

GENERAL

**NATIONAL SCHEME OF INSERVICE  
TRAINING OF  
SCHOOL TEACHERS**

**RESOURCE MATERIAL - PART I**  
**General**

NIEPA DC



D11346



**राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्**  
**NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING**

March 1987  
Chaitra 1909  
P.D. 65T

373.0711  
NAT-9

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National Institute of Educational  
Planning and Administration  
17-B, Sri Aurobindo Marg,  
New Delhi-110016  
DOC. No. D-11316  
Date 15.02.2002

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Published at the Publication Department by the Secretary, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi - 110 016 and printed by Sraswati Offset Printers, A-5, Naraina Industrial Area, Phase II, New Delhi - 110 028

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The Department of Education of the Ministry of Human Resource Development sponsored the National Scheme of In-service Training of School Teachers in 1986 to create awareness about the new dimensions and thrusts in the National Policy on Education - 1986. Under the scheme, the teachers will be provided an opportunity to perceive their role in successful implementation of the Programme of Education, which lays down specific action to be taken by teachers and others involved in the task of education.

Last year orientation was organised for more than 4 lakhs primary and secondary teachers throughout the country in 9,000 camps, each camp being of 10 days duration. A similar exercise for 5 lakh teachers is being repeated this year.

The programme has several inputs, print material being one of the most important one. The NCERT has got 35 modules on different topics, prepared by faculty members of various departments of NIE, CIET and NIEPA. The material was further revised with active cooperation of teachers and resource persons from the state of Kerala, representatives from different state governments and faculty of Regional Colleges of Education.

The total package consists of :

1. Part I : general Modules both for Primary and secondary Teachers (14)
2. Part I (Primary) : Modules for Primary Teachers (11)
3. Part II (Secondary) : Modules for Secondary Teachers (9)

Thus each participant will use two booklets, Part I and one of the two volumes of Part II.

Suggestions for improvement of the material would be received gratefully.

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## Module: 1

# National Policy on Education Implications for Teachers

This module is intended to help you understand the salient features of National Policy on Education — 1986 and your role in implementing it.

NPE is a landmark in the history of education in our country. Great expectations have been roused in the Policy about the needed reforms in education in India.

## Objectives

After going through this module you will:-

- Know the salient features of NPE;
- understand the importance of the role of the teachers in its implementation;
- participate in discussions;
- plan curricular and co-curricular activities for effective realization of educational objectives;
- work out important steps for eliciting active community participation in the implementation of NPE.

## Introduction

It has been recognised that education is the most important national activity and is the back-bone of any programme that the country would undertake. Our education system needs, like any other system, regular up-keep, maintenance and improvement. No system can be uniform for ever. It has to adjust with time, with development and with new discoveries in technology.

Education pattern in India has undergone changes from time to time. But it has not been sufficiently realistic and related to the life needs of the people. Changes have been sporadic, not well planned and not properly implemented. National Policy on Education — 1986 has been designed keeping in mind the achievements and failures of education till 1986, the prevailing

political and social conditions in the country specially the disparities amongst various social groups and the environmental changes due to all round advancement of science and technology.

### **Salient Features**

### **NPE Provides National Perspective and National Direction to Education**

The National Policy on Education aims at not just availability of education for more people but also a quantum change in the quality of education. Through this new policy every disadvantaged section of our society will be benefitted. Special efforts are intended to be made in the tribal areas, in the hilly areas and specially for such sections of our society which have not been able to take advantage of existing facilities. Improved quality of education is one of the prime aims of new policy on Education and would aim at producing a self assured, more productive, more capable and more thinking citizens of our society.

### **Societal Involvement**

The policy lays great emphasis on contribution by the society in the educational process. It is vital for the success of NPE. NPE gives prominence to people's involvement, parents, community, voluntary agencies, employers and teachers. Closer links between schools and community would help reduce absenteeism and pre-mature dropouts, improve relevance of education with greater access to community resources. It would also help better management of educational institutions. Local politics can play an important role in motivating the community for its positive participation.

### **National Curriculum for School Education**

The NPE provides for a national curriculum. The educational structure of 10 + 2 + 3 will be adopted throughout the country without exception. Ten years of schooling will comprise five years of primary, two years of upper primary and three years of secondary stages. The common core-curriculum for the entire country will be adopted. Suitable textbooks and reading material

rial will be prepared on the common curriculum so that interstate transfer of students may not pose any problem and a sense of unity of the nation may be created. The common national curriculum would reduce the glaring disparity now existing in the educational institutions from region to region and among social class structures. The national curriculum will ensure minimum standards of educational attainments for learners at all stages of education besides inculcating the basic attitudes and values enshrined in the Constitution. Further it also reflects the national ethos, the main concerns of the nation as well as of the states and communities. It promotes national values social and emotional, integration in the country. The basic features of national curriculum can be summarised as under —

- emphasis on the attainment of personal and social goals and promotion of values enshrined in the Constitution
- the mobilisation of human resources for the realization of national goals of development
- broad based general education to all learners at the primary and secondary stages
- learner-centred approach rather than the teacher-centred approach to the transaction of the curriculum
- provision for flexibility in terms of selection of content and learning experiences which would facilitate the attainment of the essential learning out-comes
- applicability of the curriculum to all learners irrespective of modes of learning
- provision of threshold resources-physical and academic necessary for active transaction of the curriculum in all schools and non-formal learning centres.

These features reflect the major objectives, basic components and organization of the curriculum. A curriculum based on the essential learning and a common scheme of studies is referred to as a core curriculum.

The following common scheme of studies have been suggested in the national frame work —

- one language at primary level and three languages at the upper primary and secondary level.

- mathematics
- environmental studies (science and social science)
- work experience/SUPW/pre-vocational courses.
- art education
- health and physical education

Besides the common scheme of studies, it is envisaged in the NPE to include certain core components in national curriculum.

“A national system of education will be based on a national curriculum framework which contains a common core along with other components that are flexible. The common core will include the history of India’s freedom movement, the constitutional obligations and other contents, essential to nurture national identity” (NPE: 3.4).

The idea of including these core components in the curriculum is to develop national awareness and inculcate national values.

## Education for Equality

The National Policy lays special emphasis on the “removal of disparities and to equalize educational opportunity by attending to the specific needs of those who have been denied equality so far” (NPE: 4.1).

### a. Education for Women’s Equality

The national educational system will play a positive role in the empowerment of women. Education will be used as an agent of basic change in the status of women. Women’s studies will be promoted as a part of various courses and educational institutions will be encouraged to take up active programmes to further women’s development. The removal of women’s illiteracy and obstacle inhibiting their access to, and retention in elementary education will receive top priority. It will be done by providing special support services and effective monitoring.

### b. The Education of Scheduled Castes

Pre-matric Scholarships scheme of children of families engaged in occupation such as scavenging, flaying and tanning will



be given to students from class 1 onwards regardless of their family incomes. Suitable incentives have been recommended for all educationally backward sections of society particularly in rural areas.

Remedial courses will be provided for SC children to improve their prospects for further education and employment. Hostal facilities will be provided. Teachers would be recruited from amongst SCs.

Constant planning and supervision to ensure enrolment, retention and successful completion of courses by SC children would be undertaken.

Other available resources such as National Rural Employment Programme and Rural Landless Employment Guarantee Programme would be used to make educational facilities available to SCs.

### c. Education of Scheduled Tribes

- priority will be accorded to opening primary schools in tribal areas.
- special instructional material will be developed for the beginning years of education with arrangements for switching over to the regional languages.
- as in case of SCs, teachers will be recruited from amongst educated youth of STs.
- facilities such as residential schools, remedial courses and incentives would be extended to large numbers to enable ST children to come up to the level of the mainstream of the country.

### d. The Handicapped

Special boarding schools will be provided at district headquarters for handicapped children. Adequate arrangements will be made to give vocational training to the disabled. The policy lays emphasis on the teacher training programmes for teachers of primary classes who deal with special difficulties of the handicapped children. The education of the children with mild handicaps and orthopaedically handicaps will be common with that of other children.

### e. Vocationalization

The introduction of systematic, well planned and rigorously implemented programme of vocational education has been proposed in the national policy. All this is intended to increase individual employability. Vocational education will be a distinct stream to prepare students for identified occupations. These courses will be provided at different stages of school education. NPE envisages that vocational courses must cover 10% of higher secondary students by 1990 and 25% by 1995.

### f. Work Experience

Work experience has been viewed as purposive and meaningful manual work organized as an integral part of the learning process and resulting in either goods or services useful to the community. National Policy on Education recommends pre-vocational programmes to be provided at the lower secondary stage so as to facilitate the choice of vocational courses at the higher secondary stage.

### g. Sports and Physical Education

Sports and physical education have been recommended to be integral part of learning process and will be included in the overall evaluation of performance. A strong nation-wide infrastructure for physical education, sports and games will be built into the educational system. Appropriate encouragement will be given to talents in sports and games.

### h. The Evaluation Process and Examination Reform

It has been strongly recommended that the excessive element of chance and subjectivity be controlled. A system of continuous and comprehensive evaluation incorporating both scholastic and non-scholastic aspects of education has been recommended in the policy.

### Teacher's role

In the context of NPE responsibilities of the teacher have increased manifold. It places complete trust in the teacher community. The teacher is the principal functionary in imple-

menting any educational programme of the re-organization of education. The teachers include the heads of the educational institutions, whole time teachers in the formal system of education and also instructors of non-formal and adult education centres. As far as the whole time teachers in our educational institutions are concerned their primary role will always be to teach and guide their pupils, not only through class-room instruction and tutorials but by personal contacts and numerous other ways. The teachers have a responsibility for building the character of their students.

The major areas where teacher's participation would be of utmost use:-

1. Involvement in implementation of NPE, in laying down of rules, procedures and norms and in monitoring policy implementation.
2. Participation in the policy making, the management forums such as Central Advisory Board of Education, District Board of Education, Village Education Committee etc.,
3. Collaboration with academic organizations and Councils to discuss specific or general issues of improving the institutional education systems.

While observing the prevailing conditions in the country it has been stated in NPE document that the above tasks can be performed by the teacher effectively only when proper attention is given to their status, service conditions and in-service education programme for improving their professional competence. The national policy has worked out strategies in this direction which consists of—

- a better deal to teacher with greater accountability
- provision of better facilities and service conditions
- devising suitable methods of recruitment of teachers
- improving professional competence through pre-service and programmes of in-service education

The new policy has thus laid emphasis to give due status to the teachers in our society and in turn their active participation in

the effective implementation of National Policy on Education. It is an innovative teacher who can devise appropriate methods and modes of communication and activities relevant to the needs and concerns of the community. His task is challenging in the context of National Policy on Education.

### **Suggested activities**

The teachers will be asked the following questions to motivate them for their participation in discussions —

What steps would you take as a teacher to get full support from the community in implementation of NPE?

What new methods would you suggest for overcoming the problems of lack of facilities in your school?

Do you think that in the present circumstances the responsibilities of teachers are being properly discharged?

How would you react to the present system of in-service education of teachers? Does it provide equal opportunity to every one, if not what steps would you like to suggest to your state Governments in this direction?

How would you involve yourself in the process of curriculum development, preparation of instructional materials etc. in your State?

What suggestions you would like to offer for improving the present system of evaluating students performance?

What activities you have taken in your school from time to time to inculcate proper values among your students?

## Module:2

# Implications of Programme of Action

## Overview

This module is meant to help you understand the implications of the National Policy of Education (NPE) and Programme of Action (POA) for primary teachers in the country.

The module outlines the major reforms proposed to be implemented to achieve the goal of Universalization of Elementary Education through formal and non-formal school system, its implementation strategies, the content and process of education, special attention to the deprived sections of the society, community participation in primary education and minimum necessary facilities for making the system work. It also explains the facilities proposed to be provided to and expectations from you in order to implement the suggestions made in the policy.

The main purpose of the module is to make you aware of the problems, suggestions made for realising the goal of universalisation of elementary education, and to consider how you can be of help in this process. It provides you an opportunity to think, discuss and plan programmes for your own school.

## Objectives

- On completion of this module you should be able to-
- understand the problems of Universalisation of Elementary Education,
  - identify the strategies for implementing the programmes suggested in the POA, and
  - plan a programme for your own school

## Learning Activities

### Universalisation of Elementary Education

As you know, the Directive Principle of our Constitution pro-

vides free and compulsory education to all the children upto the age of 14 years. The Government has made determined efforts to achieve this goal since independence. However, the goal still remains to be fulfilled. The POA now proposes to achieve this goal of enrolling all children upto the age of 11 by 1990.

It has been found that the main problem in achieving the universal enrolment and retention of children in primary schools is the non-attendance by girls, children from scheduled castes and scheduled tribes, children with disabilities and children from the other educationally backward sections and minorities. Another factor affecting the enrolment in primary schools is the poverty of parents. This forces a good number of children to work for supplementing their family income or otherwise assist the family.

### Activity Sheet No. 1

Universalisation of primary education still remains to be achieved in most parts of the country. List some of the reasons why young children do not attend school, specifically in the area where your school is located.

Collect  
Collate  
Discuss

### Implementation Strategies

It has been found that about 75% of the non-attending children belong to 9 states, namely, Andhra Pradesh, Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. These states have, therefore, been treated as educationally backward. However, there are educationally backward pockets and groups in other states also. Even in the backward states there are wide disparities from one area/region to another which require special treatment. In view of the above facts, the POA has identified an implementation strategy consisting of the following elements-

- all children will be provided access to education of reasonably good quality

- children from all sections of the society will be provided equal opportunity to achieve success comparable with children from better off sections of the society through common school system,
- the educational process will be made child centered through reforms in pre-service teacher education and in-service training,
- efforts will be made to have all children in whole time schools of good quality, until it becomes possible they will be provided opportunities through non-formal education,
- the emphasis for achievement of universalisation in elementary education will shift from enrolment to retention of children in the schools,
- the process of planning will be decentralised and teachers and community will be involved in this process,

## Activity Sheet No.2

Consider the above strategies of implementation, identify their implications and discuss the problems which may arise in implementing these strategies.

## Facilities for Implementation

The POA has proposed the *Operation Blackboard(OB)* programmes. Its purpose is to ensure provision of minimum essential facilities in primary schools. You might wonder why the programme is called 'Operation Blackboard'. The use of the word 'Operation' implies that there is an urgency in the programme, that the goals are well-defined and the government and the people are determined to achieve these goals within a time frame.

The OB envisages that the following minimum material facilities and learning equipments will be provided to each school —

- two reasonably large rooms suitable for all weather,
- blackboards,
- maps,

- charts,
- necessary toys and games material
- other learning materials (refer annexure)

It is also proposed that at least two teachers will be provided in each rural primary school. One of them would be a lady as far as possible.

## Facilities for Teachers

The implementation strategy of NPE also consists of a variety of measures for improvement in the status of teachers including the teacher accountability. In specific terms these are as follows —

- improvement in the living and working/service conditions of teachers,
- creation of an effective machinery for removal of grievances,
- involvement of teachers in the planning and management of primary education,
- involvement of teacher associations in maintaining the dignity of teachers, professional integrity and in following the professional code of conduct,
- provision of opportunities to promote creativity and innovation among teachers,
- introduction of reforms in the system of selection of teachers, and
- taking hard decisions if teachers do not perform their duties according to the acceptable norms and do not follow the professional ethics.

The POA envisages the following action to improve the living and working conditions of the teachers.

- the POA envisages that eventually the pay and allowances to teachers will be paid according to their qualifications, professional responsibilities and the expected status in the society. The anomaly of providing lower scales of pay to some categories of teachers will be done away with. The pay and allowances of teachers will be fixed keeping in mind the existing scales in other comparable agencies,



- the career advancement will be linked with professional growth based on comprehensive appraisal at suitable intervals,
- all teachers in government, local bodies, private and aided institutions will be eligible for retirement, old age benefits and medical care,
- steps will be taken to provide housing facilities for teachers in urban as well as rural areas,
- all teachers will be entitled to full pay for long term study leave,
- women teachers will be posted keeping in view their domestic obligations and will be provided other facilities like creches for their children,
- efforts will be made in consultation with State Governments to work out uniform service conditions for all teachers in the country,
- transfer and postings of teachers will be made in accordance to certain norms,
- the activities of the National Foundation for Teachers Welfare will be enlarged to make it more effective,
- participation of teachers will be obtained in planning, laying down norms and monitoring of policy implementation. They will also be represented in policy making bodies such as -Central Advisory Board of Education, District Boards of Education, Village Education Committee.

### Activity Sheet No.3

You have read about the facilities proposed to be provided for teachers for quality improvement of primary education and status of teachers. List any other facilities which need to be provided in this regard.

Collect  
Collate  
Discuss

### Content and Process of Education

In order to achieve the goal of Universal Primary Education as envisaged in the National Policy of Education, it is necessary to make the curriculum relevant to the needs and aspirations of the

society. This can be done through the curriculum enriched by inclusion of Indian culture and social and moral values which lead to unity and integration of the people. The core curriculum will consist of a common scheme of studies based on certain basic essential learnings. It will facilitate the mobility of the children horizontally and vertically. The essential elements of the national core curriculum will be discussed with you in detail in a separate module.

The NPE has recognised that the school environment is unattractive due to unsatisfactory condition of buildings and lack of instructional material demotivating teachers, children and parents. It has, therefore, suggested that in addition to proposed minimum facilities, the approach to teaching should be child-centred. It means that the teacher should take into consideration the needs, abilities and aspirations of the children, make use of the child's environment and real life situations in teaching. The process of teaching and learning should be joyful, satisfying and creative for children. It should not be based on rote learning and authoritarian instruction. The learning process should not be a cheerless activity. The corporal punishment should be stopped.

Thus, the content and process of primary education will have the following features-

- introduction of the norms of minimum learning competencies for the primary stage,
- provision of minimum facilities so that the learning process becomes more enjoyable experience for the children,
- development of curriculum and instructional material keeping in view the culture of specific groups like the tribal people and other educationally deprived sections,
- preparation of instructional packages based on the national core-curriculum,
- improvement in the system of evaluation,
- use of modern educational technology for communication

## Activity Sheet No. 4

Discuss the usefulness of introducing the national core-curriculum in all primary schools and its transaction by using a learner-centred approach to teaching. Consider the difficulties, if any, envisaged in introducing this programme and ways and means to solve them.

### Non-Formal Education

The Non-Formal Education programme is inescapable strategy to achieve the goal of universalisation of elementary education. You as a teacher working in a primary school, will be directly concerned with the implementation of this programme. In order to make the programme more effective and to maintain its quality NPL and POA have suggested certain special measures.

- provision of facilities in Non-Formal Education centres comparable in quality with the formal schooling system. It is proposed to provide technical support such as audio-visual aids, radio-cum-cassette players, provision of power through solar packs and learning material of good quality
- the curriculum to be followed in the Non-Formal Education Centres will be made more relevant by relating it to the environment and real life experiences of learners,
- approach to teaching will be learner-centred in which instructor will act more as a facilitator rather than a lecturer/teacher,
- organisation of activities will be based on individual needs to enable the learners to proceed at their own pace,
- the scholastic achievement will follow almost the same norms as set for the formal schooling system so that it becomes possible for the learners to enter the formal system,
- the facilities and incentives provided to special groups in the formal system will also be made available to them. Free text books and stationery will be provided to all pupils,

- initial training of instructors for non-formal education will be organised to be followed by orientation courses at different intervals,
- voluntary agencies and local bodies will be involved in this programme under the supervision of State Governments,
- the non-formal education programme will be linked with the formal system to enable the learners to enter the latter after proper testing and also with the open schools to enable the pupils to appear in the examinations. The pupils coming out from non-formal educational system could be provided vocational and technical courses.

### Activity Sheet No. 5

Think of the Non-Formal Education programmes being conducted in and around your school and list the problems that might be faced. What measures would you suggest to improve the functioning of NFE centres in the light of reforms suggested in the NPE

Collect  
Collate  
Discuss

We have so far discussed universalisation of elementary education, its implementation strategies, facilities to be provided to schools, teachers and students, the content and the process of education and implementation of non-formal education programme for achieving the goal of UEE.

### Your Role As a Teacher

You, as primary school teacher, are the key person in implementing the strategies suggested for universalisation of primary education by 1990. Your role in achieving this goal is to —

- follow the national core-curriculum, lay emphasis on the national goals, social and moral values, integrate the process of education with Indian culture, make efforts to inculcate the national and emotional integration among children,
- use the learner-centred approach in teaching keeping in

- view the needs, abilities and aspirations of children, using child's environment as a basis for teaching,
- make the teaching-learning process joyful, satisfying and creative for children, using activity approach,
  - involve the community, using the community resources for school activities and by helping the community in turn in its programmes,
  - make maximum use of the facilities provided in the school,
  - pay special attention to the education of girls, SC/ST/BC and children of the minorities,
  - assist in the implementation of non-formal education programme,
  - follow the professional code of conduct, uphold the dignity of the teacher and maintain professional integrity,
  - participate in the planning and management of primary education,
  - organise co-curricular activities suitable for primary school children,
  - conduct action research and make efforts to innovate,
  - participate in the development of curriculum and instructional materials for primary schools,
  - make your school attractive so that the children like to come to your school and stay there rather than at home.

### Activity Sheet No. 6

Think over your role as suggested above, discuss its implication and write your reactions to it.

Collect  
Collate  
Discuss

## ANNEXTURE

### Essential Facilities at the Primary Stage

- I. Teacher's equipments
  - i Syllabus
  - ii Textbooks
  - iii Teacher's Guides
- II. Classroom teaching materials
  - i Maps
    - District
    - State
    - Country
  - ii Plastic Globes
  - iii Educational Charts
- III. Play materials and toys
  - i Wisdom blocks
  - ii Surface Tension
  - iii Bird and Animal Puzzle
  - iv Animal World
  - v Balance and weights
  - vi Magnifying glasses
  - vii Magnets
  - viii Measuring tap
  - ix Cleanliness, Nutrition, language & number charts
- IV. Games equipment
  - i Skipping Rope
  - ii Balls
    - Footbal
    - Volleybal
    - Rubber Balls
  - iii Air Pump
  - iv Ring
  - v. Swing rope with tyre
- V. Primary Science Kit
- VI. Mini Tool Kit
- VII. Two-in-one audio equipment

VIII. Books for library

i Reference Books

- Dictionaries
- Encyclopaedia

ii Children's Books (At least 200)

iii Magazine, journals and newspapers for teachers and children

IX. School Bell

X. Musical Instruments

- Dholak or Tabla
- Harmonium
- Majira

XI. Contingency money

XII. All weather

- i School building classrooms
- ii Toilets — one for boys and one for girls
- iii Mats or furniture for students and teachers
- iv Water facility
- v Trash Can

## Module -3

# National Curriculum Framework for Primary And Secondary Education

### Overview

School curriculum is a means to realise aims of education which emerge from national needs and aspirations. With the passage of time, national needs and aspirations also change as change is the law of nature. Any kind of social change requires modifications in the approach, policy and methodology. As such, it is but logical that school curriculum also changes or gets modified to be in tune with the emerging national goals.

