

## **(i). WORK EDUCATION (500)**

### **Rationale**

In the new curriculum framework (2005) Work Experience has been termed as Work Education and thus makes it an integral component of education. As such it would provide both knowledge and skills through well-structured and graded programmes, which would help them on their entry into the world of work. Work Education is a distinct curricular area for providing children with opportunities for participation in social and economic activities inside and outside the classroom, which would enable them to understand scientific principles and procedures involved in different types of work. The productive manual work situations were to be drawn from the area of health and hygiene, food, shelter, clothing, recreation and community service. The competencies to be developed in this field should include knowledge, understanding, practical skills and values through need based life activities. Pre-vocational courses should get a prominent place at this stage.

Work Education aims at restoring dignity and respect to all types of manual work, promoting self-reliance in meeting one's daily needs and those of one's family and community, increasing productivity through the development of proper work skills and values, and promoting commitment to the welfare of the society through suitable programme of social work or community service.

### **Objectives**

The major objectives of Work Education at the Secondary stage are:

- To help the pupils to develop essential knowledge and understanding in terms of :
  - identifying needs of the self, family and community in respect of food, health and hygiene, clothing, shelter, recreation and social service;
  - acquainting themselves with productive activities in the community;
  - understanding facts and scientific principles involved in various forms of work;
  - knowing the sources of raw materials and understand the use of tools and equipment in the production of goods and services; understanding the utility of

- productive work and services to the community;
- understanding the needs of a technologically advancing society in terms of productive processes and skills;
- understanding the processes of planning and organization of productive work;
- conceptualizing their role in productive situations;
- developing abilities for self-evaluation of performance and for entrepreneurship.
- To help the pupils to develop skills:
  - for the selection, procurement, arrangement and use of tools and materials for different forms of productive work;
  - to observe, manipulate and participate in work practice;
  - for the application of problem-solving methods in productive work and social service situations;
  - for greater productive efficiency;
  - to enhance their working competence sufficiently so as to enable them to earn while they learn;
  - to use their creative faculties for devising innovative methods and materials.
- To help the pupils to develop proper attitude and values in terms of:
  - respect for manual work and regard for manual workers;
  - socially desirable values such as self-reliance, helpfulness, cooperativeness, teamwork, perseverance, tolerance, etc.
  - proper work ethics such as regularity, punctuality, honesty, dedication, discipline, etc.
  - self-esteem through achievement in productive work and services;
  - a deeper concern for the environment and a sense of belonging, responsibility and commitment for the society;
  - strive for excellence.

### **Course Content**

The content of Work Education comprises two parts, i.e., 'Essential Activities' for the satisfaction of day-to-day needs of the pupils, their families and communities and an Elective Programme of productive work and services, which would result in some remuneration in cash or kind. The component of productive work practice through 'Elective Activities' is most important at this stage and is, therefore, to be assigned a weightage of 70 per cent of the school time-table. However, the actual selection of activities/projects/pre-vocational courses by school would depend upon the availability of natural, physical and human resources in the locality, the socioeconomic background of the community and the needs and interests of the pupils.

### **Essential Activities**

List of activities for the Secondary School stage is given below :

1. First aid activities like counting of pulse, taking of temperature and bandaging of wounds after cleaning them.
2. Preparation of family budget and maintenance of daily household accounts.
3. To be able to know and procure transport facilities from one point to another using online resources or cooperation with local authorities such as Panchayat.
4. Studying the nutrition and health status of people in a village/city/slum/tribal area.
5. Helping in community health programmes for enhancing the nutrition, health and environmental status of the community through door-to-door contact programmes.
6. Help in preparation and distribution of mid-day meal/snacks in composite schools.
7. Volunteer work in hospitals and fairs, during natural disasters and accident, etc.
8. Activities related to sensitization towards needs of differently abled and elderly persons.
9. Activities related to sensitization towards weaker sections of society.
10. Participation in cleanliness drives in schools, community and neighborhood areas.
11. Participation in adult literacy programme.
12. Helping school authorities in organizing exhibitions, picnics, tours and excursions, school functions, etc.
13. Helping in child-care in creches.
14. Helping traffic police in the regulation of traffic.
15. Plantation and care of shady/fuel/ornamental/avenue trees.

