers.

8.5. Inservice Education :

For keeping working teacher abreast of the latest practices and trends, a planned programme of in-service training

should be prepared and implemented. Summer courses for subject teachers, general training for Primary School Teachers, correspondence courses, short term courses in the use of audio-visual aids, material-production, illustration of books, evaluation etc. should be organised. Teachers should be exposed to an in-service course after every 5 years.

In States, SIERTs are mainly functioning as in-service training institutes. Therefore, it is suggested that best available personnel should be appointed in these institutions and be provided selection grades.

8.5. Quality and Standards :

At the National level an All India Council of Teachers Education as an apex body and at the State level a Teacher Education Board should be constituted for the purpose of uniformity in standards of teacher training, recognition of such institutions, laying down norms in terms of qualifications and personality of teacher trainers; for suggesting relevant and forward-looking curriculum for providing minimum facilities and equipment and the pattern of evaluation of trainees.

These institutions should be in close touch with society, making sure that their work is relevant. At the same time they must maintain equally close ties with schools and classroom teachers so that neither the schools nor the training institutes will be isolated from new ideas on curriculum or from educational inquiry. Further

teacher training institutes must be an aggressive force for change in education, not a reflection of the status-quo.

8.7. Teacher Status :

The recruitment of good teachers should be a top priority on education lists. More often than not men and women who could be good teachers are attracted to other professions because of rewards and incentives of teachers are relatively weak and because of the conditions of work are not conducive to high performance. The best teachers should receive salaries equal to those of the best paid professionals in the country.

8.8. Accountability :

One important measure to improve the quality and performance of the teacher is to make him accountable. His evaluation should be result-based. It should be essential for him to put in some predetermined quality and quantity of work so that shirkers cannot get away with poor quality of teaching and the devoted ones are spotted, recognised and encouraged. Though it is difficult to set very precise norms because in the teaching profession the outcome is not always tangible, we have to evolve some yardstick to evaluate a teacher and make him responsible for his performance.

Further a code of conduct for educational personnel ((teachers, administrators and the supporting staff) should be developed in consultation with the teachers and employees. A State and National level body should be developed on the line of Press Council or

Indian Medical Council to implement and monitor the maintenance of the code of conduct.

8.9. Teachers' Organisations :

Teachers' organisation can play a vital role in activating teachers to attain higher standards of performance. They can help a lot in creating a congenial climate and in developing a consciousness among teachers for their professional growth. Such organisations should, like other agencies, contribute to the cause of education by providing academic guidance to teachers. A code of conduct for these organisations will go a long way in providing a right sense of direction.

8.10. Indian Education Service :

To attract better talents and given enhanced status to the services, a cadre of Indian Education Service on the lines of IAS, IPS etc. should be created.

C H A P T E R - I X

ADDITIONAL RESOURCE MOBILISATION FOR EDUCATIONAL DEVELOPMENT

9.1. It has been universally accepted that our efforts to reform the existing educational system would depend on our ability to raise additional resources for making investment in priority areas. It has been suggested that budgetary allocations to education should be increased to bring them at par with investments made in the developed countries. However, in view of the fact that after Defence the highest budgetary allocations are already ear-marked for education, it is very unlikely that substantially higher investments in educational development can be made in the near future by Government. In this situation, mobilising resources from non-governmental sectors is of crucial importance.

9.2. The pattern of financing education in independent India reveals that initially non-budgetary sources contributed to almost 50% of investment. Tuition fees also made a significant contribution. However, over the years there has been a considerable reduction in the flow of funds from non-governmental sectors and the share of Central/State Governments has continuously increased. In the State of Rajasthan budgetary sources contribute as much as 80% of the annual investment in education. If this trend continues it is likely that contributions from the community may shrink further placing tremendous strain on the already scarce resources of Central and State Governments.

The time has come to reverse this trend and to make strenuous efforts to attract additional funds from the community.

9.3. The Government of Rajasthan had appointed a working group to go into the question of mobilising additional resources for education in the VII plan. The group studied the problem in depth and suggested that the following non-budgetary sources may be tapped for raising additional funds for financing education during the VII Plan period :-

- (1) Raising donations and creating a fund for Educational Development.
- (2) Levy of cess
 - (a) Levy of cess on agricultural holdings.
 - (b) Levy of cess on sale/transfer of land and property.
 - (c) Levy of cess on income of Krishi Upaj Mandies.
 - (d) Cess on licence fee on public vehicles.
 - (e) Cess on industries and commercial establishments.
 - (f) Education cess on cinema tickets.
- (3) Enhancing the existing scales of fee.
- (4) Other methods -
 - (a) Organising special lotteries for educational development.
 - (b) Floating education development bonds.
- (5) Adoption of schools by banks, industrial organisations, commercial establishments and charitable institutions.

9.4. Detailed recommendations in this regard are contained in Chapter VII of the 'Approach paper on Educational Development during VII Plan' which has been submitted to the Government of Rajasthan by the Education Department.

9.5. In addition to the proposals contained in the above mentioned report, the following suggestions for mobilising resources for investment in education may also be considered :

- (1) A scheme may be prepared by the Ministries of Finance and Human Resources Development, Government of India to attract investments from non-resident Indians for the development of educational infrastructure.
- (2) The possibility of setting up Educational Development Banks throughout the country for financing education of gifted children from all walks of life, may be explored. The present scheme of Government scholarships places a heavy burden on the State exchequer. The procedure for disbursement of scholarships is faulty and inefficient. The inordinate delay in disbursing scholarship money causes undue harassment to students and brings discredit to the Government. Loan-scholarships from Educational Development Banks on liberal terms would be a definite improvement on the present system.

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