In the context of National Policy on Education - 1986 (NPE-1986), 'National Curriculum For Primary and Secondary Education — A Framework' has been developed. As you go through this module, you will see relationship between the school curriculum and national aims of education and also understand why need arises for curricular change or modification from time to time. You may also develop an understanding about content and method of school education as suggested in NPE-1986. The implications of NPE for instructional strategies have also been presented. As it is ultimately the teacher who gives purposeful meaning to objectives and content of the curriculum, it is necessary that you get familiar with important aspects of national curriculum. This module, therefore, seeks to provide you with such general understanding.

### Objectives

After completing this module, you should be able to —

- recall meaning of the curriculum.
- see relationship between school curriculum and national aims of education.
- see relationship between aims of education and national goals



- state reasons why, at times, school curriculum needs changes and modifications.
- state reasons for the need of National Curriculum for Primary and Secondary education in the context of NPE-1986.
- draw inference about implications of National Curriculum on deciding essential learning outcomes, content area and instructional strategies, role of the teachers in the curricular transactions.

## The Curriculum Framework

### 1. National Curricular Objectives: Educational Aims and National Goals

As a teacher, you have been devoting much of your professional life to curricular transactions in the classroom and outside. You must have also been asking question to yourself as to why you have been busy in these activities with your students. Like many planned activities, teaching too have certain objectives to achieve. These objectives are not decided on adhoc basis but are organismically related to aims of education which the society sets before it in relation to the goals it aspires to realise for its development and progress. Thus, the means employed to attain the national goals are reflected in the curriculum of the school.

#### Activity Sheet No.1.

- list activities which you organise for your students in the classroom.
- list activities which you organise outside the classroom for your students.

Collect  
Collate  
Discuss

Based on your responses on the above activity, we have listed a number of activities which you may organise for your students. Can you think of a common term encompassing all these activities? You are correct, if you have chosen the term 'Curriculum'. As is clear now, curriculum refers to all the activities and experiences that you plan and organise for the learners in educational institutions to attain the aims of education.

## 2. Changing Nature of Curriculum

Some of you must have been teaching for a very long time. You are probably aware that there have been changes and modifications in the school curriculum at certain intervals. The thrusts of these changes in the curriculum have been in the objectives, stages of school education, content and transactional strategies. Not only this, even the weightages given to curricular activities have also undergone changes. This means that curriculum is dynamic. It changes or gets modified with the changing aspirations of a nation. For example, following the Education Commission Report (1964-66), greater emphasis in the curriculum was given to activities related to work experience-socially useful productive work (SUPW) as a part of general education. Again at plus 2 stage, vocationalisation of education was given special importance. The structure of school education has also undergone changes.

### Activity Sheet No.2

- list the changes that have been recommended in your subject area during the last 20 years.
- what, according to you, are the reasons for Discuss these suggested changes.

Collect  
Collate  
Discuss

## 3. National Concerns and NPE-1986.

There has been a growing concern that, by and large, our system of education has not been able to respond to national needs and aspirations. The new Social Order envisioned during independence movement and visualised in our Constitution still seem to be a mirage. It appears educational system has failed to a great extent in helping the nation in actualising its aspirations. The role of education vis-a-vis the national goals and aspirations have been reviewed and debated from time to time. Like earlier policy statements on education, NPE-1986 is the outcome of such an effort which seeks to identify critical thrust areas in education for national development and progress to meet the challenge of

the future. The Programme Of Action (POA) emerging out of NPE as action strategies seeks to translate policy statements into realisation.

#### 4. A Case For National System of Education

The concerns listed above are not of a local nature but are all pervasive over our national life. As such, they call for the development of a comprehensive national approach to education — a national system of education and a national curriculum for school education. We need a national educational system also for the reason that glaring disparities exist in the educational spheres from region to region and that we have to ensure minimum standard of attainment for learners at all stage of education. Certain minimum facilities must also be provided to all the schools in the country to ensure a reasonable quality of education for all children.

A national educational system does not at all mean a regimentation of the educational system or the imposition of a rigid uniformity on it. Ours is a country which derives its strength and pride from its geographical, linguistic, religious and cultural diversities. Our unity as a people is based upon an appreciation of the richness of Indian culture. The national educational system is to be looked upon as an effort to reduce existing regional educational imbalances and ensure every child a minimum standard of education through a built-in flexibility for the teacher, the school and the local educational authority.

The salient features of such a system should be —

- emphasis on shaping the character of the learner
- equality of educational opportunities for all
- linkages with the world of work and development of entrepreneurship
- a minimum national standard of attainment by the learners enrolled at different stages of education
- a technical support system for continuous improvement of the quality of education
- promotion of national integration through educational programmes

- lateral and vertical mobility of learners for the purpose of further education and training through different modes of learning.

## 5. Features of the National Curriculum Framework

The national system of education implies a national curriculum to attain its objectives. The National Curriculum -A Framework for Primary and Secondary Education developed in this context has the following basic features —

1. Emphasis on the attainment of the personal and social goals and propagation of values enshrined in the Constitution.
2. The development of human resources for the realisation of the national goals of development.
3. Broad-based general education to all learners at the primary and secondary stages.
4. Learner-centred approach rather than the teacher-centred approach in teaching.
5. Provision for flexibility in terms of selection of content and learning experiences which would facilitate the attainment of the expected learning outcomes.
6. Applicability of the curriculum to all learners irrespective of their modes of learning.
7. Provision of essential resources (physical and academic) necessary for effective transaction of the curriculum in all schools.

### Activity Sheet No.3

A school teacher needs minimum (threshold) facilities (physical and academic) for effective transaction of the curriculum. List the facilities that you already have. What more facilities do you require?

Collect  
Collate  
Discuss

## 6. Core-Curriculum

The national curricular framework contains a common core along with other components that are flexible. The main implica-

tion underlying this concept is, that upto a given level, all students, irrespective of caste, creed, sex or location have access to education of a comparable quality. The rationale for common core is that while there is no limit to the benefits one may derive from education, certain minimum essential learnings are expected to be acquired by one and all. They are basic and essential as without them an individual cannot live a satisfying life as a person and as a member of society. These constitute core learnings and a curriculum incorporating these common learnings is called 'core-curriculum'. The core curriculum will, therefore, be centred around certain essential learning outcomes common for all learners. Attainment of common learning outcomes does not imply rigidity and uniformity in content and methodology. It envisages flexibility in order to make learning relevant to the needs and aspirations of diverse groups of learners in the vast country like ours. There should be flexibility with regard to content and provision of learning experiences based on local conditions. The essential learnings constituting the core curriculum are envisaged through a common scheme of studies, keeping in view the needs and characteristics of the children at different stages of their development.

A child entering the primary level is largely in the 'concrete operational' stage. During this stage, the child begins to think logically about the real world but is very much tied to concrete situations. These operations are both of the logical and the arithmetical kind and are also in the regions of space and time. These operations, however, are still carried out only on objects involving concrete situation. He still finds it difficult to generalise from one situation to another. Thus, at the primary stage the basic mode of learning of children should be through group activities and play-way techniques, languages games, number games and activities directed to promote environmental awareness. The curriculum at this stage should be closely related to the environment so that it becomes functional, significant and relevant to the needs of children. The scheme of studies at this stage comprises the study of one language, the mother tongue of the regional language, environmental studies, mathematics, work experience/socially useful productive work, art education, health and physical education. At the upper primary stage the

scheme or studies suggested is three languages, social sciences, science, mathematics, art education, WE/SUPW and health and physical education.

At the secondary stage, the child is in the adolescence period of development. He is confronted with many strains and stresses because of certain physiological changes. He also becomes conscious of his future occupational status. Regarding intellectual development the child is at the stage of formal operations and therefore he is in a position to think logically and perform mathematical deductions. Emphasis should be laid on formal abstractions of attributes and relationship of objectives and events. Therefore, curriculum at this stage should provide for acquiring a wider knowledge based on the context of broad based general education. After this stage, a learner should be able to enter the world of work or take up vocational courses or academic courses at the plus 2 stage. To equip the student for the first two alternatives, there is need for pre-vocational orientation through work experience/SUPW programmes. The essential learnings under the core curriculum need to be provided through content and learning experiences related to different subject areas. The core curriculum at the secondary stage comprises the study of three languages, science, mathematics, social science, art education, work experience/SUPW and health and physical education.

The curriculum should be undifferentiated for all students in all areas of study. However, in the area of work experience/SUPW and art education options be provided depending upon the availability of facilities and local needs.

### 7.0 Core Elements

An important aspect of the core curriculum is its emphasis on instilling a nationally shared perception and values and creation of an ethos and value system in which a common Indian identity could be strengthened. In order to achieve this, the following core elements need incorporation and integration in different subject areas.

- (i) The history of India's freedom movement.
- (ii) Constitutional Obligations and physical

- iii) Content Essential to Nurture National Identity
- iv) India's Common Heritage
- v) Egalitarianism, Democracy and Secularism
- vi) Equality of Sexes
- vii) Protection of the Environment
- viii) Removal of Social Barriers
- ix) Observance of the Small Family Norm
- x) Inculcation of the Scientific Temper

## The Role of the Teacher

As a teacher, you have a very important role to play in the effective implementation of the curriculum. First, you should know that curriculum only lays down certain guidelines for the selection of content and teaching learning strategies. The syllabi and the textbooks further elaborate them. But, the organisation of appropriate learning experiences for children to attain the intended learning outcomes is your job. For this you have to analyse, interpret and give concrete meaning to the curricular elements keeping in view the children you teach. The processing of content, the selection and organization of learning experiences and adoption of the needed teaching-learning strategy are critical elements in the realization of objectives of the curriculum and this is in your hands. You should be prepared to assume the role of a producer of learning resource materials. Models and other teaching aids can be prepared from locally available low cost materials and you should learn how to make them. You also make full use of the educational programmes available through the mass-media like the radio and T.V. The rural environment and the community are also very important learning sources and you should learn how to utilise these for educational purposes.

## Discussion Questions-

1. Why was it considered necessary to formulate the National Policy on Education - 1986?
2. In the formulation of NPE-1986 different categories of people were involved in various discussions/seminars. Why was the involvement of so many people considered necessary?

3. Some people are of the opinion that national system of education will lead to regimentation and rigidities in the education system while others feel that this fear is unfounded. Comment.
4. Why should the curriculum be undifferentiated up to secondary stage for all students in all areas of study except work experience/SUPW and art education?



## Module:4

# Code of Professional Ethics For Teachers

## Overview

The National Policy on Education approved by Parliament of India in May 1986 stated that "teachers" associations must play a significant role in upholding professional integrity, enhancing the dignity of the teacher and in curbing professional misconduct.

National level associations of teachers, could prepare a Code of Professional Ethics for Teachers and see to its observance." \*

The national level associations of teachers met under the auspices of NCERT at Hyderabad in November 1986 and prepared a draft Code of Professional Ethics for Teachers (CPET) which may be adopted by them. Articles of the same code are given in this module for information to teachers.

## Objectives

After completion of this module, you will be able to-

1. realise the need for a Code of Professional Ethics for Teachers (CPET) for maintaining the integrity of the teaching profession, and enhancement of its prestige by curbing any professional misconduct.
2. promote awareness among teachers of the possible dimensions of worthy professional conduct in relation to students, parents/guardians, management/administration, professional Organisations, society and nation.

## Introduction

All professions have a written or unwritten, code of conduct or an ethical code. Various professions contribute services for the

\* National Policy on Education, 9.3

general good of the society. Every profession or job is an important as the other. Learning and teaching are mutual and complementary. Learning is perpetual, especially in the fast growing era of knowledge in today's world.

The spirit behind such codes is to accept the idea of catering to the needs of the society, its well being and promoting understanding among people and various nations. Mutual dependence, co-operation and realisation of rights and duties and privileges availing is on the increase with growing global consciousness.

Teachers as any other professionals have the similar responsibility, even more, because, what they teach should be useful tomorrow, not only to the individual but also to the society. A teacher educates to produce better citizens in the community.

Now, teachers being learned and conscious members of society, need to have a brief and simple code of professional conduct. No doubt anything limited to words would be inadequate and unclear, but the clear thinking and right actions of teachers certainly help realise the spirit of the code.

A person who chooses teaching as a career, assumes the obligation to conduct himself at all times in accordance with the highest standards of the teaching profession, aiming at quality and excellence in his work and conduct, setting an example to command respect of the pupils, the parents, his colleagues, and the society at large.

Teaching, in its true sense, does not merely mean instructing but influencing as well. The teacher's duty is not merely to impart knowledge in specific subjects but also to help children grow into stature, develop suitable attitudes and unfold their personality. In this responsible task the personal example of the teachers matters most.

The status of teachers in ancient Indian society was very high. He was the legendary "Guru" the dispenser of knowledge. There was no challenge to his authority as scholar. With the decline in authority and the adverse conditions prevailing during the middle ages his value and position was shaken. Teaching

became secular and practical instead of religious and scholarly. The explosion of knowledge today is having its impact and the teachers have to acquire knowledge and training in precise skills and scientific methods to do full justice to their task. A profession sets up its own standards and has also a strong professional organisation of its own. Teachers like members of any other professions, undergo relevant training and profess to know their specialised fields better. Education has become essential for modern living and has been declared compulsory for the young hopefuls. \*

Adherence to the code is a condition for membership or entry into a profession. This long felt need was given concrete shape at a meeting held at UNCSO House in Paris in May 1964 under the Chairmanship of Mr. William Carr, the then Secretary General of WCOTP, with the recommendation that establishment of a code of ethics for teachers, which, those entering the profession would agree to follow, either acceptable on a world scale or appropriately reflecting differences in the circumstances of different countries" is essential. The need for a code was again stressed by the UNESCO/ILO recommendation concerning the status of teachers which declared that codes of ethics or the conduct should be established by the teachers organisations since such codes greatly contribute to ensuring the prestige of the profession and the exercise of professional duties in accordance with agreed principles (Quoted in chapt IV of the report of WCOTP-AIFEA, National Seminar 1981, New Delhi).

Teaching is a profession. It is a form of public service which requires expert knowledge and specialised skills, acquired and maintained through vigorous and continuing study; it calls also for a sense of personal and corporate responsibility for the education and welfare of the pupils.

The Education Commission (India; 1964-66) declared, among other things, that one function of teachers organisation is to establish a professional code of conduct for its members and to ensure that it is followed.

\* UN Declaration of the Rights of the Child (Principle), and Article 54 of the Indian Constitution.

The dawn of independence brought hopes, aspirations and expectations in the minds of Indian people that the dream of building a prosperous and welfare oriented state was close at hand. There is now a new hope and a renewed resolution in the minds of all concerned that a reorganisation and subsequent value-orientation of the educational system is a pre-requisite for the development of democratic, socialistic, secular India committed to social justice. We put our faith in the teaching community as nation builders and hope that teachers would strive to give to the teaching profession the respect that is due to it by playing the role of guides and active agents of socio-economic change. In order to express this commitment of teachers to the nation it is deemed essential to have a specific code of ethics for teachers.

# A Code Of Professional Ethics For Teachers Of India

Draft developed at a Workshop of National Level Teachers Organisations held at Hyderabad from 24 to 26 November, 1986. \*

## PREAMBLE

We, the teachers of India,

1. Believing that education should be directed to alround development of human personality and the creative, and productive abilities of all citizens for the intellectual, social, political, economic, scientific, moral and spiritual advancement of the country;
2. Recognizing the fundamental right of every child to be provided with the fullest possible and equal educational opportunities based on social justice without discrimination on grounds of religion, caste, creed, region, sex, social origin, political opinion or economic condition;
3. Requiring that Government should make sufficient financial allocation for providing the necessary infrastructure, equipment, adequate and qualified staff and all facilities and amenities conducive to imparting education, in an atmosphere of freedom and creativity;
4. Reaffirming our resolve to strengthen, through education, national consciousness and identity, sense of patriotism, a pride in our rich cultural heritage and a determination to defend the unity and integrity of India;

\* Sponsored by the Department of Teacher Education, NCERT.

5. Reiterating our firm belief in the fundamental principles of democracy, socialism and secularism enshrined in our Constitution and rededicating ourselves to strengthen them through education;
6. Pledging to foster through education international understanding and world peace;
7. Determined to organise teaching as a profession requiring expert knowledge, specialised skills and a sense of individual and collective responsibility for the welfare of students in our charge;
8. Committed to self-direction and self-discipline, have resolved to adopt this Code of Professional Ethics and enforce it on ourselves voluntarily to practise our profession according to the highest ethical standards.

## PART-I

### Teacher in Relation To Students

The teacher shall,

1. treat all students with love and affection and be just and impartial to all, irrespective of caste, creed, sex, status, religion, language and place of birth;
2. help the students in their intellectual, physical, social, emotional and moral development and character
3. promote scientific temper and a spirit of enquiry, creative self-expression and aesthetic sense among the students and encourage them to question and satisfy their curiosity;
4. develop in the students respect for manual work and workers;
5. enable the students to appreciate our rich cultural heritage and unity in its diversity;

6. be mindful of the individual needs and differences of students and their socio-cultural backgrounds and adapt his/her teaching accordingly;
7. not to accept additional remuneration for coaching on tutoring his/her own students;
8. speak and act with students with respect and shall not divulge confidential information about students except to those who are legitimately entitled to it;
9. inculcate a sense of love for the motherland and universal brotherhood among students;
10. set a standard of dress, speech and behaviour worthy of example to the students.

## PART-II

### Teacher In Relation To Parents/Guardians

The teacher shall,

1. seek to establish friendly and cooperative relations with parents/guardians;
2. strive to promote cordiality between the educational institution and the home;
3. be receptive to view points in regard to educational needs of their children;
4. not divulge any information given by parents regarding home conditions or concerning their own children to any except to those legitimately entitled to it;
5. provide information to parents regarding the attainments and shortfalls of their children;
6. not to say or do any thing which will tend to undermine the students confidence in their parents or guardians;
7. seek to involve parents in school improvement programme;
8. strive to promote effective parent-teacher association.

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DOC, No..... 2-11346  
Date..... 18-02-2002

## PART-III

### Teacher in Relation to Society and the Nation

Recognizing that teachers are part and parcel of the social milieu sharing the needs and aspirations of the people, the teacher shall,

1. strive to develop the educational institution as a community and human resource development centre providing knowledge and information needed for the area;
2. strive to fight fissiparous tendencies based on religion, region and language and separatist tendencies and extra-territorial loyalties;
3. try to fully utilise the resources available in the community to improve teaching-learning process;
4. refrain from interfering in the local factional politics;
5. strengthen national integration and promote the ideals of democracy, secularism and socialism;
6. strive to enlighten the community with the help of appropriate agencies on welfare programmes, citizenship rights, legislative and administrative measures intended for the benefit of the people;
7. endeavour to seek public cooperation in cent per cent enrolment and retention of children of school-going age till they complete their education;
8. while striving to secure necessary facilities for women in cooperation with the community, encourage them to work in rural areas with dignity and honour and protect them from unsocial elements;
9. take particular interest in promoting education of girls and the weaker sections and in creating an awareness of equality of women with men.



## PART-IV

### Teacher Relation to Profession, Colleagues and Other Professional Organisation

#### A. Teacher in relation to colleagues and profession

The teacher shall,

1. acquire and maintain high academic and professional standards;
2. seek and participate in programmes of continual professional growth like inservice education, seminars, symposia, workshops, conferences, etc;
3. keep abreast with latest developments and techniques in subject matter and pedagogy;
4. seek, as a matter of right, to conduct experiments and innovation in teaching-learning practices;
5. avoid making derogatory statements about colleagues in the presence of pupils, other teachers, officials or other persons;
6. cooperate with the head of the institution and colleagues in the institution and outside in both curricular and co-curricular activities and in seeking or providing professional assistance;
7. plan operational schedule of coverage of syllabus (teaching, written assignments and tests) and complete the work in time with scope for revision;
8. be even willing to assist colleagues who are new entrants to the profession;
9. help in the corporate responsibility of protecting the image of the educational institution and the system as a whole;

10. accept as a professional the individual responsibility of reporting in an appropriate manner all matters that are harmful to the interests of the students and the development of the institution;
11. Organise cultural activities in the school with community participation.

## B. The head-teacher in relation to colleagues

The Head-teacher shall,

1. seek the participation of teachers and share decisions with them in matters that affect them and the institution;
2. make teaching assignments in consultation with the teachers concerned;
3. ensure that the supervision and evaluation practices are subject to review by colleagues;
4. oppose arbitrary transfers and terminations;
5. advise the teacher immediately the nature and source of any criticism regarding professional or personal conduct;
6. be impartial to colleagues and follow accepted principles while making assessment of the performance of colleagues;
7. be a friend and guide to colleagues in the discharge of their work and set an example to them in matters of duty and discipline,

## C. Teacher in relation to other professional organisations

The teacher shall,

1. be a member of a professional organisation and pay his dues regularly;
2. recognise services to professional organisation as a professional responsibility;

3. participate, as a matter of right, in the formulation of policies and the conduct of the programmes and contribute to strength the unity and solidarity of the professional organisation;
4. be responsive to the call of the organisation and observe its code of behaviour and discipline;

## PART-V

### A. Obligations of Managements and Administration

In the Indian conditions where the teacher has been harassed, humiliated and exploited by some unscrupulous managements and has been made a scapegoat for all the ills in the education system, any code of ethics for teachers will be unrealistic and therefore unworkable without corresponding obligations on the part of the managements and administrative departments of the government. Therefore, it is assumed that similar codes of ethics will be formulated and adopted by managements and the administrative personnel in the discharge of their obligations.