### **Elective Activities**

Work practice at this stage is to take the form of projects with sequential activities in respect of vocations in the production or service sectors. Intensive projects/pre-vocational courses in diverse need and occupational areas, to be pursued over a span of time ranging from a few months to the entire two-years duration of the Secondary stage, are clearly the answer for this requirement. Such projects/pre-vocational courses are intended to lead to intensive skill formation and proficiency in work which would be conducive to increased productivity and capacity on the part of pupils to engage in work which enables them to earn while they learn. This emphasis on intensive skill formation is meant to provide a pre-vocational base to the work education programme at this stage and also to serve as ground preparation for the world for those pupils who terminate their studies after Class X. For those who continue their education at the Senior School Stage, these pre-vocational courses will serve as preparation for vocational courses at the +2 stage. A tentative list of such projects/ pre-vocational courses is given below:

### **Agriculture and Horticulture Skills**

1. Acquaintance with common fertilizers and pesticides and their application with appropriate equipment.

2. Acquaintance with common pests and plant diseases and use of simple chemical and plant protection equipment.
3. Raising of flowers, vegetables, plants and their seedlings in nurseries.
4. Repair and maintenance of equipment for horticulture and agriculture.
5. Prefabrication of irrigation channels.
6. Development of plants by vegetative propagation budding, grafting, cutting, layering, etc.
7. Mushroom cultivation for consumption, preservation or sale.
8. Post-harvest technology and safe storage of food grains.
9. Making of bio fertilizers.
10. Plant protection against pest and diseases.
11. Soil testing and reclamation measures.
12. Maintenance of farm equipment and machines.

#### **Animal Husbandry Skills**

13. Milking of dairy animals and managing allied activities.
14. Handling farm animals for feeding, washing or general examination.
15. Raising poultry birds (1) for eggs, (2) for table purposes.
16. Bee-keeping, bottling and marketing of honey.
17. Silk worm rearing for sale or yarn-making.
18. Fish rearing in small ponds.

#### **Skills for food manufacture**

19. Making bakery and confectionery products.
20. Food preservation making of jam, jelly, tomato ketchup, pickles.
21. Projects relating to non-conventional sources of energy sun, wind, tides, biogas, etc.
22. Cookery skills.
23. Preparation of milk products.

#### **Skills for Textiles**

24. Tying and dyeing and screen printing as commercial ventures.
25. Garment making.
26. Mat and carpet weaving.
27. Hand embroidery.

28. Stitching and Tailoring.

### **Other Skills**

29. Preparation of stationery items such as files, file boards, registers, writing pads, stamping ink, etc.
30. Preparing paper out of waste paper
31. Repair and maintenance of domestic electrical gadgets.
32. Preparing electric extension boards for use in home/school or for sale.
33. Plumbing.
34. Preparation of decoration pieces of a more sophisticated nature out of plaster of paris.
35. Doll making.
36. Preparation of toys and other play materials for self and primary classes.
37. Typewriting with adequate proficiency.
38. Stenography.
39. Running a cooperative store.
40. Running a book bank.
41. Caning, carpentry and handling the job of as mason.
42. Cycle, motorcycle and scooter preparing.
43. Computer operation and maintenance
44. Photocopying
45. Screen-printing
46. PCO (Fax)
47. Photography-commercial.
48. Making of assisting devices/material for persons with special needs
49. NCC, NSS, Scouting and Guiding.

Out of the list of Elective Activities suggested above, each pupil is to select one or two activities/projects from different areas of human needs such as food, health and hygiene, clothing, shelter, recreation and community service. The number of elective courses to be selected would depend upon the total number of periods required for their performance which should not exceed 120.

### **Syllabus Outlines of Some Activities**

In order to enable the translation of the above activities and projects into concrete action and to ensure proper utilization of the allotted time as also optimum attainment of the intended objectives, some of the Essential and Elective Activities have been specified

further. For Essential Activities, the number of periods needed for their performance, the class for which they are suitable and tools and materials required, are indicated. In case of Elective Activities, class wise pre-vocational courses are presented with details content/major activities, learning outcomes/specific activities, teaching/learning methods, tools and materials, time required for performance and linkage with other curricular areas. Specific activities for the remaining activities/projects/pre-vocational courses can be worked out in similar manner. Syllabus outlines of some activities are given below.

### **Essential Activities**

**Activity 1:** Studying the nutrition and health status of people in a village/city slum/tribal area.

**Classes IX or X**

**Period 30**

The nutrition and health status of the people reflects the present status and future prospects of a country. Enhancement of the nutrition and health status of the people should, therefore, be the first priority of the national planning for development. Study of the factors responsible for the present status of nutrition and health will lead to acquisition of facts on the basis of which proper planning for the enhancement of their status can be made.

### **Specific Activities**

- Adoption of a village/city slum/tribal area.
- Preliminary identification of nutritional and health problems of the community.
- Preparation of questionnaire/interview schedule to elicit background and information from family such as:
  - General information: head of the family, type of family
  - Composition of the family
  - Meal pattern of the family
  - Monthly expenditure pattern on food, clothing, housing, education, medicine, fuel, transport, saving, remittance of debt, recreation, other items.
  - Details of monthly food expenditure.
  - Food produced at home.
  - Food given under special condition
  - Methods of cooking.
  - Food items stored in the home
  - Food items which are considered “good” and “not-good”.
- Commonly occurring health problems:
  - deficiency disease of children
  - other common ailments of children
  - commonly occurring ailments in the family
  - measures taken to get rid of the ailments

- Environmental sanitation problem:
  - procedure of disposal of wastes (solid or liquid)
  - source of water supply and mode of water storage at home
  - Hygienic habits followed
  - Health services available
- Conduct of Survey.
- Analysis of data and preparation of reports on main findings in respect of :
  - socioeconomic conditions;
  - environmental sanitation problems;
  - commonly prevalent health problems;
  - malnutrition problems of children, mothers and the community;
  - undesirable nutrition, health and sanitation practices in the community;
  - practicable intervention measures to enhance the nutrition and health status.

**Activity 2:** Participating in the community health programme through door-to-door contact programmes.

**Classes IX or X**

**Period 30**

Malnutrition and infection are the major causes of the precarious status of health in the developing world. Malnutrition is not only due to poverty or non-availability of food resulting from social and distributive injustice, but also due to ignorance of nutritional facts and undesirable practices. Malnutrition problems can be resolved to a great extent if judicious selection of food is made possible within economic means and the available foods are better utilized. Infectious diseases are caused mainly by the lingering existence of two fundamental problems of environmental sanitation, mainly unsafe water supply and unhygienic disposal of waste, specially human excreta. The application of modern scientific knowledge to environmental sanitation can lead to 80 per cent of the diseases being effectively controlled.

Thus, by developing desirable nutrition, health and environmental sanitation practices in the communities, health problems can be considerably resolved. This can be achieved through environment based education for all age groups of population. A door to door contact programme is the most effective way of environment based education. Without any nutrition, health and sanitation intervention, the status of nutrition, health and sanitation in the community can be enhanced through functional education by door to door contact.

### **Specific Activities**

- Organizing a conference, inviting the sarpanch of the village, community health worker, personnel from the Primary Health Centre, Public Health Engineer and Block Development Officer and discussing about the community health programmes being implemented in the adopted community and exploring the possibility of their participation and cooperation in the contact programme.

- Correlating the nutrition, health and sanitation problems in the adopted community identified from previous survey (Activity 1) with the community health programmes being implemented and preparing a check-list of specific practices desirable in the community such as :
  - Gives supplementary foods to the child from the age of four months.
  - Gives milk to the child in bowl and not in a bottle.
  - Feeds the child several times a day.
  - Feeds the child even when sick.
  - Immunizes the child.
  - Washes vegetables before cutting.
  - Makes use of surplus cooking water.
  - Uses green leafy vegetables regularly.
  - Uses raw vegetables/fruits/sprouted grains regularly.
  - Keeps the home surroundings clean.
  - Uses waste water for growing plants.
  - Throws garbage in a pit
  - Keeps teeth clean.
  - Keeps nails trimmed and clean
  - Keeps hair clean and combed.
  - Keeps clothes clean.
  - Defecates away from pathways, sources of water and houses.
  - Washes after defecation outside and not in pond/tank/stream.
- Distributing families among members of the project team for door-to-door contact and preparing a time schedule for door-to-door contact programmes, explaining the importance of desirable practices for better nutrition, health and sanitation and recording the practices present in the family in the checklist of desirable practices.
- Discussing the problems encountered by the team members after every 3 contacts, analyzing why a particular desirable practice is not achieved, finding out possible solution to reinforce the programme.
- Consolidation the records of desirable practices on the first and last contact programme for the entire community and seeing the impact of the programme on the basis of improvement in practice percentage.
- Assessing individual performance of the project team members on the basis of their integrity and honesty and improvement in practice percentage in the families assigned to them.



### **Activity 3: First Aid**

First aid is the immediate and temporary care given to the victim of an accident or sudden illness. The main purpose of first aid is to preserve life, assist recovery and prevent aggravation of the condition until the availability of a doctor, or during transport to casualty home or hospital.

#### **Specific Activities**

- Preparation and use of First Aid Kit.
- Dressing of wounds and bandaging.
- Management of simple injuries and emergencies :
  - bleeding
  - shock
  - drowning
  - burns
  - snake bites
  - fractures
  - poisoning

### **Activity 4: Plantation and care of Shade/Fuel/Ornamental/Avenue trees.**

Importance of trees for ecological balance of the environment. Local and exotic trees for various purposes. Factors affecting normal growth of the plants. Specific problems pertaining to certain tree species and their solution. Raising seedlings in the nursery, nursery management. Vegetative propagation of ornamental trees. Planning layout. Planting and after care.

#### **Specific Activities**

- Identification of shade/fuel/ornamental/avenue trees.
- Preparation of herbaria of various trees.
- Phenological observations on vegetative growth, emergence of new shoots/leaves, flowering, fruiting, etc.
- Identification of seeds, seed treatment before sowing in the nursery.
- Preparation of nursery beds for sowing the seeds.
- Raising seedlings in the nursery and nursery management.
- Vegetative propagation by cutting, layerage.
- Layout for planting.
- Digging pits for planting.
- Preparation of soil-manure mixture for filling the pits.