It is further assumed that:

1. the management and the educational administrators shall be just, fair, impartial and honest in matters like recruitment promotion and assignment of duties to teachers;
2. favouritism, nepotism and political interference shall scrupulously be avoided in the matter of recruitment, promotions and transfers of teachers;
3. external interference in admission and promotion of students shall disallowed;
4. managements and administrators shall provide the needed infrastructure, physical facilities, equipments, laboratories, libraries and adequate staff on the basis of subject requirements at higher levels, and other conditions necessary for

running the institution in an atmosphere of freedom and innovation;

5. the government and management shall maintain, in consultation with teacher organisations, a teacher-pupil ratio which will enable the teacher to teach effectively with individual attention;
6. the government and management shall provide the teacher adequate salary, uniform pay structure, a decent standard of living, social security, retirement benefits, housing and uniform service and working conditions required to discharge duties without want and without fear or favour;
7. government and management shall promote a system of teacher evaluation, participative and data-based, rewarding merit and discouraging sub-standard performance;
8. government and management shall involve teachers in planning and decision-making in matters concerning education and in particular, teacher recruitment, teacher education and determination of teachers' service conditions and grievance removal. For this purpose, a suitable statutory machinery shall be evolved at the national and state levels;
9. government and management shall afford full opportunities to teachers to improve their academic and professional standards by providing libraries and reading rooms in institutions, continuous in-service education programmes, travel facilities, facilities for attending conferences, seminars etc., both within the country and abroad;
10. management and government shall provide additional complementary staff to work as substitutes in cases of long absence of regular teachers;

## B. Teacher in Relation To Management And Educational Administration

Assuming that the foregone conditions are fulfilled, the teacher shall,

1. be aware of legislative enactments, and rules and regulations governing educational policies and employment and abide by them;
2. cooperate with the head of the institution, the management and the educational administration in running the institution according to the stipulated norms;
3. show due respect to constituted authority;
4. be punctual and regular in attending the institution and in carrying out duties and assignments and shall not abstain from duty without proper sanction;
5. refrain from attempting to influence individual members of the management and officers for furthering personal career prospects or gaining professional favours;
6. protest assigning of duties for which he feels unqualified and which make it difficult to render professional service;
7. resist pressures from management and administrators in the matter of admissions and promotion of students;
8. refuse to impart any instruction which is detrimental to the interests of the students, society or the nation;
9. refuse to accept any duty unconnected with the profession;
10. seek the assistance of auxiliary staff in doing clerical and other non-academic work;
11. not shirk responsibility and accountability to the students, the institution and the community as a whole.

### Implementation

1. Teacher organisations, after mutual consultations, may evolve, within their respective organisations, a suitable machin-

- ery and procedures for the observance of this code and for dealing with cases of professional misconduct.
2. It shall be the endeavour of teachers and teacher organisations to see that all conduct rules governing teachers now in existence in various forms, in different states and at the centre are replaced by the faithful observance of this code of professional ethics.
  3. This code of Professional Ethics after it is finally adopted by Teacher Organisations, shall be translated into all the regional languages.

## Epilogue

The Code of Professional Ethics for the Teachers may not be taken as mandatory until it is adopted by the national level teachers organisations in the country. It may be taken as conventional code of ethics generally accepted and followed by teachers even without any prescription like the conduct rules. This specimen draft is developed after examining several codes developed by teachers' organisations in India and abroad and the NCERT in various workshops organised during the last two decades. The draft is supplied to teachers for their information and awareness of the need for such a code, its adoption and observance.

## Follow Up

1. After a thorough discussion of the various Articles in the Code of Professional Ethics for teachers, make plans for the implementation of the selfdirective ideas of conduct in different school and community situations.
2. Think about some more clauses that can be added to the different sections of the Code, and give the rationale for their addition.
3. Are there any sections in the Code which can not be implemented by teachers. If so, why so ?

4. What measures would you like to suggest for dealing with the teachers who violate the Code of Professional Ethics for Teachers?
5. Would you like to sign the PCET after its adoption by national level teachers organisations and recommend that new entrants should also sign the same on oath at the time of their appointment.

If you disagree with the above suggestion, please give your arguments.

## Module: 5

# Community Participation For Educational Development

### Overview

This module aims at developing in the teachers an insight into various aspects of community participation in the educational programmes and also enhancing their ability to enlist community support to the programmes.

Here the 'community' means a group of people who have common interests and needs participating in furthering the cause of education within a particular area-village/locality.

You have been working for the promotion of education, both formal and non-formal seeking community support and participation in this task; It has been experienced that the programmes introduced through governmental agencies, often do not achieve their goals to the desired extent, without sufficient community support. This is applicable to the educational programmes also. If the educational facilities have to be increased on one hand with the introduction of NPE, the qualitative change in education to meet the specific educational needs of the community also need to be brought about on the other. This requires participation and involvement of the community.

### Objectives

After completing this training module, it is expected that you will be able to :

- understand and explain the meaning and types of the community participation,
- appreciate the need for community participation in educational programmes,
- analyse the causes of insufficient community participation in educational programmes and take remedial steps,
- identify the areas in which community participation may be required and its feasibility,



- understand the role of school in maintaining better school-community relationship and drawing latter's participation,
- understand some basic aspects of community participation, and
- understand and practice some methods of community contact to enhance community participation.

## Learning Activities

The community participation has been emphasised in different documents as well as by several eminent educationists. You have been working as a teacher for quite sometime and must have tried to get community participation in various educational activities.

Generally, we tend to believe that help rendered by the community is community participation. But it is not always true. Participation has a wider connotation. Participation may also be of different types from the view point of willingness and desire of the community to participate in a programme. Let us try to understand the above aspects better.

### Activity Sheet No. 1

Think about the meaning of community participation and its types. Write them out on a separate sheet.

Collect  
Collate  
Discuss

It is not necessary that the community members contribute on every occasion. Sometimes they just attend the functions, enthuse the children for regular attendance, help you in educational activities, come to you for advice, depend on school for some community functions etc. This means, it is a two-way traffic, in other words, it is the process of sharing with each other.

You might have noticed from your write up that community participation or involvement may be willing at times and seem to be forced one at other times. Participation can be catagorised as :

1. Spontaneous — persons come forward on their own to par-

- ticipate without any external support or force,
2. Sponsored — persons participate because some mandate or official endorsements are issued. No force is applied, but it has been externally supported.
  3. Compulsory — persons participate because it has been made compulsory. Many a times its violation may ask for coercion.

Let us take a particular situation in which required community participation can be achieved through any of the above three ways. This will help in understanding these concepts. Suppose, the community realises the need of a school and decides to raise funds for necessary materials and also to send their children to school, it is 'spontaneous participation. If the same community is persuaded for the above action by appropriate authorities, sometimes coupled with some incentives like matching grant for building, increase in strength of teachers or other facilities to school, it may be considered as 'sponsored participation. If the parents are forced to contribute for the building fund because their children might not be allowed to continue in the school or their results might be withheld or any other such action will amount to compulsory participation. Similarly when the authorities or the members of a community direct parents to send their children to school failing which they might be fined or lose some benefits or get some punishment it would come under this category of participation.

In a democratic country like ours, compulsory participation is not desirable. Between the spontaneous participation and sponsored participation, the former is most suitable. This will sustain for longer period of time as well as establish the ideal cooperative and participatory situation.

Having known the meaning and types of community participation, it is desirable that we know the need for community participation in educational programme, more specifically educational development programmes, which are community based, and get going with increasing success as they get the acceptance of the people and community. While working for the promotion of educational programmes, you might have come across such situations in which you realise the need for the community

support. You could have tried to do something about it but felt helpless as only governmental support was not sufficient. Let us try to recollect the situations and discuss the need for community participation in educational programmes.

## Activity Sheet No. 2

Reflect some situations from your experience where you felt the need for community support/participation.

Collect  
Collate  
Discuss

The school is such an institution which receives the children directly from the laps of their mothers and from universal institution of family to shape their personality in a continuum. The responsibility of educating the children has been shared by many traditional institutions in a given society specially among the tribal communities. The school of today is also an integral part of the society. It, therefore, has to have the community support and participation.

The participation of the community is needed in all aspects of functioning of an educational institution including planning and organisation of activities, material support, regular functioning, increasing the number of beneficiaries, supervision, helping educational development etc.

The NPE has, besides many other things, envisaged expansion of educational facilities to remove disparities in educational opportunities making education relevant to the societal needs, decentralisation of management etc. which are not likely to be achieved without active participation of the community. It emphasises 'decentralisation' and the creation of a spirit of autonomy for educational activities as well.

If you consider the efforts made by a school in enlisting community participation, you will find that most of the teachers complain of not having enough time for community contact, but, if this aspect is considered necessary, some time can be squeezed for it. The functions organised in schools are mostly made official with inadequate community involvement. How-

ever, at many places ideal participation of community has been noticed.

We have already discussed in brief the need for community participation. Let us now discuss the feasibility of getting the community support in areas where it is needed most.

### Activity Sheet No. 3

Enlist some of the important areas/aspects of educational programmes and institutional management in which community participation is needed.

Collect  
Collate  
Discuss  
including

The areas in which community participation or help is needed, relate to the academic, management and administrative aspects of the school. Let us synthesise our experiences :

1. If there is a proper dialogue with the community, it can substantially help in motivating and persuading the members for enrolling their children in school. It can help in enhancing regular attendance of children as well as their retention in the school. Some-times, social pressure can also be put on the parents by the community for sending their children to schools.
2. The school is a part of the community, therefore, the latter can help in providing physical facilities such as, construction and maintenance of school building, desks, teaching aids, residence for teachers particularly in rural areas, etc. It can also contribute funds for various functions or help the school by providing free labour specially in rural and tribal areas.
3. There are many skilled persons in the communities who can help the school in taking up activities related to work experience. Besides, in the absence of teachers the educated persons can come forward/for voluntary teaching.
4. It has been observed that, in such villages where the community is education minded and interested in educational

activities, it helps regular functioning of the schools by solving unforeseen day-do-day problems and also by close supervision and help.

5. The community helps in maintaining a congenial atmosphere in the school by intervening in any dispute between the teacher and the parents or among teachers etc.
6. The administrative problems in the schools are also, many a time, taken care of by the community. It has been observed that on such occasions, the panchayat or the community members help the school.
7. In academic aspects, the community can contribute by way of giving valuable suggestions in planning and execution of activities. One of the important contributions of the community is to provide authentic feed back to the school regarding children's perception about teaching, co-curricular activities etc. in order to make necessary modifications in the teaching-learning processes.

There can be many other aspects, in which the community can participate and help an educational institution.

As we have discussed earlier, participation can be a two way traffic. Now the role of a school in maintaining better school-community relationship and drawing community participation be examined.

#### Activity Sheet No. 4

Note down the activities that the school can undertake for maintaining good relations with the community and getting its participation.

Collect  
Collate  
Discuss

The school can play a positive role in enlisting community participation by bringing itself nearer to the community. Following are some of the important aspects in which school can help.

the community:

1. The school may extend its role and become a centre for learning for every one in the community. It may not confine itself to only formal instruction to the pupils but can help also the community members in learning. The school may provide academic assistance to its members and also encourage them for further learning. It can, thus become a community centre.
2. In most of the places, school is the only place where people can hold meetings and functions. In such circumstances, the community can be helped with the facilities such as library and play ground, without disturbing the regular school programmes.
3. The teachers are considered knowledgeable and educated persons in the villages. People come to them for advice and guidance. They should be helped.
4. The role of school may be enhanced to an agent of change in the community: It can help in collection and dissemination of new and innovative ideas relating not only to education but also to other development programmes of the community. Sometimes it can help in guiding the people for approaching the appropriate development departments to meet their needs.
5. The results of some activities of the school children may be properly displayed and the parents may be invited to look at them. It pleases them, they can also see and learn from the experiments, demonstrations and other works being done in school.

Now that the areas in which community can help the school and can be helped in return is analysed, let us synthesise our ideas. Some basic factors influencing community participation need explanation.

## Activity Sheet No. 5

What according to you are the basic factors influencing community participation?

Collect  
Collate  
Discuss

As discussed, it appears that the following major factors which influence community participation can be listed.

1. The school and the community should work as co-partners which means, the community should be involved in the affairs of the school. Unless a sense of belongingness and sharing is created amongst the community members, they will not feel sufficiently concerned to participate. The participation should be in the planning of all school activities and their management. This process is called 'participatory planning and management'.
2. There has to be an organisation at the community level through which the community participation can be channelised. In almost all the villages or localities a committee is formed for this purpose under different names, such as, school committee, co-ordination committee, parent-teachers association, but such committees are not properly utilised for ensuring community participation. These have to be operationalised and activated.
3. You might have noticed that in places where ever the youth or younger generation comes forward to take part in educational programmes, the rate of community participation increases. This aspect needs further emphasis.
4. Those of you who are working in remote, tribal and rural areas, might have noticed the existence of some traditional institutions like youth dormitories. If these institutions are fruitfully utilised, the community participation rate will be accelerated.
5. The role of voluntary organisations in increasing community participation has been encouraging. Wherever such organisations are existing, they should be approached for

help

6. It is desirable that a survey of the community/locality should be made to identify the community resources in order to know and expect the extent of community participation. It should include the survey of socio-economic status of the community, its educational level, educational needs of the community, composition of social groups, human resources, village functionaries, reasons for non-attendance of students, etc. These will help in mobilising community resources for school improvement and areas of co-operation between school and the community.

In addition to the factors mentioned above, there may be other factors which could be taken care of in the process of drawing community participation. These factors can be identified and taken care of by the teachers while interacting with the community.

### Activity Sheet No. 6

You might have noticed that some of you get good community support while others find it difficult to manage. Let us try to analyse and identify some important methods of working with community.

What, according to you, are some of the important methods of community contact and working with it to ensure community participation? Please write them briefly.

Collect  
Collate  
Discuss

A number of methods for community work have been identified. They are all useful. However, let us synthesise our experiences and note down some common methods :

1. It is necessary that we should know the community well before entering into full-fledged dialogue with it. When you are posted to a new place, try to understand the social structure, economy, cultural constraints, political organisation and other problems of the place.



2. Only knowing the community is not enough. It is more important to identify yourself with the community. Try to approach the community on equal level and respect the community members.
3. It is important that you appreciate the problems of the community or of individuals instead of imposing your own ideas on them without knowing their problems. Such behaviour of yours will bring you nearer to the community.
4. Instead of complaining about the children to their parents, positive suggestions to the parents will be appreciated by both.
5. The cooperation of emerging leaders who are mostly the youth and educated persons may be sought. The support of the elder members of the community will be useful.
6. Attending social, religious and other functions organised in the locality helps the teachers to come closer to the community.
7. It is recommended that every school has a functioning 'parent teacher association' or a co-ordination committee with similar objectives.

In addition to the methods indicated above, some other actions, such as, sense of humour, style of talking, respect to individuals play important role in establishing rapport with the community. There are no ready-made solutions to the problems. It will greatly depend upon the judgement and the action of an individual or a teacher in a particular situation. Your role need not be confined to giving instructions in the class. You shall have to assume the role of a guide and helper to the community.

For the secondary school teachers, closer relationship with the parent-teacher association is recommended in addition to the activities suggested in this module.

## Module: 6

# Provision of Equal Opportunity to Deprived Groups

### Overview

The National Policy on Education 1986 lays special emphasis on the removal of disparities and to equalise educational opportunity by attending to the specific needs of those who have been denied equality so far.

Broadly, four groups of children who have suffered deprivation on one kind or the other are covered under this. They are girls, scheduled castes, scheduled tribes and disabled. These children have been considered as inferior to others and have been so treated over the years resulting in their unequal educational development.

The deprivations suffered by this section of children are at social, cultural, and psychological levels. Women suffer lower status in society, scheduled castes are untouchables, scheduled tribes are boors and handicapped are pitied. Such stereotype images of the four groups are baseless, discriminatory, unjust harmful to the society. The NPE emphasises the constitutional provision of non-discrimination on the basis of caste, creed and sex. It envisages fight against such discrimination so that all sections of society are brought at par with each other.

The purpose of this module is to create an awareness amongst teachers about the existence of discrimination, its extent and nature and to enable them to fight it out by developing a different kind of attitude towards these groups. Various activities as detailed out in this module will help in the achievement of the following objectives.

## Objectives

After going through the module you are expected to be aware that :-

- discrimination against these groups exists in the form of behaviour of peer groups and also of teachers. It also exists in the behaviour meted out to these groups in different textbooks.
- the behavioural discrimination is in the form of negligence, non-participation and total disregard for the feelings of these groups. In textual material, presentation of thematic and linguistic content reflects the stereotype images of these groups.
- the discrimination is unjust and has to be fought against by
  - (a) making the girls, SC, ST & disabled to participate in all activities along with others like cooking, bringing water, playing games,
  - (b) making all students to undertake collective responsibility for any classroom work,
  - (c) finding out educational social & cultural needs of children
  - (d) devising ways and means to meet these needs.

## Explanation

Discrimination operates due to the prejudices of society towards the role and status of women, towards inferiority of SC and ST and an attitude of pity and negligence towards handicapped children.

This discrimination often gets reflected in the behaviour of teacher towards these groups as well as of children belonging to other groups. Teachers do not ask the children of Harijans in the classroom to fetch drinking water. Children of non-SC/ST community avoid playing with SC/ST children. Girls are not allowed to join boys in the games while disabled children are not considered fit for playing any game.

Traces of this kind of discrimination are also found in textual

material, in their thematic and linguistic content. Inspite of being a woman Rani Jhansi was a great warrior. The use of the word 'inspite' is not only superfluous it is indicative of sex bias as well.

## Activities

1. As a first step teachers must involve all children in all activities of classroom bringing drinking water, sports, dramatics etc.
2. Avoid calling children in roll call or other wise by caste names as 'Ramu Dhobi' or 'Paltu Chamar'
3. Avoid segregation in the classroom on the basis of sex, caste or disability
4. Avoid segregation in the hostel accommodation, hostel kitchen or dinning hall
5. Avoid discrimination in providing programmes to children in the school and the hostels

## Learning Activities

You have now some idea as to how discrimination operates between the boys and girls on the one hand and SC/ST as compared to the non SC/ST on the other, in textual materials and actual classroom situation. It is right time to think and observe for a while and find out

## Activity Sheet No. 1

Have you noticed any focal point of such discrimination in the textual materials which you have been teaching for years ? Try to write them down on a separate sheet of paper.

Collect  
Collate  
Discuss

Now you have some identified textual materials in which the discrimination on sex or caste basis operates because of preju-

dice of society towards the role of women and SC/ST. Is this discrimination discernible in the textual materials in their thematic or linguistic content or both? Does this discrimination appear in the style and presentation of material as well?

### Activity No. 2

Pause and think if you also treat your students—both boys and girls at par? List down the activities in which all your students contribute equally e.g. both curricular and co-curricular activities such as games, sports, dramatics, fine arts (singing, dancing, drawing and painting), creative writing.

Collect  
Collate  
Discuss

This is time for peeping into your own heart and see whether you yourself are treating woman and SC/ST at equal levels. Do you give them equal opportunities for their growth into self-reliant personalities? If not, give your reasons in the end.

Is it justified to differentiate between boys and girls and treat them with a bias? If not, then how you have tried to improve upon the situation and what role can the language teacher play in achieving the aim of eliminating sex-bias.

### Activity Sheet No. 3

Write in few sentences what you understand by discrimination in thematic content.

Collect  
Collate  
Discuss

You will find that there is imbalance in themes relating to women in the lessons/chapters of the books.

Less emphasis may have been given to themes concerning women. The number of female character in the text may also be less than that of male characters. Evidently each lesson/chapter of the book has to be screened with a view to finding out

whether or not the theme (including the number of chapters) is adequately representative of the equal status of women.

As you have gathered from this discussion, sex-bias in thematic content reflects the social stigma and taboos attached to childless married women, spinsters and widows; it also reflects the differential treatment given to girls so far as the educational or other opportunities are concerned. There may also be references such as dowry system, bride-price, child marriage, superstitions, false beliefs and dependence on men.

According to this approach, all the areas where a differential treatment is given to girls need to be removed from the textbooks/ supplementary reading materials and also in your behaviour towards the girls and boys. The overall aim is to find out the negative approach which is mainly responsible for undermining significant role of women in social, economic, cultural, historical, religious and educational fields.

#### Activity Sheet No. 4

Write down in a few sentences what approach you would adopt to bring about a balance in treatment if such references occur in the textual materials ? and  
How will you make the children aware of these evils so that they start thinking about the place of women in positive terms ?

Collect  
Collate  
Discuss

Now you have located areas of biases appearing in the textual materials, this is the right time for you to rectify the mistakes which may be responsible in developing wrong attitudes towards women/girls amongst your students. Now is the time that the boys and girls are made conscious of the fact that women have proved equal to men both physically and intellectually; that they do not lag behind in administration management or leadership.

There are two methods of doing this job —

## Activity Sheet No. 5

Go through the textbooks/supplementary reader and locate such references which depict positive behaviour amongst women, and also list down the negative portions where you would like to tell your students that the times have changed and many women have appeared on the scenes of the world who have given evidences that they can be counted equals or even better than men in their performances.

Collect  
Collate  
Discuss

You will find that now you have a ready rechner with you which will facilitate your work of growing awareness amongst your students that women today are more self-reliant, self-propelled and self-directed.

The role of women in different walks of life has not been properly understood and appreciated by the parents, other members of family, in-laws, society in general and surprisingly enough by women herself.

## Activity Sheet No. 6

Note down the language items from the textbook/supplementary readers which tarnish the image of women or other deprived groups.

Collect  
Collate  
Discuss

Communication of the total meaning is made possible through a particular way of presenting the thematic content with the help of linguistic content. Obviously presentation and style of the author is of paramount importance and is to be taken into consideration while screening the book from this angle. The image of a person is elevated or tarnished by the way it is projected.

It is hightime that you point out to children that our constitution guarantees equal opportunities for development of the personality of all irrespective of caste, creed or sex. Healthy competition for the development of personality of both the sexes is necessary and desirable, and all of them should be provided with equal opportunities in social, religious, political, professional and cultural spheres. Try to mention such references to your students.

Try to impress upon the minds of your students that family is an integral part of society as a whole. Hence, the progress of the family and the society at large depends on mutual co-operation, affection, the feeling of oneness and sense of belongingness. Evidently, in matters pertaining to family and social affairs both husband and wife should co-operate and discharge their duties more effectively. Decisions arrived at on the basis of mutual consultation are of considerable help in having a happy family and achieving success.

There is still another group of Children which need our attention. Some of them have been in the schools but unnoticed and still others never entered the system. These are referred to as disabled children.

The POA indicates that out of 12 million disabled persons about 4.3 million fall in the UPE age group. Another 1.4 million children fall in the age group 0-4 year which is relevant for identification, diagnosis, assessment, early stimulation and preparation for education. To this will be added the children in the post-primary stage and those requiring vocational rehabilitation. The POA also suggests that the mildly handicapped children who can receive education in common with other children should be brought within the educational system by 1990 and 1995. For the severely handicapped children who require special services in special institutions, the POA suggests universalization of educational services by 2000 A.D. synchronising with the goal of 'health for all'.

It is believed that a sizable number of mildly handicapped children do enter the common schools but they fail to cope up



with the normal academic inputs. They are not identified in time and in the absence of special efforts they lag behind in academic work. It brings down their self-concept and they tend to drop out. So it is necessary that the children with consistently low academic achievement should be identified and it may be found out whether their low achievement is due to special learning problems arising out of particular disability. By identifying the children with disabilities a programme for overcoming the handicapping effects of this specific disability and development of the academic programmes to their needs can help in preventing their drop out. Another group of the children with disability refers to those who do not enter the schools either because the parents feel that they cannot benefit from the school because of the disability or schools refuse to admit them as they feel that they are not equipped to cater to their needs. Special schools, particularly in rural areas, are by and large not available. So we have three categories of disabled children who needs to be served for meeting the objectives laid down in the POA;

- .....
- (a) Handicapped children who are already in common schools whose retention can be ensured through special support.
- (b) Children with mild disabilities who are non-attending and can be brought within ordinary school system.
- (c) Children who will need education in special institutions.
- .....

The POA suggests an increase in the enrolment of handicapped children in common schools by 25 percent every year.

The first step is to identify educational, social and cultural needs of children.

**Activity Sheet No. 7**

List the problems of your disabled pupils and also what you think their reasons can be :-

Type of Problems	Reason (s)
_____	_____
_____	_____
_____	_____

Collect  
Collate  
Discuss

You have listed the causes of the educational problems of your students. You may classify these causes into categories on the basis of some common characteristics. At the end of the group work your outcome will look like :

### Activity Sheet No. 8

Learning Problems	Category	1	2	3	4

Collect  
Discuss

An examination of the causes listed and categorized by you indicate that some of them relate to the learning environment at school or home, while some others are with the child himself. For example, unfavourable attitude of parents or social disadvantage refers to the learning environment at home and in the community. Inadequate instruction on the other hand refers to the learning environment of the school. Lower level of intellectual functioning, hearing problem or visual problem lie in the child. These deficits do create educational problems. Their causes can also be attributed to the environment in the sense that the corrective and curative measures for overcoming the effects of the disability \* have not been initiated or they are not adequate. But as teachers we can not ignore these children and suitable corrective and curative measures. In the absence of such measures, the educational problems of these children will con-

1. \* Impairment is loss or abnormality of some part of the body as a result of which normal functioning is disturbed.
2. Disability: Impairment leads to loss or reduction of functioning ability in the personality structure of the persons concerned. This impaired functional ability in an individual is known as his disability.

tinue to multiply and under the stress of frustration they are likely to drop out sooner than later.

Dealing with these children in regular schools is the focus of this section. Other causes have been dealt with separately. Some of the disabled children, particularly children with mild disabilities like lower level of intellectual functioning and deficits in adaptive behaviour, visual impairment, hearing impairment, and locomotor impairment might already be in your classroom. You must be dealing with these children to improve their learning and performance. Think a while, and list the steps you are taking to deal with such children in your classroom. You may also think about the steps that can be taken further.

### Activity Sheet No. 9

Disability	Steps being Taken	steps that can be taken
Locomotor		
Lower intellectual functioning		
Mild hearing loss		
Mild visual impairment		

Collect  
Discuss

Some of the teachers like you have tried several ways to deal with learning problems of the disabled children in regular classrooms. This section describes how they tried to devise creative learning for such children.

### Steps in Organising educational Programmes

The first step in dealing with children having learning problems refers to their identification. Once children with educa-

tional problems are identified, children with problems arising out of the disability are specified. These children are referred to appropriate persons/agencies for two reasons. They have to undergo cure for their disability. For example, children having hearing problem may require medical help. Secondly, they may require correction (hearing aid) in order to overcome the disability. A child with visual problem may require a lens or a magnifying glass. A child with locomotor disability may require crutches or a wheel-chair to move around or some mechanism for adjustment of hands for writing.

The curative and corrective measures are accompanied by adjustment in curriculum and instruction with the objective of making the curriculum accessible to such children as much as for the normal children. Each area of disability has been discussed specifically within this framework.

## Children with Locomotor Disability

The children with some physical disabilities have locomotor problems. Locomotor problems refer to the problems relating to muscles and joints. They affect mobility of limbs and extremities. These children may find difficulty in moving around. They have otherwise normal learning ability. However, they can have some specific problems interfering with their learning. For example, a child having rigidity in finger muscles may have writing problems.

They may also have posture problems which bring in fatigue and limit their performance in certain learning activities. These children also develop adjustment problems because of non-acceptance or ridicule by their peers. In the case of these children, identification is desired as the disability is readily discussed.

The teacher, in cooperation with parents of their children, may take action to provide relevant aid for mobility of the limbs and functioning of the extremities. These services are available with District Rehabilitation Centres. They can also be obtained from hospitals through Primary Health Centres.

It is of paramount importance that the teacher himself accepts such children. He should himself avoid sarcasm and taunt at the expense of a child's disability. But at the same time the child should never get the impression of being pampered. He should be involved in all learning activities as an equal partner with his peers.

The teacher encourages peer interaction on the basis of mutual respect, help and cooperation.

In the classroom suitable adjustment in view of the disability may be made in seating arrangement. For example, such children can be seated in the front space in the classroom so that movement of the normal children does not interfere. If there is a child with wheelchair, rumping of the passage to the school and the classroom will have to be done.

It has been observed that recreational needs of these children are ignored in the school because of their disability. It may be ensured that they have adequate opportunity to participate in games and recreational activities suiting their needs. Peers may be encouraged to join them in such activities.

In the case of problems of learning by the children with rigidity in limb movement, lot of practice is needed. For example, writing with hand using adjustment aids requires graded practice with reinforcement. In assessment of the performance of these children, particularly for grading or marking, their disability needs be given due consideration. If they have difficulty in writing, they may be provided extra time and, if necessary, oral testing may be used.

## Activity Sheet No. 10

Did you as teachers have a chance of dealing with a child with locomotor disability ?

- a. If yes, describe in about 25 words each of the following:  
Children with problems of movement from one place to another.
- b. Children with problems of posture arising out of muscle tension.
- c. Children with problems of muscle rigidity interfering with their academic learning/skills.

Just like children with locomotor disability, you are likely to come across children with other disabilities have.

### Children with Visual Impairment

Lots of reading from the book and use of blackboard is required for academic learning. Visual impairment results in several learning problems. Such children need to be identified. Salient observable behaviours are -

- rub eyes excessively
  - covers one eye and tilts the head forward
  - holds objects including the book close to his eyes
  - asks other children when taking notes from the blackboard
  - blinks more frequently
  - squints eyelids together
  - watery eyes
  - complains about headache following close eye work
- bumps into people or objects

### Children with Hearing Impairment

Listening plays a significant role in communication and academic learning. Hearing problems interfere with learning and

performance of children. It is therefore, desirable to identify such children and plan steps to meet their educational needs. For identification, salient observable behaviours displayed by such children are as follow

- frequent ear eggs
- turning head on one side to hear better
- unable to follow directions
- requests for repeating instructions, questions etc.
- focusing specially on speaker's lip movement while listening
- hesitates to participate in group discussions
- displays restlessness and inattention
- displays speech difficulty

### children with low Mental Ability

Some children consistently show low academic achievement. They perform about two years below the level of performance of normal children. They have no physical problem. They are also poorly adjusted in the classroom. Some observable behaviours for identifying such children are as follows.

- displays poor academic achievement
- has short attention span
- has short-term memory
- is inattentive and distracted
- shows too much reliance on presentation of concrete objects
- seeks immediate reward
- displays fear of failure
- has poor self-image
- lacks in self-confidence
- has restricted communication
- has poor muscular coordination
- seeks repetition and practice
- lacks initiative in group activities

## Sources Available to Teachers

You are not alone in your efforts to improve educational facilities for these children. The Department of Education and Deptt. of Social Welfare in the Ministry of Human Resource Development are putting in joint efforts. NCERT has a cell at its Headquarters at Delhi with four regional centres in RCE,s Ajmer, Bhubaneswar, Bhopal, and Mysore to help you in getting oriented to education of disabled. Four National Institutes for Handicapped, NIVH, Dehradun NIVH, Bombay, NIVH Hyderabad and NIOH Calcutta are there to give you specific information on each of the disabilities. Very soon they too will have regional centres. District Rehabilitation Centres are also being opened. A number of voluntary organisations are also active. You can contact state Depts. of Social Welfare for more information. For guidance in teaching of children with mild disabilities in regular classrooms, Department of Teacher Education, Special Education and Extension Services is at present the best source.

## Consolidation

You listed the ways in which you have been dealing with the learning problems of the disabled children. You also listed the steps that can be taken towards this end. You have just now studied what some other teachers and professionals have suggested on the basis of their experience with such children. Would you like to revise the list of actions that can be taken to improve the learning of the disabled children in your classrooms as suggested by earlier. You may review your earlier suggestions and complete the following :

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Category	Action for dealing with
----------	-------------------------

---

Locomotor  
hearing Impaired  
Visually Impaired  
Low Mental Ability



## Questions :

1. In what ways the disadvantaged groups are discriminated against in education ?
2. How a teacher might, knowingly or unknowingly, discriminate one section of students from another ?
3. What procedures can help in providing equal opportunities to different deprived groups ?

## Module: 7

# Promotion of National Integration

## Overview

Various commissions and committees have been emphasising with one voice the role of education in promotion of national integration. The Kothari Commission's report observed that one system of Education the policy indicated a common core of a national objectives of education should be to accelerate the curricular framework. Out of ten elements identified as common cores of social and national integration.

The Gajendra Gadkar Committee of the National Integration Council observed that education from primary to the post-eight are late stage should be re-oriented to -

- serve the purpose of creating the sense of Indianness, unity and solidarity
- inculcate faith in the postulates of democracy,
- help the nation to create a modern society out of the traditional one.

The latest in this regard are the observations made in the National Policy on Education — 1986. While indicating the essence and role of education, it states -

'Education has an acculturating role. It refines sensitivities and perceptions that contribute to national cohesion, a scientific temper and independence of mind and spirit thus furthering the goals of socialism, secularism and democracy enshrined in our Constitution.'

While elaborating the National Sdirectly related to national integration. These are -

- history of India's freedom movement
- the Constitutional obligations

- content essential to nurture national identity
- india's common cultural heritage
- egalitarianism, democracy and secularism,
- equality of sexes
- removal of social barriers
- inculcation of scientific temper

While dealing with value education in the chapter 'Reorienting the Content and Process of Education' the policy indicates :

“In our culturally plural society, education should foster universal and eternal values, oriented towards the unity and integration of our people. Such value education should help eliminate obscurantism, religious fanaticism, violence, superstition and fatalism”

The importance of education in promoting national integration being such, it is essential that teachers understand its meaning and value and take such measures in school that would enable education to play its role in achieving the set objectives.

## Objectives

After reading this module, you will be able to -

- understand the concept of national integration
- appreciate the idea of 'unity in diversity' prevalent in the country
- recognise how petty differences on caste, creed, cultural and language issues damage the larger interests of the nation
- emphasize the values and attitudes related to national integration while teaching various subjects,
- organise and evaluate co-curricular activities directed at promoting national integration,
- create a climate in the school conducive to promote national integration.

## Learning Activities

### The Concept

You must have heard and talked about the term 'National Integration' quite often. You must have also read and discussed the concept on various occasions. Let us systematise the idea by answering a few questions.

### Activity Sheet No. 1

What do you understand by 'National Integration' ?

Write a paragraph about the concept

Collect  
Collate  
Discuss

The Indian society is a pluralistic one with people speaking different languages, having different religions, following a variety of cultural practices. In the large diversity, there is an underlying force that binds all people into oneness. This force is the feeling of Indianness and the sense of belongingness to the country, its progress and unity. The feelings also include a commitment to build a welfare society in the country. The diversity in Indian culture is a strength and not a weakness. It is indeed, a weakness when narrow loyalties to caste, creed, religion, race, language and region overplay their roles.

A healthy balance has to be struck between the two aspects of 'diversity' and 'unity'. Whenever this balance is disturbed, divisive forces raise their ugly heads and disturb the peace of the country. National Integration implies recognition and appreciation of diversities. It is thus a positive concept. National Integration should not be considered as a rigid uniformity devoid of variety. On the other hand, it values the differences and diversities. What it opposes is social conflict and disruption on the basis of these differences. It aims at reducing prejudices on the basis of caste, creed, language, race, religion and region. To be a good human being, it is necessary that one understands the feelings and values of other fellow beings. Love, sympathy and tolerance

become essential part of human behaviour. Such qualities of human beings help develop a healthy society. India's history and its cultural heritage are unifying forces. An urge to remove poverty, hunger and disease and to provide economic and social justice to our people is yet another unifying factor.

## Need for National Integration

Having understood the concept of national integration, let us know why it is necessary in our country.

### Activity Sheet No. 2

Why is National Integration necessary in our country ?  
Why do the divisive forces become active ?  
Write one para for each question.

Collect  
Collate  
Discuss

Peace in a society liberates human mind. It gives freedom and provides more opportunity to think about the progress and development of society. History exemplifies that in a region or a country during the period of peace, scholars have put forth new ideas, scientists have made discoveries and inventions and human society have progressed materially as well as spiritually. People living in a country which is torn of conflicts and strifes, where people have to bother about the security of life and property, are not able to contribute to the progress and welfare of the society.

The British rulers thrived on the policy of 'Divide and Rule' creating ill-feelings among the various communities of the country. The country as a whole also suffered from poverty and inequalities. The people rose as a nation to oppose the British rule and to obtain freedom from them. After a prolonged struggle and supreme sacrifices the nation got independence in 1947. The new Constitution framed by our own people was soon adopted. With the promulgation of the Constitution the people resolved to usher in a new social order based on the principles of socialism, secularism and democracy. However, the hoarders of

wealth, the fundamentalists and the people in authority fear that they might lose their privileges in the new social order. They conspire and sabotage, time and again, the efforts of building the new order. The bogies of caste, region, language and religion are raised and disturbances are created retarding the growth of the new order. At present such forces seem to be more active all over the country challenging the very idea of national integrity. If the people have a strong faith in the values of secularism, socialism and democracy they can undo the design of divisive forces. The need of hour is that people should unite and strive for building a forward looking welfare society.

### Role of Education

Let us try to understand the role of education and that of the teacher in inculcating the attitudes and values related to national integration.

### Activity Sheet No. 3

What is the role of education in promoting national integration ?  
Point out the general role of the teacher in promoting national integration ?  
Write one paragraph on each of the two points raised above.

Collect  
Collate  
Discuss

In order to achieve the objectives mentioned above, our educational system should play a vital role, In fact a good educational system would necessarily take care of the aspect of national integration. The schools organised on these ideals will no doubt play a significant role in developing attitudes and outlook essential for the future of this country. Promotion of national integration must be an important aspect of the school curriculum, at all stages. The teaching of various school subjects, various activities undertaken in the school, in short, the entire climate of school should be conducive for inculcating the values related to national integration among the students

In school system, the teacher can play a pivotal role. He can create the necessary climate in the school which effects the minds of the children in a subtle manner. It is not through lectures or sermonisation that students will imbibe the values related to national integration. Through a number of activities both in the classroom and outside, slowly and gradually attitudes related to national integration can be internalised. Teachers will have to explore the situations in the school and in the local community which he could make use of for developing a teaching programme.

The teacher may sometimes find that forces of disintegration in the environment outside the school are so strong that his efforts in the school are not effective. But it should also be realised that if school does not counter the outside effects, there is likelihood that attitudes related to disintegration may be perpetuated in the minds of growing children. It is, therefore, essential that teacher continues to play a positive role with regard to inculcation of attitudes related to national integration.

The teacher himself has to present an exemplary behaviour before the students. He has to make himself a living symbol of national integration. He must be, in his thoughts words, and deeds a man free from all barriers of caste, religion, language, region and sex.

## Specific Role of the Teacher

Let us now discuss the specific role that teacher can play in curricular as well as co-curricular areas of the school.

### Activity Sheet No. 4

Which subject areas have potentialities for inculcating values and attitudes related to national integration and why ?  
Write a small paragraph for each subject.

Collect  
Collate  
Discuss

## Language and Literature –

Teaching of language and literature have strong potentiality in promoting the idea of national integration. In earlier classes where emphasis is on development of language skills, words, sentences, idioms, proverbs etc. should be so used that no prejudices against any caste, creed, region or linguistic groups are developed. Such examples that promote the feeling of oneness of the people should be highlighted. In higher classes textbooks in languages are generally anthologies of literary pieces in various forms. Literature has a strong emotional overtone. This should be fully utilised for developing emotions related to the unity of the country. The literature of the past sometimes reflect the prejudices prevalent at that point of time. If such pieces are included in the textbooks the teacher has to explain these in the context of the time when these were written. The generalisations drawn in the literary pieces with regard to some caste, creed people and language may not be true. While teaching such pieces from literature these points should be clearly explained. For composition such topics should be selected that provide opportunity to students to express their ideas on national integration.

While teaching language the teacher should equip himself with some knowledge of other languages. He should be in a position to give references of well known literature and literary figures of other regions and languages. He should also be able to suggest supplementary reading materials which describe the life and places of other regions.

## History

The teaching of Indian history and promotion of national integration should be seen in the broader perspectives of the objectives of teaching history. History is no more the story of kings and queens and of the battles they fought. Its purpose is to help students to understand the process through which societies have evolved and to appreciate the heritage of mankind. Such an understanding helps us to appreciate the present correctly and thus contribute in making a better future. The content of school



textbook has undergone a change in view of this approach. However, there are still many textbooks which reflect the traditional approach. Sometimes the books have communal, regional and sectorial biases. Teachers will have to be very careful while dealing with such textbooks.

History of India, if taught in correct perspective, will emphasise the 'Unity in Diversity'. It will lead students to appreciate the variety in our language, literature and culture and also the contribution of various regions and people in the growth of India's culture and heritage.

The history of India's freedom struggle is a glorious part of our history and that should enable students to appreciate the sacrifices made by our elders and the value of our hard earned freedom.

## Geography

The content of geography can highlight the interdependence of various regions and areas. The raw material produced in a region is utilised in the factories located in other regions due to a variety of reasons. The give and take between various regions bring the people together.

Geography also deals with the human geography which explains the variety in human races, their intermingling, their custom and traditions. Historical geography also explains the geographical unity and entity of the country through the ages.

## Civics

Civics deals with the civic life of the people explaining the rights and duties of all the citizens equally. It also deals with the Constitution of the country teaching of which can be utilised for developing the concept of unity. The Constitution is the reflection of the will of the Indian nation and is the symbol of the nationhood. The ideas of single citizenship, fundamental rights, duties, the federal character, Parliamentary system of government, existence of a Supreme Court etc. are the topics which emphasise the unity of the country.

## Economics

The economic welfare of the people of the country is the most important goal for which the whole nation is striving. The teaching of economics emphasises the need of interdependence of various regions. It also emphasises the need of peace and tranquility being very essential for economic development. The teaching of the subject emphasises the need of making united and concerted effort to build a prosperous India. Removing poverty, ameliorating the deprived and weak, raising the standard of living, controlling the population producing wealth and distributing it equally, are some of the national goals, in achieving of which the people of India irrespective of caste, creed and region are engaged. Any disturbance of peace retards the pace of progress. Teaching of economics highlights these aspects.

## Science

One of the important objectives of teaching science is to enable students to think logically, reasonably and rationally. This process helps in developing a scientific temperament. Many of prejudices are based on our thinking and attitudes which do not have any basis.

The formal teaching helps in inculcating the ideals of national integration but it is the entire climate of the school which is responsible for cultivating the attitudes. The climate of a school is reflected through its activities. Let us see what activities can be taken up in the schools to promote national integration.

### Activity Sheet No. 5

Suggest some activities which you can undertake in your school for promotion of national integration.

Collect  
Collate  
Discuss

Activities suggested should be practicable. It should also be seen that students play active role in carrying out the activities. Co-operation of parents and the community may be sought in

organising these activities. Activities may not be confined only classroom or school. Students should more in the community observe and experience its various festivals and functions. Similarly the community should be invited to participate school activities. Care should be taken that activities in an outside the school are not organised on basis of caste, creed and religion.

## Module: 8

# Institutional Planning and Management

## Overview

It is common experience that anything done in a properly planned manner yields much better results than something done in a casual or routine fashion. While planning, one has to take into account the prevailing situation and think of measures to improve it considering the constraints under which one has to operate. The process of planning also implies evolving effective built-in mechanism for monitoring and evaluation of the plan with a view to identifying bottle-necks and to take timely corrective action.

Planning for social and economic development of which educational planning forms an integral part, was started in our country more than 35 years ago. All through this period, our planning system adopted 'top-bottom' approach with the result that most of our schools remained unconcerned with the educational development plans prepared at the state or national levels, The Education Commission (1964-66) aptly remarked that "no comprehensive programme of educational development can ever be put across unless it involves every educational institution and all the human factors connected with it—its teachers, students and local community". (p. 157).