- Transfer of seedlings for plantation.
- Planting with the help of planting board or rope.
- Providing tree-guards/fencing for protection (made of iron bars/empty old drums/thorny twigs/bricks barbed wire/live fence, etc.)
- After care of the plants; watering, weeding, mulching, hoeing, protection against disease, pests, animals, adverse weather conditions, etc.

**Activity 5: Preparation of Family Budget and Maintenance of Daily Household Accounts.**

**Specific Activities**

- Identifying importance of household accounts.
- Learning the procedure of recording transactions.
- Keeping records of expenses, vouchers, receipts, bills, etc.
- Preparing simple receipts and payment account in the register systematically and neatly.
- Comparing past receipts and payments with present receipts and payments.
- Discriminating between necessities, comforts and luxuries of different families.
- Preparing a list of consumable articles of the family.
- Collecting comparative prices for the required consumable articles.
- Allocating the family income on various heads.
- Preparing family budget.
- Making a comparative study of the budget of families from lower class, lower middle and middle class.

**Activity 6: Helping school authorities in organizing:**

- (a) picnics, tours, excursions, functions.
- (b) exhibitions.

**Specific Activities**

- Helping school authorities in the organization of picnics, tours, excursions and school functions:
  - planning the programme;
  - forming groups for different functions such as conveyance, food, games and entertainment, collection of funds and maintenance of accounts;
  - making arrangements/preparation of each activity;
  - organizing/performing activities on the day of the picnic, tour/excursion, function;

- evaluation of the success of the programme/effectiveness of the activity undertaken.
- Helping school authorities in organizing exhibitions:
  - planning the programme;
  - collecting/making exhibits and keeping them safely;
  - collecting suitable tables, boards, etc., for display;
  - cleaning and decorating the exhibition hall or ground;
  - displaying the exhibits on proper spots according to plan;
  - doing reception duty on the day of the exhibition;
  - explaining exhibits to the visitors;
  - collecting the exhibits after the exhibition and restoring them to their owners/the school authorities;
  - putting back the furniture, etc., in its proper place.

**Activity 7: Participation in Adult-Literacy Programmes.**

**Specific Activities**

- Survey of the neighborhood and identification of adult illiterates.
- Making door-to-door visits and persuading them to join literacy classes.
- Grouping the illiterates according to their age, occupation and interests.
- Grouping students on the basis of their known capabilities and interests.
- Selecting literacy materials with the guidance and help of the teacher.
- Making spatial and physical arrangements for conducting the programme.
- Making adequate preparation for teaching, including the selection of teaching aids.
- Teaching adults in groups.
- Getting together in class and reviewing the progress of work and problems, if any.
- Correcting the teaching methods and procedures in the light of experience.
- Evaluating the progress of adult literacy and maintaining records.

**Materials, Tools and Equipment Required:** Charts, maps, register, almirah, etc.

## **(ii) ART EDUCATION (CODE No. 502)**

### **Rationale**

Art education constitutes an important area of curricular activity for the development of the wholesome personality of the learners. Art is a process of fulfilment running through every aspect of life and it goes on in a creative, productive and joyful manner. Art education helps to explore various means of communication (verbal and non-verbal). It encourages to develop creative expression and sharpens senses through keen observation of the environment. It helps to discover preferences through exposition to variety of material and identify the personal form and style of expression. It develops awareness of various art forms in and around the environment and locality and develops skills in the use of various tools, instruments and other art materials in the process of experimentation and exploration. In the process of discovering space, organization, colours, forms, lines, texture, movement, sound, etc., learners develop a sense of organization and design which inculcates in them a sense of order with regard to their personal appearance, home, school and community. It also develops aesthetic sensibilities and respect for social values and cultural heritage.

The idea of creative art involves all the elements of commonly known art forms visual, performing and language arts, namely music, dance, drama, drawing and painting, modelling and sculpture, or construction work, pottery and ceramic work, poetry and creative writing and other connected craft forms.

### **Objectives**

The objectives of art education are to :

- help learners to consolidate past experiences and knowledge;
- introduce learners to different media and techniques and their use for creative and productive expression for common use;
- provide opportunities for development of awareness about folk arts, local specific arts and other cultural components leading to an appreciation of national heritage;
- assist learners to use artistic and aesthetic sensibility in day-to-day life situation;
- enable learners to achieve a balanced growth as a social being in tune with our culture through project work.
- get acquainted with the life and work of the local artists/artistes;
- use resourcefully locally available material to make different products (objects) with the help of the community;
- refine the sense of appreciation of the beauty of nature through the basic elements of art forms.