Decentralisation of educational planning and management at the institutional level would form the base of the planning process permitting active participation of all educational functionaries, school principals/headmasters, teachers, students, parents and other community members therein where each one of them will have specific tasks to perform.

## Objectives

After going through this module you will be able to—

- understand the concept of institutional planning,
- realise the importance of involving all concerned in the planning process,
- appreciate the role of institutional planning in the context of multi-level planning at the block, district, state and national levels,
- appreciate some of the merits of 'bottom-to-top' model of planning, and
- identify institutional needs and formulate some projects and programmes for institutional development.

## Concept of Institutional Planning and Management

Planning is of three types, namely, short-term medium-term and long-term. Institutional planning at the school level will largely be of short-term or medium-term in nature; the duration of short-term plan being one year and that of medium-term ranging between two and three years.

The concept of institutional planning envisages the involvement of all concerned with proper functioning of an institution, namely, the principals/headmasters, teachers, students, parents and other members of local community in the process of planning.

This implies that every institution will identify its own problems, assess its own needs through systematic planned efforts and find alternative solutions to those problems and develop appropriate programmes and projects to meet the assessed needs by itself.

Sometimes the school calender which includes the school principal's planning with respect to assignment of duties to his staff and teachers' planning of lesson units and home work assignments, is confused with institutional planning. Undoubtedly, the school calender is important in its own way but is different from institutional planning. It has nothing to do with the development aspects of education in the school. An institu-

tional plan, on the other hand, includes inter-alia a number of developmental programmes designed mainly to improve the quality of education in the school.

The term 'management' in this module is being used as synonymous with 'administration' and includes personal administration, financial administration and other similar activities undertaken by the head of the school in day-to-day running of the school.

### Activity Sheet No. 1

Attempt a definition of institutional planning in your own words and also state the need for institutional planning.

Collect  
Collate  
Discuss

### Objectives of an Institutional Plan

The specific objectives of an institutional plan could be as follows—

1. to provide educational facilities for the growing population in different age-groups in the localities where institutions are located,
2. to plan for improvement of the output quantitatively, economically and qualitatively. Improving the output quantitatively implies reduction of the incidence of wastage and stagnation, while improving the output economically means reducing the cost per pupil which can be mainly done by better utilisation of the available resources. Improvement of output qualitatively envisages the inclusion of such programmes in the plan as would aim at improving the level of knowledge and skills of pupils making their moral, social and physical training more effective.

### Basic Characteristics of an Institutional Plan

The basic characteristics of an institutional plan are—

- It is based on the principle of participatory planning which means that it is not a plan of the headmaster/principal alone, but of all teachers, students, parents and the local community.
- It is based on the felt-needs of the institution and the problems faced by the school community.
- It seeks to utilise the available resources (both human and material) optimally both within the school as well as those available outside the school in the local community.
- It is flexible.
- It is scientific as it takes into consideration all the facts and figures.
- It is a realistic plan of action from the stand-point of feasibility and is not a 'charter of demands'.

## Activity Sheet No. 2

Considering the situation prevailing in your institution, what would be the objectives of institutional plan? Can you list some of the essential characteristics that a plan prepared by your school will have?

Collect  
Collate  
Discuss

### Steps Involved in the Preparation of an Institutional Plan

The following steps are suggested to formulate an institutional plan —

1. to take stock of the available physical facilities, instructional programmes, supervision, etc. and to identify the deficiencies in each of these areas,
2. to project future enrolment,
3. to estimate physical facilities and staff requirements,

4. to assess financial resources likely to be available from government and non-government sources over a period of time,
5. to determine priorities and to work out alternative choices in the light of assessed resources and future needs,
6. to work out detailed programmes and projects to meet the assessed needs,
7. to estimate costs of expansion programmes and improvement after making due allowance for better utilisation of available resources and the likely escalation of costs,
8. to phase out programmes and outlays according to priorities,
9. to throw open the plan for wider discussion of its priorities and programmes by the local community,
10. to finalise the plan in the light of public comments.

(Suggested format for institutional planning is given in Annexure).

### Activity Sheet No. 3

If you decide to introduce the system of institutional planning in your school, what are the steps that you would initiate? Give a list of such steps in the order, in which they should be taken.

Collect  
Collect  
Discuss

### Formulation, Implementation, Monitoring and Evaluation of an Institutional Plan

Since the idea of an institutional plan envisages the preparation of a plan not by the head of the school alone but by all teachers, students, parents, and the local community, it is expected that its implementation will be effective. It will be necessary to call meetings of all concerned at regular intervals



for identifying needs and assessment of resources to meet the identified needs. It may not always be possible to prepare a comprehensive plan for the all-round development of an institution at one stroke. But it should be possible to identify all conceivable needs of an institution, and decide upon certain priorities. Having decided upon priorities and taking into account the existing resources and additional resources that can be mobilised without much difficulty, it should also be possible to embark upon one or two projects or programmes and start implementing them as a beginning. To facilitate this, separate designs for such projects, programmes have to be prepared. The sum-total of all such projects should constitute an institutional plan.

While preparing the design for various projects, the following factors have to be considered—

1. Need and justification of the project.
2. Specific objectives of the project enumerated in measurable terms, if possible.
3. Details of personnel involved in the project.
4. Time frame for implementation.
5. Resources.
6. Methods of monitoring and evaluation.
7. Suggestions for improvement.

Each project will have to be split into different activities and information regarding the seven components mentioned above in respect of each one of them will have to be incorporated in the project design.

## Activity Sheet No. 4

You may like to take up some projects or programmes for qualitative improvement of your institution. Prepare a list of such projects/programmes in order of priority. Indicate these specific objectives in respect of at least one of the projects.

Collect  
Collate  
Discuss

Evaluating the performance of an institutional plan is equally important. Continuous evaluation has to be done for each plan, project or programmes in relation to its objectives. The experience gained through evaluation can be used for the purpose of feedback into planning at a later stage. Evaluation may normally be done by the school authorities themselves or by an external agency or by both.

## Activity Sheet No. 5

On completion of the study of the module, the questions given below may be taken up as a recapitulation exercise—

Collect  
Collate  
Discuss

1. Define the concept of institutional planning.
2. Briefly highlight the areas which fall under the purview of institutional planning as against those coming under planning at the block, district, state and national levels.
3. Some of the items to be undertaken under an Institutional Plan are given in the module. Can you suggest some other programmes relating both to quantitative expansion and qualitative improvement in the case of the institution in which you are working?
4. What are the main features of participatory planning and management? How far are they practicable?

5. Explain the steps and techniques involved in the preparation of an institutional plan.
6. Institutional planning implies identification of open, hidden and potential resources of an institution to maximise its development. How far do you agree with this ?
  7. State the need and importance of monitoring and evaluation of an institutional plan. Draw up an outline for monitoring and evaluation of any one programme included in the Institutional Plan of your school.

## Annexure

### Suggested Format for Institutional Planning

- I. Introduction or Background Information
  1. Brief historical development of one institution.
  2. Objectives of the institution.
  3. Description of the service area of the institution.
  4. Curricular and co-curricular programmes.
  5. Organisational structure of the institution.
- II. Diagnosis of Present Position
  1. Quantitative Aspects
    - 1.1 class-wise enrolment (last 2 years)
    - 1.2 class-wise pass percentage, class-wise dropout rate in percentage (last 2 years)
    - 1.3 Teachers qualifications and experience
    - 1.4 Teacher-pupil ratio/classroom-pupil/student ratio
    - 1.5 Classrooms, building, facilities, etc.
    - 1.6 Site
    - 1.7 Curricular offerings and enrolment in each course
    - 1.8 Others (please specify)
  2. Qualitative Aspects
    - 2.1 Staff development programme
    - 2.2 Administrative and supervisory programmes
    - 2.3 Selection and placement of students
    - 2.4 Research and evaluation
    - 2.5 Provision of extension services
    - 2.6 Others (Please specify)
- III. Objectives/Targets/Strategies
  1. Assumptions for the Future
    - 1.1 Possible change in population and labour force

- 1.2 Economic growth in the area
- 1.3 Social development in the area
- 1.4 Educational and economic plans of the government and the implication for the school
- 1.5 Need of education and training by the people.

## 2. Quantitative Expansion

- 2.1 Projection of enrolment by grade/level or course for the plan period
- 2.2 Projection of personnel requirements
  - 2.2.1 Teaching personnel
  - 2.2.2 Non-teaching personnel
- 2.3 Projection of land and building requirements
- 2.4 Projection of media instructional facilities
  - 2.4.1 Equipment including furniture
  - 2.4.2 Supplies and materials
  - 2.4.3 Library facilities.

### Extension Projects

## 3. Qualitative improvement

- 3.1 Administrative structure and/or procedural reforms
- 3.2 Curricular revision/reorientation
- 3.3 Provision of life or community experiences
- 3.4 Placement and follow-up studies of students
- 3.5 Research and evaluation
- 3.6 Selection and school placements of students.

## IV. Programmes/Projects/Activities

### V. Costing of the Plan (Financial Requirements)

#### 1. Current Expenditures

- 1.1 Salaries of personnel
- 1.2 Operational expenses
- 1.3 Cost of staff development programme
- 1.4 Cost of Curricular improvement
- 1.5 Cost of career guidance service including placement of students
- 1.6 Other expenditures.

## **2. Capital Expenditures**

- 1.1 Expenditures for school projects such as building and purchase of equipment.**

## **VI. Strategies of implementation**

- 1. Administrative approval of the plan**
- 2. Ways and means of obtaining funds for programmes/ projects**
- 3. Further maximization of the use of resources**
- 4. Time-tables and target period**
- 5. Alternative measure for contingencies that might crop-up**
- 6. Involvement of implementors and decision-makers**
- 7. Other measures**

## **VII. Evaluation**

- 1. Periodical reports and feedbacks**
- 2. Actual inspection and observation of projects**
- 3. Time-table, charts, graph, PERT**
- 4. Others**

## **Areas for Planning at Institutional Level**

### **Student Services**

- Canteen**
- Cycle Shed**
- Water Coolers**
- Book Bank**
- Cooperatives**
- Common room**
- Union Office**
- Financial Assistance**
- Health Care**
- Vocational Employment Bureau**
- Student Study Homes**

- Hostel Facilities
- Non-resident Student Centres
- Remedial classes for weak and under privileged students
- Games/Sports
- Debates/Seminars etc.
- Hobby classes

#### **Faculty Improvement**

- Growth of new Faculty
- Organisation of Seminars/Workshops/Discussions
- Adoption of Modern Teaching Techniques
- Faculty Evaluation (Self-assessment)
- Travel Grants

#### **Building & Equipment**

- Institute Building
- Hotel Building
- Play Grounds
- Teacher Quarters
- Guest House
- Recreation Hall

#### **Extension Activities and Other Programmes**

- Library Improvement
- Laboratory Improvement
- Extra Curricular Activities
- Institute Magazine
- Annual Function

- National Service Schemes
- Adult Education
- Involvement of Community in Institute's Activities

#### **General Administration**

- Time Table
- Option Provisions
- Teacher/Students Union Activities
- Concessions
- Office Administration
- Discipline
- Examinations
- Publications

#### **Financial Management**

- Raising of additional resources
- Running of Activities on no profit no loss basis like canteen, cooperative stores etc.
- Timely payment of financial aid to student and other payments of staff



## Module: 9

# Low Cost Aids For Effective Learning

### Overview

Nearly 75% of the schools in India are in villages. These schools do not have enough funds to procure equipments. Low cost aids made with simple materials available in the immediate school environment and the use of local technology are perhaps essential to make learning relevant and effective. It is imperative that teachers should know to prepare, use and evaluate, Low Cost Teaching Aides so that their classroom interaction becomes more relevant and effective. This module deals with the learning problems faced by the rural school children and the ways and means for fulfilling their educational needs.

The learner must feel the need to learn which would depend on its relevancy to the learner's needs and accordingly the learning activities could be planned. The learner is interested only when he participates actively in the learning process. Learning activities for Low Cost Aids involve identification of difficult concepts, inventory of material available in the environment, preparation of aids/conducting the experiments and activities with the involvement of children, teachers and the community.

### Objectives

- After the completion of this module, you will be able to -
- describe the material available in the environment for the preparation of aids for the better comprehension of difficult concepts
  - list the local resources such as the local artisans/craftsmen, carpenters, ironsmiths etc. and the local materials such as bamboo, matchsticks, shells, seeds of fruits, used cycle spokes, valve, tube etc.
  - appreciate the value of low cost materials in education

- think about the ways of getting help from the local artisans and talented persons for making low cost materials
- prepare at least five aids with the write-up for each aid indicating the preparation process and its use.

### What is Low Cost Aid- A Discussion

Low Cost is a term which refers to aids prepared with simple material, costing very little by involving the children and the artisans. India has a rich art and craft tradition in an environment of material surroundings such as trees, plants, rivers, ponds or sea.

There are some inexpensive and waste material available locally such as empty match stick box fused electric bulbs, cans, seeds and shells etc. Low Cost Aids include charts, models and other inexpensive aids which could be prepared easily with little or no money to make learning effective, comprehensive and fascinating.

### Types of Learning Activities

You have been teaching the students for some time. You might have come across certain concepts or sub-concepts in which you could be facing the difficulty of teaching to the students with varying mental capabilities without models, charts, experiments or some other aids. You may list such concepts or sub-concepts at the primary level which the children find difficult to learn with only the help of simple and low cost aids. You may also mention the aids or activities which you are conducting in your schools. There might be some models in your school. Make a mention of such models or charts. Are you using such aids? Do you conduct experiments to explain the concepts or are these explained mainly through the books?

The teacher is the key person in the entire preparation process of low cost aids. He may involve the artisans and the children while preparing aids. He has to take the initiative to procure the material, give an idea about the aid required and plan its preparation or to conduct the experiment or an activity in a scientific way.

It is imperative to understand before the preparation of aids as to how to explain the concepts which could not be clarified through the books. The children find it difficult to learn concepts/sub-concepts without use of aids, sufficient funds or such aids may not be available in the environment. You may lack the confidence of using the ready-made aids in the class because you are not involved in the preparation process. List the causes which deter you to use aids for clarifying the concepts. Check your resources in terms of equipment material, help, time and the money required.

## Consideration for preparing of Low Cost Teaching Aids

You may categorise the concepts subject-wise. Some causes are common and could be easily identified by you. These are mainly —

### Nature of subject and inadequate training —

Very often you might be feeling that the present curriculum is heavily loaded and you may not be in a position to complete the syllabus. In such a situation the introduction of teaching aids where necessary will help you to teach more in the allotted time. you may not have studied science as subject but you are supposed to teach all the grades at the primary level. Difficult concepts in science and mathematics can be identified with ease if you understand science and simple mathematics.

### Inadequacy of Funds and General Conditions

The contingent money given to a primary school per year is very meagre out of which you have to procure chalks, dusters, brooms etc. and there is hardly any money left to purchase the material for teaching aids. The school has often one room and there might be situations in which you are teaching more than one classes. You may come to the school by commuting long distance either by bus or on a bicycle which may be most inconvenient. The school system has hardly any teaching aids. There is

also a question of maintaining the aids without proper storage facilities in the school. The administrative system seldom encourages the use of such aids.

### Facilities for the use of aids

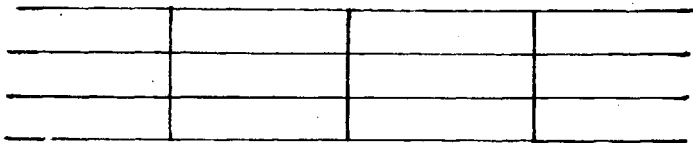
You might be feeling reluctant even to use the basic aids like black-board etc. adequately for lack of facilities like black-board paint or duster etc. You may like to do or make something with your own hands. Do you feel hesitant to interact with artisans or craftsmen even if they wanted to make an aid for the school? Are you hesitant in entertaining questions from the children for the latent fear that such questions are at times difficult for you to answer?

### Place of Teaching Aids in Learning

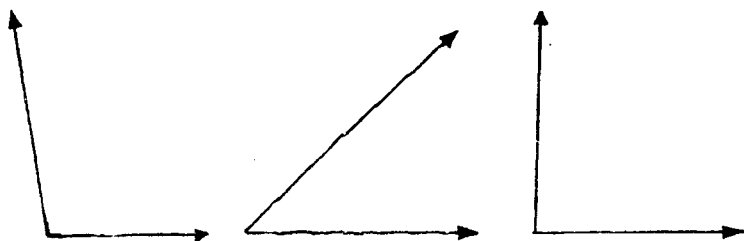
Teaching Aids, in the present educational system, come at a very low priority, although these promote learning by actual participation. Could you devise ways and means to motivate the preparation and use of Teaching Aids? It may be necessary to involve the community and a time-slot be given for doing activities/experiments in science and mathematics.

### Some Simple Example of Low Cost Aids

You may explain the concept of 'Expansion of Metals on Heating' with the help of waste materials like bicycle spoke, used hacksaw blade, tooth paste cap, candle and match sticks. Similarly with the broom sticks, you can concretise the concept of multiplication by placing the sticks as shown below. The broom-sticks placed horizontally and vertically would make cross-sections which could be counted. The number of cross-sections would be answer of  $3 \times 4 = 12$ .



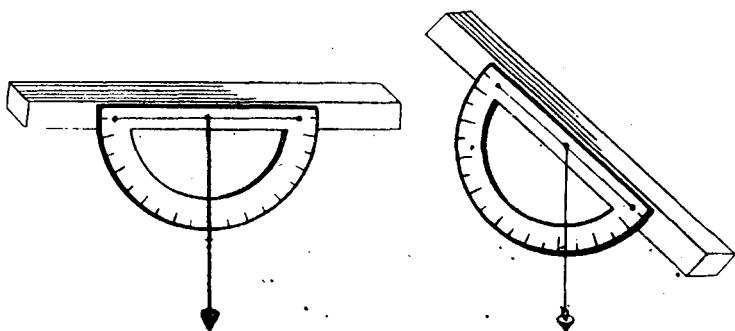
The broom sticks can also be used to explain the geometrical concepts like the obtuse angle, acute angle and right angle. Newton's disc just needs some white card board,



water colours, brush and thread. Concepts of 'Place Value, Addition and Multiplication' could be explained with the help of 'Ganak' made with simple material like bicycle spokes, a wooden platform, rectangular card-board piece, sticks of colour paper, some beads etc. Geometrical shapes could be explained to the children with match sticks and bicycle valve tube. The concept of "Expansion of Gases on Heating" can be concretised with a simple demonstration. With the fused electric bulb and after removing its inner contents, you may fix a balloon with the in mouth of the bulb. When the heat is applied to the bulb, the balloon will be blown.

To measure the height of trees, houses, poles etc., you just require the protractor (could be improvised out of card board also), a wooden rod  $25\text{ cm} \times 2\text{ cm} \times 2\text{ cm}$ , thread  $25\text{ cm}$ , a small nail and a small weight. Glue the protractor to the wooden rod. The flat edge of the protractor should lie along one edge of the wooden rod. Drill a small hole through the protractor at the point where the  $0^\circ$  and  $90^\circ$  lines meet. Press a nail through the hole and hammer it a little way into the wood. Tie a small weight to the thread and be it with the nail. Estimate the height of the object (hole) say  $X$  meters. Look along the length of the wooden rod at the top of the object (Pole) Move yourself a few step forward or backward so that the downward thread make an angle of  $45^\circ$  on the protractor. Measure your distance exactly

from the pole. Then measure the distance from your eye to the ground. Now you know the height of the pole  $x$ .



A magnifying glass for teaching science can be made easily by filling water into a fused bulb. A volta-meter for teaching by hydrolysis of water can be made using a coconut shell and carbon rods from a used dry cell. Similarly, you can think of making effective use of low cost and no cost material in developing aids for teaching.

### Activity

Suggest a low cost aid that you can prepare using the raw materials available in your locality. List the materials required and expected cost of production. Explain the procedure for preparation and the context in which it is used.

### Work done on Low Cost Aids

Central Institute of Educational Technology of NCERT have organised a series of programmes on Low Cost Aids for the selected rural primary/middle school teachers in the various states of India, in collaboration with the State Education Departments and rural voluntary organisations. It has—

- compiled a UNESCO Case Study on Low Cost/Appropriate Education Material and Equipment in India..
- printed papers on Low Cost and a series of 20 charts.

- prepared a tape slide programme on the Educational Technology of Low Cost Aids
- printed an illustrated Manual of Low Cost Aids on 25 concepts of series and Mathematics. The manual was tested with the teachers in formal as well as non-formal situation
- a series of 12 programmes on Low Cost Aids produced recently on video. These programmes are being telecast to the INSAT States, and
- Keith Warren's book "Preparation of Understanding' on Low Cost Aids has been got translated in Hindi by CIET and printed by Unicef.

Copies of the report, papers, manuals and books are available in the CIET, NCERT (I.P. Wing), 10-B Ring Road, New Delhi- 2.

You may contact the CIET for sharing your experiences. The names and address of some of the voluntary organisations/institutions, doing pioneering work in this area are -

- Kishore Bharati, Palia Piparia Village, Via. Banbhadi, Distt. Hoshngabad (M.P.).
- Vikram A. Sarabhai Community Science Centre, Navrangpura, Ahmedabad (Gujarat).
- Social Work and Research Centre, Tilonia, Ajmer. Mitraniketan, Vellanad, Trivandrum District.
- State Institute of Educational Research and Training Udaipur (Rajasthan).

## Feedback Questions

1. List ten materials in your environment out of which teaching aids could be made.
2. Can you give ideas to the artisans for the preparation of ten aids? If so how?
3. Do the teaching aids adequately plead for learning by actual participation?

4. Judging from the cost involved in the preparation of aids, do you feel these could be prepared in the Indian School system on a mass scale ?
5. What are the four major considerations for preparing low cost aids for effective learning ?
6. Can you think of reasons that hinder use of low cost aids by a teacher ?



## Module: 10

# Use of Mass Media

### Overview

This module is to help you understand what is meant by the term 'Mass Media', what is the role of mass media in education, and how you can use effectively in and out of school situation to improve the quality of education.

In early times, teacher was the only medium of communication for the children. He taught his students orally. Later, with the advent of print technology, books came on the scene. The books have proved to be of great advantage to both teachers and children alike in the teaching-learning situation. Day by day the newspapers are becoming accessible to increasing number of people and they play an undeniable role in developing awareness and providing information about things and happenings. Now, for quite sometime, mass media like radio and television are being increasingly used in education in India. The mass media can be of further help to improve the quality of education.

Ours is a vast country, with a large and rapidly growing population. A large number of children go to schools. But there is a very large number of children who don't go to school or drop out from school in early stages. If we depend merely on conventional methods of teaching, we may not succeed in reaching every child who needs education.

As you know, the boundaries of human knowledge are expanding and changing very rapidly. As such, the curriculum in various subjects is changed and up-dated from time to time. However, the knowledge of the teachers themselves may not change automatically to transact the new curriculum. The mass media can be of great help in orienting and retraining a large number of teachers simultaneously in the new pedagogy and content of teaching.

However, it requires specialised knowledge and skill on the part of the teachers before they can use these media effectively for their own benefit and for the benefit of children. Here we shall also discuss the technique of using radio and television properly in the classroom. The objectives of this module are as under -

## Objectives

After completing this module, you should be able to :

- classify various instructional media in meaningful categories.
- appreciate the advantages of using mass media in education.
- acquire the skill of using radio and television in education.
- prepare feedback report and send it to the concerned agency.

## Activities

During your training and career as a teacher you must have learnt about and used various instructional media in teaching--learning process. Can you recollect various instructional media and list them ?

### Activity Sheet No. 1

List various instructional media on a separate sheet.

Collect  
Collate  
Discuss

Now you have a list of various instructional media. Go over the list again. You will find that all these media can be classified in different categories such as print and non-print media; zero cost, low cost and high cost media; projected and non-projected media etc.

## Activity Sheet No. 2

Categorise various instructional media

Collect  
Collate  
Discuss

One comprehensive categorisation of various instructional media could be as under –

### Printed Media

Remarks

Books  
Workbooks etc.

### Non-machine devices which don't require a machine to use

Toys

Games

Charts

Maps

Graphs

Cut-outs

Pictures

Flash cards

Flannel-cards

Models

Specimen.

These can be purchased commercially but can also be made by the teacher and the children using non-cost/low-cost locally available materials.

### Machine operated devices which require a machine to use

Slides

Filmstrips

Overhead transparencies

Audio-tapes or audio-cassettes.

Video-tapes or video cassettes.

## Mass Media

Films ( 16 mm, 35 mm )

Radio

Television

In this module we shall talk mostly about radio and television, and also about audio and video cassettes.

You must have some experience of using radio and television in the classroom, or must have heard about these from your colleagues.

You might be aware that radio has been used in our country for educational purposes for about fifty years now. A number of Askashvani stations ( about forty four ) relay regularly produce and broadcast programmes for the school children. A number of other Aakashvani stations ( about thirty four ) relay these programmes to make these programmes available to a large number of people.

The programmes for the schools produced by the Aakashvani stations are for the following categories of audiences —

- Teachers
- Children of higher secondary classes
- Children of secondary classes
- Children of primary classes
- General enrichment programmes for young children
- Preparatory lessons for secondary and higher secondary students when the examinations approach.

An Aakashvani station may produce and broadcast all these or some of these programmes.

The programmes are generally broadcast in the morning, and again repeated in the afternoon for the benefit of the students of the second shift.

The themes and topics of the programmes for different audiences are annually planned by the concerned Askashvani Stations. They have set up Advisory/Consultative Panels for the

purpose in which state Department of Education and other state educational agencies are represented.

It is mostly the Aakashvani stations which produce educational programmes. However, some educational institutions like the NCERT, New Delhi, CIEFL, Hyderabad; CIIL, Mysore also produce educational programmes which are broadcast by various stations of Aakashvani.

Most of the Aakashvani stations or the State Departments of Education print the annual schedule of the broadcast of the school programmes and distribute it among schools registered with them for their information.

### Activity Sheet No. 3

Find out the name of Aakashvani station(s) in your state which broadcast school programmes. Also find out the nature and types of programmes broadcast by the station, and the time of broadcast of the programmes. Find out which agency prints and distributes schedule of school broadcasts. Contact them and request them for putting you on their mailing list.

Quite a large number of schools in each state have procured radio receiving sets for listening to school broadcasts. In some cases, sets are provided by the Department of Education. In other cases, schools purchase sets out of their funds. Also, one can think of the possibility of getting a set as a donation from voluntary or service organisation. The State Educational Technology Cell/State Institute of Educational Technology advise the schools about the types of sets suitable for the purpose.

## Activity Sheet No. 4

Find out the possibility of procuring a radio set for your school, if you don't have it already.

As with the radio, television is also being used in education in our country for the last 25 years though on a comparatively limited scale. Television was first used in schools of Delhi in 1961. The scheme was later taken up by Doordarshan Kendras of Bombay, Madras and Srinagar. These Kendras telecast programmes mostly for the children at the middle level and above, but some do it for primary schools also.

To reach a large number of children at the elementary level in remote rural areas, the first attempt to use TV on a mass scale was made by using an American Satellite namely, ATS-6, in 1975-76 during the Satellite Instructional Television Experiment (SITE). The SITE was conducted for one year in 2330 villages scattered in 20 districts in six states namely, Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Orissa and Rajasthan. The Children watched a 20 minute programme every day during the school hours. The satellite was also used for orientation of primary school teachers in science for 12 days during the autumn vacations of 1975 in which more than 24000 teachers participated. The training was repeated with a different set of teachers during the summer of 1976.

After SITE, school programmes were continued to be telecast for limited number of schools using ground transmitters at Jaipur, Raipur and Muzaffarpur.

Now television is being used on a mass scale for qualitative improvement of elementary education after acquiring its own satellite viz Indian National Satellite (INSAT) in April, 1982. Starting with Andhra Pradesh and Orissa, the educational television service was later extended to Maharashtra, Gujarat, Uttar Pradesh and Bihar. More than 6000 TV sets have been provided by

the Govt. of India in the schools of the selected districts of these states.

Beginning from mid-october, 1984 the ETV programmes are being relayed by all High Power Transmitters (HPTS) and low power Transmitters (LPTS) in these six states, and also the Hindi speaking States of Rajasthan and Madhya Pradesh. The Statej Governments arej taking steps to provided for additionalj community receiving sets in the schools falling within the coverage area of the respective transmitters. As your might be knowing,j there are now more than 186 TV transmitters in the country covering 70% of the population.

### Activity Sheet No. 5

Find out if your school lies within the area of transmitter which relays ETV programmes and also the time of telecast of these programmes. The local Doordarshan Kendras and the State Institute of educational Technology/State ET Cell can be of help to you in this respect.

Collect  
Collate  
Discuss

Under the scheme, there is five-day a week transmission in the morning for 45 minutes for each state comprising of two separate chunks of 20 minutes for 5-8 and 9-11 year old children. There is a programme for the teachers once a week on Saturdays.

You might be wondering that when a number of other good devices like black-boards, books, charts etc are not fully available to support the teaching-learning process, why the country is investing lot of money and efforts in pushing mass media in education.

### Activity Sheet No. 6

Think of possible advantages of using radio and televisions in education, and make a list.

Collect  
Collate  
Discuss

Experience all over the world shows that when properly used, radio and TV offer great advantages in education. The more children use their senses greater is the learning on their part.

Radio appeals to audio sense. It can therefore be of particular helps in development of language, music and learning of historical events through dramatisation. TV is still more powerful medium as it combines sound with moving visuals. TV can be of particular help for demonstration of skills, clarification of difficult concepts, inculcation of values and attitudes and conveying factual information in an interesting manner. Radio and TV help in bringing the outside world to the classroom, and help expand the horizon and experience of the child, which may not be possible otherwise.

There are thus various advantages of using radio and TV in education, but both media have certain limitations. Can you think of some limitations under which these media are used?

### Activity Sheet No. 7

Think of limitations of educational radio and TV
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Collect  
Collate  
Discuss

You have rightly guessed. These media have following limitations:-

1. There is one-way communication; the viewers cannot ask questions and get clarifications on the spot.
2. The viewers must move with the speed of presentation; they cannot go back or ask for repetition of the ideas. We can always refer backward and move forward while reading a book but cannot do so in case of radio and television presentation.
3. The mass media-programmes are produced keeping a large sections of audience in view. The programmes may not



exactly relate to the experience of children of a particular community living in a particular environment. We know that children learn better and faster when a given idea/information is related to their experience and immediate environment, but radio and TV programmes may not always fulfil this requirement to the fullest extent.

Fortunately, there are ways of overcoming these limitations to a great extent. Can you think of some way of filling these gaps?

### Activity Sheet No. 8

Think of ways of overcoming various limitations of the educational radio and TV.

Collect  
Collate  
Discuss

In fact, it is in view of these various limitations of mass media that your role as a facilitator and guide comes in. You can fill these gaps firstly by motivating children to listen to radio, and watch T.V. and learn from these. The children depend on you to switch on the receiving set. Make it a habit with the children to make use of these media regularly.

Secondly, look at the schedule and go through the notes, if available, in advance to refresh yourself about the content and scope of forthcoming programmes. Ten minutes before the transmission time, undertake pre-broadcast discussion with the children to recapitulate the previous programmes, to motivate and prepare them mentally to receive the forthcoming programme carefully.

Listen or watch the programme along with children. Observe reaction of the children to various segments of the programme.

After the programme is over, discuss, clarify the doubts of children, and relate the programme to the class work, their past experience, and environment. Suggest them some activities which may help the follow-up of the programme.

Your presence during the transmission would also be essential to ensure discipline and orderly behaviour of children. Leaving them on their own during the broadcast, as some teachers tend to do, is not a good policy.

Moreover, some teachers feel that they also benefit by listening or watching the programmes designed for children. They learn many new things from these programmes.

Gradually you will find that children develop the necessary skill to receive the programmes and be benefited. Later on this would help them use these media for life-long education.

You have yet another role to perform. This is to provide feedback to the programme producers to enable them improve upon the quality of programmes and to make them more relevant, meaningful and enjoyable for the children. You may fill the feedback proforma in respect of each programme, and send these to the agency concerned.

Another equally important task for you would be to see that the receiving set remains in order. As soon as some fault develops, you may take immediate steps to get the set repaired. Some states have a special set up for maintenance of the sets, such as the Rural Broadcasting Unit in Maharashtra and Gujarat. In some other states, the private agencies are given contract for maintenance of the sets. All you have to do is to know about their mailing address and inform them about the fault.

Finally, it is important for you to understand that the seating arrangement of the children before a radio or TV set has to be different than that of the class room. While listening to radio, children may be asked to sit in a semi-circle or a circle around the radio set.

The ideal arrangement for the children to sit before TV set would be within an angle of  $30^{\circ}$ . But if the audience is large, it could be extended to  $40^{\circ}$ . Also ensure that there is a distance of about 6-7 feet between the first row and the set. To make them sit too close to the set would be harmful to their eyes. The last row should not be beyond 25 feet from the set.

The TV set should be kept slightly higher than the eye level of the sitting children i.e. at the height of 2 to 3 feet, if children are sitting on the floor.

Unlike the cinema hall, TV room may not be darkened. Let there be some light in the room. But this light should not fall directly on the TV screen. Keeping the doors and windows closed may cause suffocation and physical discomfort among the children, particularly during summer months.

You, as a teacher, have thus an important role to play in effective utilisation of mass media in education. Without enough initiative, motivation and skill on your part, the children will remain deprived of benefitting from them.

### Questions:

1. What are the advantages of using mass media in education?
2. What type of media support can you get in your city/village for instructional purposes?

## Module: 11

# Value Education

### What is Value Education ?

Every society, besides imparting to its children knowledge and skills through education, also wants to inculcate in them certain qualities which may help them become good citizens. This aspect of education is called Character Education, Moral Education or Value Education. During ancient and medieval ages, when public education had not taken shape, this was done mainly through religious institutions. Followers of different faiths used to impart, or receive, such education which would help them become good human beings according to the tenets of that faith. The centres for such education were generally the religious places. This education had certain advantages, as well as certain disadvantages. While it helped some children becoming good human beings, it also inculcated seeds of religious fanaticism in others in their early years, from which they could not free themselves all their life. Consequently they developed feeling of animosity towards the followers of others faiths. This while the religion-based moral education established unity and peace in a mono-religious society, it often gave birth to unrest, even wars, in the vast majority of human society.

At present, learning only those countries where a particular religion is the state religion, moral education is imparted in a secular way in all countries. In the constitution of free India, certain values have been enshrined which can become the basis of a good moral education. Some of these values are: Democracy, Socialism, Secularism, Equality, Justice, etc.

Besides, our country has certain ancient values which people have accepted as their common cultural heritage. Some of these are: Truth, Non-violence, Compassion, Peace, forgiveness perseverance, simplicity, quest for knowledge and its propagation and co-operation. These values have been emphasised through different religions and through literature in a number of lan-

guages of this country. During the modern age, the freedom movement carried out under the leadership of Mahatma Gandhi, once again a lot of emphasis on these values.

Besides the above said two sources, certain values emerge from modern life also, which the society has to accept. The new values which present day India needs most are: development of scientific outlook, preservation of environment productivity and importance of small family.

These ingredients of moral education are available from different sources, and for a good programme of moral education we have to coordinate them.

### Necessity for Value Education

The need to impart value education separately has very often been questioned. If the children are imparted 'good' education, they will themselves inculcate good values. This is true to some extent. But considering the following points, the necessity laying extra emphasis on value education will become obvious:

- (a) There is a tremendous advance in Science and technology and as a result of that, the life-style of people seems to be undergoing a complete change. There is no stability and peace in life as before. Besides Science and technology is being used to produce weapons of mass destruction endangering the very existence of the human race. As such, awakening of moral consciousness is very much needed, so that our youths learn to use science and technology for betterment of human life and not for its destruction. In other words, the progress in the field of science and technology has to be matched with the development of human consciousness, otherwise this imbalance will endanger the life of man.
- (b) Like other countries of the world, there is erosion of traditional values in our country as well. Religion is not able to contribute to the development of morality. As such a search for such values through collective efforts is required, on which our society may be based. The contribution of education in this task is very important.

- (c) Even if the schools do nothing in the field of moral education, they do inculcate a sense of values in children. There is choice of some values in curricula and text-books. The environment in some schools develops the sense of cooperation in the students, while in others, the sense of acute competition. Due to our defective examination system, a number of students become inclined to copying. As the children are imbibing some values from the environment of the school, it is necessary that efforts be made to render the educational system congenial to inculcation of right values in children.
- (d) Life in future is going to be faster and more complex. The environment of family, society, profession and politics will continuously get more complex. The students of today may have to face such moral situations in future, in which instead of depending on others, they may be required to take their own decisions. With this view also it is necessary that they in their student period to think and take moral decision for themselves.
- (e) Presently, the youths have some special problems. They have begun to question the conduct of their elders, especially political leaders. They do not see any relevance of the values given in their books. Many youths have taken to smoking, drinking and drugs. Therefore, it is all the more necessary that the youths are helped to adopt a right life-style by discussing their problems threadbare.

## New National Policy on Education and value Education

Keeping some of the above factors in view, the following may be said regarding value education in the National Policy on education :

- The growing concern over the erosion of essential values and an increasing cynicism in society has brought to focus the need for readjustments in the curriculum in order to make education a forceful tool for the cultivation of social and moral values.

- In our culturally diverse society, education should foster universal and eternal values, oriented towards the unity and integration of our people. Such value education should help eliminate obscurantism religious fanaticism, violence, superstition and fatalism.
- Apart from this combative role, value education has a profound positive content based on our heritage, national goals, universal perceptions. It should lay primary emphasis on this aspect.

It is evident that while implementing the new educational policy, we will have to give a significant place to the value education or moral education. Earlier, moral education has been given different roles. Sometimes as an independent subject and sometimes as part of other subjects like Civics. But it has not helped much in inculcating moral behaviour amongst the children. The reason is obvious: whenever a 'subject' is introduced in schools, it becomes a part of formal education and examination in the educational set up. The textbooks are prescribed for moral education; Examinations are held and children take to copying in the examination. The basic purpose of moral education gets totally lost and many times moral education begets immorality.

### General Objectives of Value Education

In fact value education is not a subject to be taught like other subjects in school. Its main purpose is to inculcate in children such qualities of moral life, which may help them in becoming good citizens of their country. At the secondary stage the general objectives of value education could broadly be as follows:

1. To develop certain basic human qualities in the students. So one of the important qualities being: cleanliness, truth, non-violence, hard work, love and compassion, equality, socialism, secularism and democracy, cooperation, justice, courage, scientific outlook, preservation of environment, productivity and importance of small family.
2. To encourage the students to become progressive and responsible citizens in their personal and social lives.

3. To familiarise the students with the present socio-economic conditions of the country and create awareness in them for their betterment.
4. To make them liberal in thought and practice to enable them to rise above prejudices based religion, language, caste or sex.
5. To develop a sense of self-respect in the students, to develop their inherent qualities and to encourage them acquire social and moral values.
6. To develop right attitudes
  - a) towards self
  - b) towards society
  - c) towards one's country
  - d) towards other countries
  - e) towards environment
  - f) towards all religions.

### **Value Education according to age-groups**

All moral values are inter-related and it is not possible to develop one or two values separately ignoring others. It is necessary to strive to make the overall life of children moral in the context of value education. Even there to facilitate it, certain values may be chosen for emphasizes in different classes according to age groups of the students.

For example we may put make emphasis on the following values in upper primary (6,7,8) classes:

1. Patriotism and national integrity
2. Social and democratic values
3. Performing ones duty
4. Sense of co-operation and help
5. Sympathy compassion and tolerance



6. Sense of courage and fearlessness
7. Preservation of environment and natural resources.
8. Knowledge of Indian cultural heritage and sense of respect towards it.
9. Importance of the small family.

Similarly it will be useful to emphasize the following values in secondary (9 - 10) classes.

1. Quest for birth and endeavour to follow the right path.
2. Developing sense of active reputation towards dishonesty, corruption, injustice and exploitation in society.
3. Developing sense of equality and co-operation in daily life.
4. Identifying social evils and endeavouring actively to counter them.
5. Rising above prejudices based on religion, caste, language and sex.
6. Respecting all the religions and understanding their basic truth.
7. Sense of liberalism towards other's attitudes and thoughts.
8. Understanding the evils of taking to smoking, drinking and drugs and actively trying to keep oneself and others aloof from their use.
9. Sense of universal brotherhood.
10. Developing a scientific outlook.

It is clear that in the field of moral education we proceed gradually from broader values to finer values. To talk of high ideals before young children, which are in comprehensible to them, will be of no use.

If some schools are averse to going into ideological matters and wish to concentrate their efforts on some limited values, they can take up the following five values only as the basis of moral education. These have been selected after discussion with

hundreds of teachers and at their suggestion these have been named 'Rashtriya Panchsheel'(National five values).

### **Rashtriya Panchsheel**

1. Cleanliness
2. Truthfulness
3. Hardwork
4. Equality
5. Cooperation

If only these five values are taught at the school level, it will go a long way to improving and promoting personal, social and national life. Active efforts should necessarily be made in including these five basis national values in every school at every stage.

### **To be discussed**

1. In what form should value education incorporated in schools ?
2. What are the factors which influence the development of moral values in children ?
3. What influence do the family and social situation exert on the moral development of children ?
4. What modifications would you like to introduce in general objectives of value education ?
5. Which more value would you like to introduce in addition to the values chosen for special emphasis in upper primary/secondary classes ?
6. What are the different sources of desired values in present-day India ? Do you consider it desirable to accept some other source as well ?

### **How to Teach Values ?**

So far we have known, why value education is necessary and which values should be emphasized at the school level. The next

step is more complicated to decide how to teach these value effectively in practice. One thing which can be easily done is to prescribe lessons on these values in textbooks, to instruct students on them and examine the pupils for their knowledge of values. But by this the pupils will only learn to talk about these values. The purpose of moral education is not to make the pupils able to talk morality, but to inculcate in their life much deeper sense of morality. Therefore, simply teaching or instructing values will not serve the purpose.

### Clear Thinking on Values

Not that discussion on values is unnecessary. In fact, the more open a discussion with students about the value, the clearer would be their conception about it. For example, instead of teaching and instructing the students, it will be useful to discuss, why truth is essential in our life. Why people cannot carry on without cooperation ? Why there is so much of injustice and exploitation in our society ? What are the evils of taking narcotic drugs etc. ?

Morality is related to the inner life of man. No value can be imposed on children except superficial values like cleanliness, discipline etc. We cannot force pupils to be truthful, just, compassionate and sympathetic. Inherent virtues can be developed only when the students fully realize their worth. Only what value takes roots in their life, which they accept voluntarily and consciously.

### Environment of the School and Moral Education

The environment of the family, neighbourhood, society and the whole country influences the moral development of the children. The environment of the school has a significant role in the development of moral attitudes in the children. We cannot expect formal to take full responsibility of their moral development. Unless there is an atmosphere of morality in the rest of society there can be no perfect moral environment in the school as well. Even then the school education should strive to inculcate better moral sense in children.

For this, it is necessary that the environment and the mode of working in the school be such which many infuse moral sense in them effortlessly. If there is a conscious endeavour to keep the school clean, the children will also learn to keep themselves and their surroundings clean and will refrain from lack of cleanliness. If the children receive sympathy at the school, they will also develop a sense of sympathy in them. On the contrary, if partially is shown for some children in the school, they may develop ill feelings not only for the teachers, but for the whole society.

### **Punishment and Rewards**

It has been a very old practice to punish the children for their wrong-doings. Now the corporal punishment has been banned, but the children were punished in many other ways. Sometimes it may be necessary to punish them, but they cannot be imbrued with moral values by punishment. As said above, only those values take roots in their lives sincerely which they accept voluntarily.

Instead of punishment, rewards can be more helpful in inculcating moral values. It is not necessary that the reward be in the form of a prize or merit certificate. Praise for doing good work also acts as a prize. The teachers should not be wanting in praising good work of the children. It would be better if children on growing behave morally without fear or reward but in young age they have a natural urge to be praised. It can be used to inculcate good behaviour in them.

### **Religion and moral education**

As said above, the moral education in many countries began with religious education and in some countries even today the moral education is imparted on the basis of a particular religion. Some people in our country are also of the view that no moral education can be imparted without religious education. But as the principle of secularism has been accepted in the Indian constitution, no Government-aided school can preach any particular religion. Moreover, there is so such controversy regarding the religions in vogue in India today that it will be difficult to impart good moral education on their basis. The quarrels, riots

and violence being perpetuated in our country in the name of religion, is a matter of shame for us all.

Fortunately there has been a tradition since ancient times in our country to rise above the dictums of all creeds and search for truth. Students should be necessarily told about this tradition.

### Creative work

Moral education cannot be imparted merely through words. Morality is related to the feelings is possible only through right work. There should be continuous activities regarding the values referred to above. In this context following suggestions may be useful :

1. To develop of cleanliness in children, it will be better if all the teachers and students of the school engage themselves only in cleaning their surroundings only for five minutes daily, leaving all their other jobs. This five minutes cleanliness work after the morning prayer will create a feeling in the students for the whole day that they should not only spread dirt, but remove any dirt which they find around themselves. The teachers should by their behaviour set an example in this direction.
2. To teach truth and honesty, a project like 'Honesty shop' may be initiated in the school. Small articles like pencils, rubber, refils etc. may be kept at a place for purchase by children and the children may collect articles of their necessity by putting their price - money honestly in a cash-box placed there. It is better if the teachers of the school run this project by contributing a rupee or two every month. Even if they have to suffer a little loss, they should accept it gladly as their contribution towards the moral education of the pupils.
3. The children of the school should be encouraged to visit one another's homes. A group of eight to ten students may go to the house of one of their peers and get acquainted with the family members there. This will promote the feeling of familiarity in a being way. It will help in bringing children of different castes and communities closer.

4. Celebrating all national and prominent religious festivals in the school collectively with the active participation of children will help in creating national feeling and teaching religious tolerance.
5. Lecturers on subjects like the country's freedom fight, religious and cultural heritage of India, life in different religions of India, present day problems of the country and the efforts being made to overcome them, etc. should be arranged frequently before the children by inviting some people from outside the school. There should be question and answer sessions also between the speakers and the children.
6. Inter-students, as well as between the students and the teachers, seminars should be organized so that the students may develop the ability to think and speak on their own and discuss the problems of their society. The students should be given an opportunity to think and speak on various problems and express their own view points. For example, if the students think that the current examination - system in the school is not fair, they should be given an opportunity to say so and give their suggestions to make the examination, system fair. In this context the students may be asked to express their views without fear about the points in the school which they consider good or bad. The students should be given every possible opportunity for the clarification of values.
7. For students of higher classes, organizing lectures and discussion on subjects like the nature of the mind of man, causes of mental problems, tendency to take to narcotic drugs to-day and their ill-effects, necessity to keep one's mind peaceful and how to achieve it, etc. will be useful.

The students may be given information about meditation. To set aside 5 minutes for maintaining silence and peace during the time they are in school would be useful.

**Topics for discussion :**

1. What in your view should be the significance of education

value in schools ?

2. How can the value of education be imparted with success ?
3. Which values would you like to emphasize in upper primary classes ?
4. Emphasis on which values according to you, will be useful in secondary classes ?
5. How far and in what way can school education contribute towards eradicating the evil influence of society on the moral life of children ?
6. What is the relation between the theoretical and the practical aspect of moral education ? How will you implement the practical aspect of moral education in schools ?
7. What is the relation between religion and morality ? What should be the true nature of religion taught to the pupils ?
8. What is the place of punishment and reward in inculcating moral values ?

## Evaluation

It is hoped that by studying this module, some clear conception about the theoretical and practical aspects of value education will emerge in teachers. To find out whether they understand this module thoroughly, it will be useful to know, how they answer the questions given under the heading. 'To be discussed.'

But as has been said so often in this module, moral education is not a subject, to talk about only'. Its application in the daily life of teachers and children is important. the study of this module will be meaningful only when teachers plan some creative work in their schools on the basis of views expressed in it. The meaningfulness and true evaluation of reading this module lies in making such plans and implementing them successfully.

## Module: 12

# Health and Physical Education

## Overview

Health and physical education is an integral part of school curriculum. The facilities for the health and physical education, even if not adequate are available in most schools. The teachers enjoy greater autonomy in organising the activities in this area. Children also participate willingly and joyfully in the activities. The present module is designed to help you understand various components of health and physical education including habits of cleanliness, hygiene, personal health, nutrition and important exercises to keep you physically fit. This will also develop a consciousness for regular participation in games and sports and to motivate you and your students to participate in physical activities for making the nation healthy and strong.

The prevailing trend in schools is that only physical education teacher organises games and sports. Few students are selected to participate in some games, sports and other physical activities with a view to train them for competitions. The approach to prepare selected students for competitions and leaving physical education of larger number of students cannot be considered satisfactory. The approach needs to be replaced by mass participation of the students in health and physical education activities. All teachers may take pride in participation in field activities.

## Objectives

After persuing this module you will—

- become aware of the concept of health and factors influencing health,
- develop awareness of common health problems of students.
- understand the need for safety measures and diseases,



- appreciate the value of health habits,
- understand the need of participation in games, sports and recreational activities,
- organise and evaluate activities related to health and physical education
- create an environment in the school to promote sportsmanship among students,

## What we can do

NPE ( 1986 ) envisaged that 'Health education at primary and middle levels will ensure the commitment of the individual to family and community health . Health is defined as a state of complete physical, mental and social well being. It also includes the absence of disease or infirmity. Health and physical education helps to attain a state of health that keeps a person physically, mentally, and emotionally fit.

We all know that growth and development of an individual depends on heredity and environment. While we have no control on heredity we can definitely influence environment for proportional growth of our body by having a control over food, relaxation, recreation, exercise and finally immunization or protection from diseases. You must explore the nutritional environment and become familiar with your own food culture. You may apply the principles of selecting and using available nutritional food. This will bring a desirable change in the nutritional practices. This will also help you to design nutrition education programme for your school.

## Activity Sheet No. 1

Prepare list of items of the balanced diet from locally available food items for yourself and your students.

Collect  
Collate  
Discuss

As a teacher you must have observed and guided children having problems related with health in your classroom. Health

appraisal is essential to determine health status of children. Under health appraisal is essential to determine health status of children. Under health appraisal following activities may be undertaken.

1. Identify children needing medical or dental treatment.
2. Detect children who are poorly adjusted & need special attention.
3. Locate children who need modified educational programme i.e. children who are hard of hearing, partially sighted, mentally retarded in the community.
4. Recognise children who need thorough medical examination other than provided by school.
5. Inform parents about the health status of your students.

A healthy child can be recognised by his physical conditions, social and emotional behaviour and work habits as given below :-

### Good health Characteristics of School Children.

Physical	Social/Emotional	Work Habits
Alert, pleasant	Curious, interested in a variety of things, enters into activities.	Persistent in work; works independently
Clear skin, clear bright eyes, clean neat in appearance.	Confident, expects success appreciation and understanding from others, meets failure.	Responds quickly and cheerfully to directions
Completes a task without undue fatigue	Enthusiastic	Attentive
Enjoys vigorous play	Objective interests like friends, hobbies, games	Carries a task through to completion.

Physical	Social/Emotional	Work Habits
Eats and sleeps well	Shares group responsibility, shows courage in meeting difficulties Adapts to new situations, exercises emotional control.	Cooperates with peers

The signs and symptoms to be observed in children for any deviation from normal health whether physical or mental are as follows

Points of Observation	Signs and Symptoms
General appearance and behaviour	Fever, failure to gain weight, over weight, pallor, weary expression, poor posture; unusual gait or uncleanliness; lethargic; unresponsive; easily fatigued; shortness of breath on little exertion.
Hair and Scalp	Stingily lusterless hair, small bald spots causing crusting sores on scalp; nite/lice in hair.
Ears	Discharge from ears; Ear aches; buzzing or ringing in ear; ears feel stuffy; fails to follow directions; persistently inattentive.
Eyes	Inflamed or watery eyes; red rimed, encrusted, swollen lids; crossed eyes; sensitivity to light; dry, scaly conjunctive; holds objects too close to or too far from eyes, night blindness, reads poorly.

Points of Observation	Signs and Symptoms
Mouth and Teeth	Cavities in teeth, excessive stains, tarter; irregular teeth. bleeding or inflamed gums; swollen jaw; sores in mouth; cracking of lips at corner of mouth.
Nose and Throat	Frequent or long continued colds, cough, persistent nasal discharge, persistent mouth breathing, enlarged glands in neck, difficulty in swallowing.
Skin	Dry or coarse rashes, inflamed skin areas, scales and crusts, persistent coras, boils, black heads; bleeding spots.
Muscles and Skeleton	Flabby muscles, pigeon or funnel chest; bow legs, lateral curvature of spine, ( scoliosis ); kyphosis, winged shoulder; clubbed fingers, painful or swollen joints, defective gait, odd gestures or movements, tremors, involuntary urination.
Mental Health	Over timidly, over aggressive-ness, temper-tantrums, undue-restlessness, gradual deterioration or marked sudden drop in education achievement, stutering, lying, stealing, school phobia, difficulty in reading or reciting.

Thus careful observation on the part of the teacher can give the clue to the child's illness which can be acute like infectious diseases, allergy, and threat infection or chronic malnutrition, vitamin deficiencies, tuberculosis, heart disease etc.

Screening in schools should be done annually for vision and hearing defects. Children suffering from errors of refraction (Problem of vision) may be referred to eye specialists for treatment. A child may have hearing defects if he is inattentive in the classroom, does not respond until the question is repeated twice or thrice, has a vacant or uncertain look, children having difficulty in hearing may be guided to see the doctor.

Health records should be maintained by all as they are helpful in further treatment. Health records refer to all the relevant information about health of a person. This may include observations, screening tests results, findings of the medical examination and notes on followup procedures.

### Activity Sheet No. 2

Prepare health record of yourself by collecting all the information available with you and through observation of your colleagues.

Collect  
Collate  
Discuss

Safety is a basic human need. There are a number of situations which cause accidents and result in disability or death. Preventing accidents is better than to explain later. Accidents are caused by human and environmental factors. You may notice that we can control these factors and encourage safety measures. School buildings, laboratories, play field are part of the school environment in which children grow. As a teacher we should make the environment accident free.

### Activity Sheet No. 3

What are the possible spots which are accident prone in your school? Suggest safety measures to check accidents in your school.

Collect  
Collate  
Discuss

The health problems are directly related with our population growth. Mothers and children are highly vulnerable groups. Pregnancies at early age, malnutrition, poor care of mothers delivery by untrained dais are the main cause of maternal mortality. The death rates of children in the period 9 - 28 days is comparatively high. The causes of death in the first month of birth are tetanus, aspiration syndrome, bacterial infection and inadequate care. Diarrhoeal diseases, respiratory infections and malnutrition are the causes of death in early childhood. The important causes of death in preschool period are malaria, typhoid, measles, tuberculosis etc. Lack of safe drinking water, poor sanitation, superstitions, family and social customs and poor maternal health are non medical factors contributing to mortality rates. These are alarming factors and invite our immediate attention for a health care system which emphasis on planned family, control of communicable diseases, environmental sanitation effective mother and child health care. The schools can provide additional support by providing health education to children and health information system to community. The Ministry of Health and Family Welfare has integrated maternal and child health with family welfare programme. Basic health care for mothers and children are being provided by primary health centres and other hospitals. Immunization of mothers against tetanus, appropriate care and nutrient supplement with iron and folic acid are also part of integrated programme. Expanded programme of immunization for children and pregnant women has been also taken up by the ministry. Immunization for children is extended for diptheria, whooping cough, tetanus poliomyelitis, tuberculosis and typhoid fever. The ministry of health and family welfare has also taken up (i) Goitre control programme (ii) Tuberculosis control programme (iii) Leprosy control programme. The ministry of social welfare runs Integrated Child Development Scheme to provide supplementary nutrition, immunization, health check up and referral services.

The First-Aid Box is available in schools although is poorly maintained. You must have seen it and noted its content. Next time when you go to your school see the first aid box. If it is not available in your school you may try to get one.

Students may be motivated to go to Red Cross for training & form Brigade, Scouts and girl guides and St. Johns Ambulance Brigade.

#### Activity Sheet No. 4

Find out the medical facilities available at the nearest primary health centre or block/district hospital.

Collect  
Collate  
Discuss

While efforts are being made to expand health and family welfare services to all, contemporary health problems among children are also emerging. Children may express their disliking for school. This may result in psychosomatic symptoms such as headache, abdominal pain etc, this may be termed a school phobia. Stealing is another juvenile crime. Insecurity, revenge, feeling of inferiority and parental unconcern may be causes for stealing. Factors in the home environment and teaching may cause backwardness in a child who is not mentally retarded. Smoking is a growing problem of school children. Use of Heroin, cocaine, barbiturates and L.S.D. are also in progress by children which causes contemporary health problems.

#### Activity Sheet No. 5

What are the problems of your students? Make a list of their problems? Suggest measures to overcome them.

Collect  
Collate  
Discuss

The school should help children to keep them mentally, physically and emotionally fit. Efforts are to be made to develop desirable health practices such as personal cleanliness, taking balanced diet, proper use of play field and keeping surroundings

clean. New knowledge about the growth and development of their bodies may be provided to them. The children should be taught about how to make their body strong. At school, provision may be made for safe drinking water, sanitary - latrines, ventilators in the classroom, proper lighting, refuse and garbage disposal, safe play area and protection against weather conditions. The sanitation and cleanliness should not be restricted to school only but it should go beyond the four walls of schools i.e. home.

### Activity Sheet No. 6

Make a list of activities to be taken up by you and your students to keep the school and surroundings clean. Chalk out a programme to develop habits of cleanliness among students.

Collect  
Collate  
Discuss

Physical education is concerned with physical development. It also helps you to keep physically fit so that you have sufficient strength to engage in daily physical activities. Physical activities and health practices keep one physically fit. Physical fitness may be achieved through regular exercises, games and sports. One should go for resistance exercises like - warm up exercises, before starting any physical activity. Jumping and hopping may be used for developing the strength. Dand-Baithaks are our traditional exercises which help to acquire physical fitness. Races - 60m, 100m, 200m, 400m, etc help us to develop speed and endurance. Yogic exercises are helpful to develop flexibility, coordination and balance. Gymnastics is an individual sport. It requires an area to permit participation with maximum safety conditions (not parallel bars, horses etc.) You must have noted that many activities given above do not require much equipment. An individual is expected to understand the need to keep physically fit and a will to undertake and participate in these activities. These activities may be learned through a teacher.



## Activity Sheet No. 7

List the physical activities in which you can participate.  
How can you train the children in these activities ?

Collect  
Collate  
Discuss

We do need playfield and equipment for a strong programme of games and sports. The community resources may be utilized where ever available for this.

Early detection or identification of talent in the area of sports and games is required to put the nation on world map. As a teacher, you should remain in search of excellance in games & sports and encourage students to participate in the same. Promising cases may be brought to the notice of District Educational or sports authority.

Genuine mobilization of resources based on participatory involvement of community will give desirable result. Due care may be taken to involve youth clubs, mahila mandal, voluntary agencies, local workers, sportsmen, players and exservicemen to make positive contribution towards activities of games and sports. Efforts are to be made to arrange cocurricular activities which are joyful including games and sports. Indigeneous activities like kho-kho, kabbaddi, Atya Patya may be organised for children.

You must not force any child to participate in any activity. If they have realised the importance of being healthy and keeping physically fit your students will naturally participate in the programme. Health and physical education is not the job of physical education teacher alone but it is the duty of all of us to keep ourselves and our students physically fit.

In the Programme of Action ( 1986 ) it was envisaged that essential facilities will be given to all primary schools under Operation Blackboard (OB). This includes play material and toys and games equipment. Special charts depicting cleanliness and nutrition are also included in OB. Facilities for skipping rope,

football, volleyball, rubberballs, air pump, ring and swing rope will be provided to all schools under games equipment. In order to maintain environmental sanitation, toilets—one for boys and one for girls and all weather classrooms are included in OB. Facility for safe drinking water will also be extended to all children. The musical instruments – Dholak or Tabla, Harmonium and Majira are a component of OB. The government expressed a firm determination to provide minimum essential facilities in all primary schools within a stipulated time.

For secondary education adequate playground facilities, where ever not available, will be provided in nearby vacant land and in other places on sharing basis. Where it is not possible school complexes may be developed. The students from nearby schools may visit 'Central School' (School complex centre) to participate in the activities for sports. Mass P.T. and Drill can form an integral part of the morning assembly.

Since you have gone through this module, you must have noticed many more activities and suggestions about health and physical education. Do you fell strongly about some suggestions? If so please write about them.

## Consolidation

You may be doing some exercises to keep yourself physically fit. At the same time must be practising certain habits to keep yourself and your family free from diseases. The material given in this module has come into existence by the work of parents, medical professionals, teachers and common men. Would you like to revise the material in the light of your interaction with your school, students and family ? You may review your earlier suggestion and activities and complete the following.

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ITEM

Action Suggested

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1. Nutritional Food
2. Health Appraisal
3. Safety
4. Medical facilities
5. Exercises for physical fitness
6. Environmental sanitation
7. Health habits.

## Module : 13

# Art Education

## Overview

Art is a process of fulfilment running through every aspect of life, it is vital to learning. It provides a new way of seeing at life. It is a way of meeting the challenge of the present projecting into the future in a creative, productive and joyful manner.

Today, there is an over emphasis on rote learning and examinations. Students do not take joy in learning and acquiring knowledge. Whatever is taught at different levels of the school is mostly based on certain formulas, set rules and methods. It denies the true inner involvement of students. In this situation Art can play an important role as a liberating force.

In arts, the fundamental principle lies in the understanding that all human beings are unique and have creative potentials. They learn and act in accordance with their own rhythm, ability and experience. It is, therefore, not possible nor desirable to make all of them similar. Each is, as in nature, like a tree that has no copy. The idea of creative arts involves all the elements of commonly known art forms — audio visual, performing and language arts, namely music, dance, drama or play making, drawing and painting, modelling and sculpture or construction work, pottery and ceramic work, poetry and creative writing and many more creative art and craft forms.

## Objectives

- After studying this module you should be able to —
- develop a broader understanding of the subject and its implications for promoting creativity,
  - modify your present approach to teaching,
  - organise a variety of activities in the classroom.

Art education, helps the child to explore various means of communication (verbal and non-verbal) and to encourage him to express in his own way sharpen his senses through keen observation of the environment, discover his own preferences through exposition to variety of materials, discover and identify the personal form and style of expression, be aware of various art forms in his own environment or locality, develop his skills in the use of various tools, instruments and other art materials in the process of discovery and exploration as also in the process of discovering space organisation, colours, forms, lines, texture, movement, sound develop a sense of organisation, and a sense of design which inculcates in him a sense of order with regard to his personal appearance, home, school and community.

### The Child—Centred Approach

Art education provides joy of learning and the pleasure that sustains curiosity. It enables students and teachers to work together creatively. The objective world-material or immaterial is known to human beings through light, sound, touch and smell experiences, associations and knowledge. Effective learning and development takes place through direct experiences. Learning occurs best when all the senses, emotions, and physical and cognitive abilities are involved. Education in arts would therefore require observation, awareness to change, understanding of ideas, skills for developing ideas and sensibilities. Learning by only hearing or reading is partial education frequently resulting in superficial understanding. The arts bridge the gap between the outer world and the inner world by providing experiences internalising knowledge. Students need to express what they know. In expression, ordering of past experiences, associations, ideas and concepts takes place.

Both in perception and in expression, individuals are unique. Many people looking at the same flower may see it differently, some may enjoy its colour, some may enjoy its fragrance, some may appreciate its form and shape or its pattern and some may wonder about its growth. No one way, is the best or the right way. Each one has one's own way of perceiving and thinking, and each perhaps has his own criteria for improving the quality of

one's life. Arts in education provides a rare opportunity for students to be different from each other and still make their contribution without being right or wrong. The teacher's role is to give responsive encouragement to students to learn without fear and competition. A language is not learnt, only by studying about it. Using the language-speaking, expressing, self study of its literature, gives the true mastery over it. So is the case with all the languages and forms of artistic expression.

Any form of genuine personal expression without having any external influence such as copy method by the child must be honoured.

Music, painting, creating three dimensional forms movement and acting, etc., are all languages of art developed by human beings to understand the world around them. Words form the part of the language of literature, and numbers, the language of arithmetic. Arts are other languages created to understand and express other dimensions and aspects of the world we come across. Human being can think and create in sounds, colours, words and numbers. Lack of opportunities for development of any one of these languages would restrict growth of the total human potential.

## Process Approach and Art Activities

The art work at school is not comparable to what we generally see in the museums or in classical performances; in cinema halls or theatres, in hoardings or advertising posters; in architectural monuments or other buildings and temples; in musical and dance concerts or drama theatres; in mushairas and kavisammelans. It is nearer to the local folk art and crafts, and folk theatre. It is also different from what most of us might have experienced during our schooling period when we were required to copy either from drawings made by the teacher or by master artists of Ajanta and Elora, or Mughal and Rajput, Miniatures of Nand Lal Bose and Tagore. Or, we were supposed to prepare a work of art based on age old concept like making of a few floral and geometrical design patterns or plates of still life/model drawings, and landscape paintings without any emotive content

and relationship with personal experiences and thoughts. Creative arts cannot be subsumed in work experience under which a few artistic activities may be conducted but the approach and the product would be different.

The creative arts programme of a school finds its way to child's natural way of doing, playing and making various art forms in his own way in response to his day-to-day life experiences with a variety of media and materials to give form of his feelings, thoughts, emotions, and fantasies.

In such an experience, there may or may not be any tangible material end-product. The process and experience which shape the child are the most important aspect of art education.

## Sources of Art Education

The arts programme in school must reflect the fragrance of the region. Artistic expression in music, poetry, dance, theatre and in the creation of forms have been a part of human life from the very beginning: it is not something new and strange, but an integral part of human existence. Exposure to local environment and arts is an essential activity of school art-programme.

Besides individual expression, the arts provide an opportunity to study and appreciate the contribution made by human beings in the past and present. By learning to appreciate music, painting, dance and theatre one develops sensitivity to and better understanding of people, belonging to other cultures. We can build a harmonious society, a productive nation or world itself, with a deep sense of appreciation. To appreciate this, it would be necessary that the arts programme in school make the child familiar with the tradition of arts of the region. From the strength and confidence gained from the familiar it will be possible for him to respect and appreciate the culture and contribution made by others.

The mother tongue of a child is the nearest and dearest medium of expression for what the child knows. Songs, lullabies, rituals, paintings on the walls of their home, gesture languages of

their own region, are therefore equally important and need to find their place in the school programme.

## Evaluation in Art Education

Any pre-conditioning or extrinsic motivation promoted through comparison, competition or examinations would defeat the basic purpose of art education. Evaluation should be undertaken to assess development of initiative and interest in different modes of expression through a variety of media, materials and techniques, improvisation, space organisation, orderliness, self-discipline and general aesthetic development. This, of course, is to be viewed against the types of classroom interaction procedures adopted for exercising choice and freedom.

In evaluation of certain areas of creative activity, group activities rather than individual activities, should be used. Whether the creative art activities are conducted individually or in groups, there is a place for inter-individual interaction by representation and display of the 'products'. Participation in such events should be considered as a positive gain.

### Activity Sheet No. 1

Evolve a format for a cumulative record for evaluation in art education.

Overall assessment on the achievement in Arts should find a place in the record handed over to the child at the end of each academic year.

## Arts at Pre-Primary and Lower Primary Classes (I to V)

### Ideas to be remembered

- young students have a natural flair for rhythm, elegance, sense of curiosity and joy. The programme must build and



develop these potentials of students and motivate them to enjoy learning.

- at this stage of education the student is learning to observe and explore the world. Art education should flow from major learning experiences.
- at this stage students are not interested in the intricacies of techniques and skillful performances. Teaching of technique and special skills, is therefore, uncalled for.
- children should choose material and media of their personal liking keeping with the mood and mode of expression. Variety of materials and media that are simple, attractive, locally available, and not complicated, should be provided. Natural materials such as clay, sand, flowers, leaves, etc. have aesthetic qualities best suited for young children.
- children's experiences at home and school, are significant to them. They should be encouraged to respond to these experiences through their choice of medium.
- children should not be asked to copy or imitate but should be left free to enjoy the process of doing and creating by themselves.
- the climate of the class should be kept friendly and pleasant,

## Suggested Integrated Arts Programme

The art education activities in lower primary schools may be of diverse kind. Sometimes even a combination of many activities.

### a. Theme Oriented Activities

Students can be asked to describe their daily life experiences or what they are required to learn at school through action, sounds and pictures. Variety of expression should be encouraged to provide room for different preferences.

## b. Integrated Approach

The thematic approach should also be integrated with other school disciplines. Such approach is especially suited for single teacher situations. Art activities like movements, mime, sound, music and creation of forms can help students to acquire knowledge in other disciplines.

Creative drawing exercises, alphabet songs, counting, sorting and classifying games can be used to help students acquire skills necessary for further learning.

## Media Oriented Activities

Art education provides a unique experience in itself. Simple, locally available materials may be used.

Using clay, stones, leaves, grass, card boards for creating three dimensional objects, drawing and painting on paper, ground, sand and wall with colours, chalk, charcoal, or making collage of paper and waste materials can be taken up with cardboards and cardboard boxes, and other junk materials.

## Rhythmic movements, mime and sound (music) activities

Rhythmic movements and mime can be a source of joy, expression, as well as learning.

The movements can be accompanied with simple rhythmic beats with improvised instruments and or vocal sounds. Movements and music may not necessarily be treated as separate activities at this stage.

All movements and sounds are considered as rhythmic experience. However, some sound exercises may be provided for -i) distinguishing sounds both by listening and creating; (ii) controlling volume of voice, (iii) creating a variety of rhythmic sounds including humming, (iv) describing the world of sounds, singing together is enjoyed by most young children.

Some examples of topics/themes are listed here. You can prepare your own list.

Playing trains, houses, animals, trees, members of the family, doctor, policemen, bus driver, tanga wala, vendor, etc., enacting scenes like cooking, birthday function, marriage, farming, cutting, sowing, ploughing, railway station, and festivals, or creating rain, storm, or different recalling experiences and imagining some others.

## Motivational Techniques

Classroom activities should precede motivational experiences like discussions, visits to places out of school, participation in the festivals and activities like collection of items of interest and discarded objects from environment.

Puppet shows and folk art performances should be shown to the children as frequently as possible. Some simple rhythmic puppet making and free manipulation activities in classes III onward, may also be introduced.

## Art Education at Upper Primary Classes

### Ideas to be remembered

This is the stage of transition from childhood to adolescence. Students have developed reasoning abilities. Spontaneity and creativity may not be as high as in early years. They still look forward to help from the teachers.

The children should be encouraged to mobilize their own resources for creative expression. Wide variety of media and techniques should be provided at this stage for exploration and experimentation for various permutation and combinations. Indirect and inductive guidance in various art techniques through discovery, exploration, improvisation and experimentation methods, should be provided. Through these methods gradual awareness of aesthetic and expressive qualities of various art media and techniques should be developed. Some pre-

liminary rudiments of formal art forms of music, dance and visual arts may be introduced indirectly.

Students need the opportunity to work together collectively to foster team spirit and to build a sharing-caring school society. Instead of selecting a few students with special talents, the interests of all students must be identified and encouraged to participate in various art activities in one way or the other.

## Suggested Activities of Creative Arts

### Integrated Approach

Puppetry and drama are good examples of integrated art forms which can later meet the varying interests of students. Within these forms there are aspects of scriptwriting, music, movement, dramatization, drawing, modelling and other stage crafts. Dramatic activities for schools must not be imitated from professional adult 'Theatre' techniques with expensive lighting, stage setting, make up, etc. All these should be improvised in classroom situation. Students may discuss social and school issues and develop scripts. Students interested in modelling and drawing may make puppets or costumes. The materials for these may be drawn, as far as possible, from local resources. Those who have interest in music and movement, may suggest such aspects of drama. If the play is related to some social issues, students can organize awareness programme for the community at large.

- a. Two dimensional pictorial experiences, drawing, painting, collage, applique, print making, etc
- b. Three dimensional or sculptural experiences: clay, pottery, construction with paper, card boards and card board boxes, soft wood, soft stone, etc.,
- c. Performing arts experiences: playing regional musical instruments, body movements and facial expression in response to various situations of real and imaginary life experiences,
- d. Community signing and dancing,
- e. Dramatic activities,

- f. Projects like aesthetic organization of physical environment by enhancing the surrounding land i.e. landscaping (including plantation, playing with levels, rocks and junks) school museum, and murals and other display work.

## Motivational Technique

Classroom activities should proceed with motivational experiences like; studies and discussions about children's day to day experiences and the cultural history of the region and the community; imagining various situations including surprising situations; Observing their environment both cultural and natural; interacting with the artist/artists of the community; visits to historical sites in the vicinity and encouraging participation in exhibitions/displays, festivals and community activities; collecting objects of interest from the environment, etc. collecting local arts and crafts for developing school museum.

An exemplary list for selecting themes/topics for making further sub-topics in experience form by the teacher, is given below —

Vegetable market, post office, fire extinguishing, playing in play ground, factories, farming activities, festivals and other functions, local natural sites and natural phenomenone, jungle experiences, dreaming, imaginary situations, etc.

## Arts at Secondary Classes

### Ideas to be Remembered

Ideas presented for upper primary stage are also applicable for this stage. This is a transitional period between the creative expression of childhood and vocation biased education of later period. At this stage students become more conscious of the world around them. Influence of adults become more emphatic.

some of the students desire to develop specific capabilities in media of their own preferences such as music, dance, theatre, puppetry and modelling/sculpture. In view of the limitation of staff, some special arrangements may be made for providing specialized guidance through a roving teacher or part time

teacher, a teacher serving for a cluster of nearby schools at a centralized place. Some local talent facilities can also be utilised. For example, arrangements for activities like baking of or glazing of ceramic objects can be made in a centralized kiln for a cluster of schools.

The students at this stage need challenges and want to explore as many techniques and media as possible. The entire approach at this stage should be an inductive one. Teacher should encourage students to mobilize their own resources for solving problems of their creative expression. Direct instructions in techniques should be avoided. In general students at this stage need to develop aesthetic sensibilities and social values through projects on conservation of natural and cultural heritage. For this purpose, students should be provided opportunities for —

Study of Indian culture

Working with artists and

Opportunity for aesthetic responses and appreciation in functional situations.

## Suggested Activities in Creative Arts

The arts programme at this stage should include the following for all students —

- opportunity for creative expression in media of their choice. Most students would not take up the Arts as a profession in later life but may like to continue to learn and participate in different areas of art for a better understanding and appreciation of art,
- opportunity to study cultural history of India and of various regions,
- study and action for contribution of rural/urban communities to the developments of a composite Indian culture,
- involvement of students in projects which are creative and exciting enough to sustain their interests in the arts projects and may include,

- visits to historical places/sites; museums; attending performances of music, dance and drama preferably of creative nature and/or folk; interaction with artists/artists of the community,
- students may organise festivals and celebrations of the community,
- they may organise exhibitions displays and aesthetic organisation of physical environment by enhancing the surrounding land i.e landscaping including plantation, playing with levels, rocks and junk, school museum and murals with a view to creating awareness on topics like, culture of each state of India, science, community, religion and the arts etc.

At this stage, as far as possible all the media of creative Arts may be made available to the students to help them choose ones that interest them

The students should be provided opportunities for detailed observation and examination of various natural and other environmental phenomenon for their responses in various creative art forms. Some of the examples for these are: branches and trunks of various kinds of trees, leaves and their formation; general pattern of foliage, viewing from hill tops of the roads, foot-paths, riverines, streams, electric poles, etc.; storms; sea-shore activities and objects like shells, sea animals, sea plants, natural phenomena like water falls, and sandunes; forests; microscopic and telescopic views of various objects and phenomena; social and cultural activities; people of various characters and professions and so on.

Students may be encouraged to express their feeling and experiences through their work.

## Module : 14

### Teaching of Science in General Education

( Before using this module, please discuss – what is Science ? Why shall a student must learn science compulsorily ? )

#### Introduction

Science is a human endeavour. Within 150 years it has influenced human society to a large extent and, still bringing changes. Science is growing rapidly through research and all the research findings are serving as base of technology. The influence of science is so pervasive that together with the knowledge of science, scientific thinking and the related skills have become indispensable for leading a meaningful life. Science is no longer considered as a monopoly of the scientist. It has been felt that all individuals experience all the laws and principles of nature. Most of those experiences are without knowing about them. The knowing enhances man's capacity to interact with the environment.

The New development of science and technology and a new need to understand the science has brought a radical change in the entire system of science education.

Science education today must be relevant and functional. The knowledge, competencies and skills of science on one hand will help to develop the powerful scientific and technological manpower and on the other hand will develop in all citizens, a scientific attitude for living a meaningful life in the modern world. The National Policy on Education – 1986 has laid greater emphasis on the teaching of science and has made following direct recommendations :

#### “Education and Environment

There is a paramount need to create a consciousness of the



environment. It must permeate all ages and all sections of society, beginning with the child. Environmental consciousness should inform teaching integrated in the entire educational process ( 8.15).

## Mathematics Teaching

Mathematics should be visualised as the vehicle to train a child to think, reason, analyse and to articulate logically. Apart from being a specific subject, it should be treated as a concomitant to any subject involving analysis and reasoning. ( 8.16).

With the recent introduction of computers in schools, educational computing and the emergence of learning through the understanding of cause-effect relationships and the interplay of variables, the teaching of mathematics will be suitably redesigned to bring it in line with modern technological devices ( 8.17).

## Science Education

Science education will be strengthened so as to develop in the child well defined abilities and values such as the spirit of inquiry, creativity objectivity, the courage to question and an aesthetic sensibility ( 8.18).

Science education programmes will be designed to enable the learner to acquire problem solving and decision making skills and to discover the relationship of science with health, agriculture, industry and other aspects of daily life. Every effort will be made to extend science education to the vast numbers who have remained outside the pale of formal education" ( 8.19).

The module will help you to understand the objectives of science education at the lower primary, upper primary and secondary stages, the shape and character of science curriculum as envisaged in the National Policy on Education and some suggestions towards the effective curriculum transaction to fulfil the accepted objectives.

## Activity Sheet No. 1

All teachers have read science and they are teaching science for a fairly long time—What is the impact of science teaching ? Has it fulfilled the objectives selected earlier ? If not, what are the reasons ?

Scientists act as investigators to unfold the mysteries of nature. Anyone who is reading science should he/she behave as an investigator ? Without being detective is it not possible to understand enjoy the mysteries of nature.

How are scientific discoveries made ? One answer is – by using the process of science (observation, questioning, formulation of hypothesis, testing, collection of data, analyses of data and drawing of conclusion or inferences). Do we follow the same process in daily life ? Sometimes accident, intuition, good luck, etc. play decisive role in the work of scientists, but are they not either the beginning or end of scientist's work ? Are the qualities like honesty, truthfulness, curiosity, interest, hardwork, tolerance not required by scientists ? Are these qualities also not desired in the future citizens ? Can we select any one activity from the existing science course and identify the different steps of the process of science and how different affective domain abilities may develop.

What are the different examples from the environment where science and technology are present ? What changes have taken place in them in the last 20 years ?

Which decisions and actions of the citizens in a given locality are guided by culture or traditions ? Are they valid in the light of the findings of modern science and technology ?

Collect  
Collate  
Discuss

## Objectives

After studying this module you will :

- have a clearer understanding about science, nature of scientific knowledge and teaching of science in general education.
- be aware of the structure of science curriculum developed in the light of National Policy on Education 1986.
- understand the purpose and mechanism of linking science with daily life, environment and with the objectives of science for all.
- be able to make science teaching child-centred, linked with technology and fitted with the use of educational technology.
- be able to change teaching/learning from concrete to abstract and the introduce new methods of teaching science at the secondary level.

## Objectives of Teaching Science

Both before and after the finalization of National Education Policy through innumerable indepth studies and group meetings, the impact of science education and desired character of science education were ascertained. In the light of these experiences and recommendations of National Policy on Education, following objectives were framed for teaching of science.

### Lower Primary Stage

- help the pupils to explore immediate environment through his/her senses.
- formulate precise questions relating to various things in the environment.
- observe, record and report accurately in oral, written and graphic forms.
- be able to collect information either through observation or from other sources for using it in a given situation.

- classify objects, events, phenomena, social and physical data based on two or three criteria at a time.
- arrange in sequence objects and data for finding out relationship and pattern.
- identify and order data for the purpose of finding out simple cause and effect relationship.
- analyse data based on concrete situation and draw tentative inferences.
- make prediction based on analysis of concrete situations.
- design simple experiments to solve problems.
- develop an objective attitude towards experimental evidence.
- make decision on the basis of facts and data.
- recall contribution of Indian scientists in the pursuit of science.
- identify natural resources in the community and to make judicious use of them.
- take steps to prevent wastage of natural resources and avoid pollution.
- relate the contribution of science and technology to the economic-social development of the community.

### Upper Primary Stage

- consolidate and strengthen the abilities acquired at the lower primary stage.
- help the pupils to understand and appreciate the nature of scientific knowledge:
  - i) it is replicable
  - ii) it is based on observation
  - iii) it is tentative

iv) it is empirical

v) it is holistic

- emphasise the relevance of scientific knowledge and method of science in daily life.
- create an environment conducive to greater reliance on the use of principles and practices of science.
- acquaint the pupils with different natural phenomenon.
- develop an understanding of scientific language (symbols and formulae), knowledge and skills for designing simple experiments.
- emphasize the principles, concepts, laws and theories of science that are relevant for interacting with the environment.
- emphasize the unity of process in different disciplines of science.
- develop scientific attitude and spirit of cooperation.
- emphasize the steps involved in proper decision making based on scientific method.
- use science as a means in developing proper social and moral values in pupils.

## Secondary Stage

The objective of teaching science at the secondary level are to:

- consolidate and strengthen the knowledge, competencies and skills acquired at the upper primary stage.
- acquire understanding of scientific concepts, principles and laws.
- develop instrumental, communicational and problem solving skills.
- develop scientific temper, scientific approach and scien-

tific attitude such as open-mindedness, intellectual honesty, courage to question and respect for human dignity and decision making.

- cultivate social, ethical, moral and aesthetic values which exalt and refine the life of the individual and the society.
- appreciate the contributions of scientists and develop sensitivity to possible uses of science and concern for clear environment and preservation of the ecosystem and to make an awareness to guard against the possible misuse of science.

## Activity Sheet No.2

Discuss each objective to ascertain the answers of two questions — What is exactly to be done ? and What would be the expected learning outcome ? Some points for discussion are given below :

1. Upto Class V, students learn science through the observation of concrete things. Is it possible to list out different knowledge, competencies and skills which the child has obtained from Primary level? For example:
  - i) Does the child know about different parts of his body and functions of the external parts; about the three states of matter, different components of environment about the materials used in daily life; about certain natural phenomena, like storms rain, change of season etc ?
  - ii) Does the child have the ability of correlate - cause and effect, size and function ?
  - iii) Can the child appreciate good things and occurrences in nature ?
  - iv) Can the child describe his/her observation ?
2. What do we mean by the nature of scientific knowledge ? What would be the examples to show that science is repli-

cable, based on observation, tentative, empirical, holistic etc ?

3. Where is the link of science with everyday life situation in relation to use of technology, consumer products, health, food and environment ?
4. What is the scientific method ? What are the steps ? Certain incidences like good luck, accident, play important role in scientific discoveries and inventions. Can we consider the as steps in the method of decision making in daily life ?
5. What do we mean by scientific attitude ?
6. Is science education value free ? Scientists work to satisfy their own inquisitiveness but their work involves critical thinking, courage to raise question, logical formulation of hypotheses, testing of each hypothesis honestly, precisely and truthfully collection of data after hard work, drawing of a logical inference.
7. What are the important decisions which effect the individual and the community ? What are the activities in science which may strengthen the ability to take individual decision, collective decision and implementation of decisions into actions ?

### Linking of Science Education with daily life, Environment and Science for All.

In between, period 1975-85, phenomenal rethinking has taken place at the National and International level to make the science education more meaningful. Unesco meeting held in the Republic of Korea in 1975 suggested the following criteria for selecting the content of science education :

- a) relevance to real life and work experience of the learners;
- lb) significance in terms of fulfilment of the needs of the learners as individuals and as members of a family and a community;

- c) feasibility in terms of maturity of the learners and availability of resources required; and
- d) consistency with new knowledge.

Another Unesco meeting in 1982 suggested that in order to gain self-determination and sustain development total population must be stimulated towards acceptance of science. For this purpose, it was suggested that science education must be replanned —

- a) to establish its needs;
- b) to determine the scope, nature and limitation of science and technology within its framework;
- c) to identify the science content; skills and attitudes for the purpose;
- d) to work out the necessary delivery mechanism; and
- e) to develop an action plan for regional cooperation to achieve it.

More detailed discussions have suggested the following steps :

1. to identify real life situations — cultural, physical, biological, political and socio-economic;
2. to synthesize the experience of curriculum developers and teachers about the real life situations mentioned in point 1 above.
3. to identify child's needs, interests and aspirations (Micro level determination).
4. to identify needs, interests and aspirations of the society (determination at macro level).
5. to harmonise both the micro and macro levels determinations (as stated in 3 and 4).
6. to define behavioural objectives — cognitive, psychomotor and affective.



7. to select modalities of specific teaching/learning to plan the expected outcome and suggested modalities and organisation to achieve the purpose.

None will probably disagree from the criteria and suggested steps towards the linking of science education with daily life; environment and science for all.

### Activity Sheet No.3

- Identification of the different factors in real life situations — cultural, physical, biological, political and socio-economic.
- What would be the content to create teaching—learning situations on the factors identified in Activity 1?
- Identification of the needs, interests and aspirations of the children whom the participant is teaching in his school.
- Identification of the needs, interests and aspirations of the society from where student of the participant is coming.
- How would it be possible in the science class to harmonize both the micro and macro level identifications done in Activity 3 and 4?
- Writing of the expected learning outcomes in behavioural terms (cognitive, psychomotor and affective).
- Suggest modalities and organisation which would be required from a teacher to obtain the selected learning outcomes.

Collect

Collate

Discuss

### Teaching Science Inside and Outside the Class

Teaching of science today is not the simple imparting of knowledge by the teacher to the students. Students have the

opportunity to acquire information from various sources even without teachers. Teaching today is defined as "the art of assisting another individual to learn, it includes the providing of information ( instruction ) or activities designed to facilitate learning".

As learning is the main focus both the elements of teaching and teaching crafts should be designed accordingly. The teaching, therefore, should be a interactive process, meeting the learning ability of the child. Teaching is done usually either by talking, teacher asks questions or makes statements or directs pupil to sources. Teacher also initiates activity for which students may seek information or consultation or students may depend on the teacher for confirmation, identification or seeking guidance.

Following behaviours of the teacher are desired :

- Clarity of presentation
- Variability in presentation
- Enthusiasm
- Achievement oriented behaviours
- Advance preparation
- Ability to acknowledge and encourage students performance.
- Ability to criticise constructively
- Ability to provide overview
- Ability to ask various types of questions
- Ability to probe students response for further elaboration
- Ability to understand the difficulty level of instruction

## Discussion about Teaching in the Class and Outside Class

Today, teacher is to know himself, his students and also parents and other members of the community.

## Activity Sheet No. 4

- What theoretical knowledge a teacher must possess about learning and human behaviour ?
- Which are the attitudes that enhance learning?
- How can teacher acquire knowledge of subject matter ?
- What are the different teaching skills required for teaching science in and out of the classroom ?
- How can teacher evaluate his own students and also his own teaching ? (specially affective domain behaviours).
- How can one organise a "Science Corner" for lower primary classes in a single teacher school?
- What are the different out-of-school activities, that the teachers can organise for the students of the schools and for the community ?

Collect

Collate

Discuss

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