NATIONAL INITIATIVE FOR SCHOOL HEADS' AND TEACHERS' HOLISTIC ADVANCEMENT – (NISHTHA)

SCHOOL LEADERSHIP DEVELOPMENT FOR IMPROVING QUALITY OF SCHOOL EDUCATION

Module 3: Pre-vocational Education



PSS Central Institute of Vocational Education (PSSCIVE) National Council of Educational Research and Training



Historical Perspectives on Work based Education in India

Pre-vocational Education from Classes VI-VIII

Vocational Education from Classes IX to XII



To develop an understanding and perspective on the purpose of work experience and pre-vocational education programme, with specific reference to Samagra Shiksha

To identify the activities required to achieve the objectives of the pre-vocational education in upper primary/elementary schools

"By education, I mean an all-round drawing of the best in child and man in body, mind and spirit."

Mahatma Gandhi



Basic Education

• Mahatma Gandhi (1937) insisted that **manual** and **productive** work should find a place in examination.

• The educational ideas of Mahatma Gandhi were given practical shape by the Zakir Hussain Committee and "Basic Education" (Buniyadi Shiksha) was accepted as the national pattern of education for the elementary stage in 1938.

National Policy on Education 1986

O The National Policy on Education 1986 promulgated "the introduction of systematic, well-planned and rigorously implemented programmes of vocational education is crucial in the proposed educational reorganization".

Work Based Education

• Work based Education or Work based Learning refers to the learning that occurs through production of real goods and services, whether the work is paid or unpaid.



Methods for Work based Learning

- Guest Lectures by Entrepreneurs
- Field Visits
- O Career Day
- Student run Enterprises
- Project related Learning
- Mentoring
- Practical Skills Training
- On-the-job Training
- Apprenticeship Training

Vocationalisation of Education

O It refers to efforts by schools to include in their curriculum those practical subjects or courses likely to generate among the students some basic knowledge, skills and disposition that might prepare them to think of becoming skilled workers or take up other manual occupations.

Vocationalisation of Education in Schools – Classes I to XII

- Work Experience Classes I to V
- Pre-vocational Education Classes VI to VIII
- Vocational Education Classes IX to XII (vocational subjects offered along with general education)

Stages in Vocationalisation of Education

 Students learn	 Students learn	 Students participate
about various	about what people	in activities that
occupations and	do for living and	integrate academic
career options in	skills needed for	skills with
the world of work	various occupations	vocational skills
Awareness	Exploration	Preparation

Outcome Based Education and Training

- A **Competency** is defined in terms of what a person is required to "do" (performance), under what condition it is to be done (condition) and how well it is to be done. Competency is an observable and measurable knowledge and skills.
- Skill is an ability to do an activity or job well, especially because you have practiced it.
- Skill standards, i.e. how well skills are to be demonstrated or performed are critical to the quality of VET.

Skill Development in India

• National Policy for Skill Development and Entrepreneurship 2015

- O Public-private Partnerships
- O National Skill Development Corporation
- O Sector Skill Councils

 Vocational Education and Training under National Skill Qualification Framework (NSQF)

Features of VET in India

- Integrated system of Vocationalisation of Education in Schools and Colleges
- National Occupation Standards (NOSs) for Job Roles or Occupations under the National Skill Qualification Framework (NSQF)
- Learning outcomes

National Skill Qualification Framework (NSQF)



School Programme				College Programme		
NSQF Level 1	NSQF Level 2	NSQF Level 3	NSQF Level 4	NSQF Level 5	NSQF Level 6	NSQF Level 7
Grade IX	Grade X	Grade XI	Grade XII	Diploma	Advance Diploma	Degree

School VE Programme



Vocational Education

Classes VI to VIII



Scope of Pre-vocational Education

 Pre-vocational education has been conceptualized in Samagra Shiksha as the integration of work based activities with teaching-learning processes, rather than a separate add on to the existing scheme of studies of education from Classes VI-VIII.

Pre-vocational Education

Pre-vocational education will help students to:

- O Identify the productive activities, plan and organise productive work;
- Identify the tools, equipment and material, used in the production of goods and services;
- O Develop basic skills to observe, manipulate and participate in work practice;
- Inculcate socially desirable values, such as cooperativeness, teamwork, perseverance, tolerance, etc.; and
- O Develop respect for manual work (dignity of labour) and regard for workers.

Who will teach pre-vocational education?

 General education teachers of languages, mathematics, science, social science, art, music, and work experience would organise skillbased activities related to the themes that they are teaching.

Pre-vocational Education - Steps





Communication Skills

• Participate in role-playing exercises (e.g., for developing interpersonal communication skills, expressing needs and wants without appearing demanding).

OKeep a diary of daily activities.

Pre-vocational Skills - Agriculture and Horticulture

O Soil testing using Soil Testing Kit

- O Identification of common pests and plant diseases.
- Raising of seedlings and plants in nurseries
- Vegetative propagation of plants through budding, grafting, cutting, layering, etc.
- O Mushroom cultivation
- O Vermicompost Production



Pre-vocational Skills – Animal Husbandry

- O Milking of dairy animals
- O Bee-keeping
- O Silk worm rearing
- O Fish rearing

Prevocational Skills - Food Manufacturing and Processing

- Making bakery and confectionery products, like biscuits, cake, muffins, etc.
- Making jam, jelly, ketchup, pickles, etc.
- Preparation of milk products

Prevocational Skills - Paper Work

• Preparation of stationery items, such as files, file boards, writing pads, etc.

O Book binding.

- Preparing paper out of waste paper
- Toy making, e.g. Dolls.

Prevocational Skills - Paper Work

- O Paper machie
- O Paper bags
- O Inserting name slips into these ID badges
- O Paper filing work
- Making envelopes and boxes

Prevocational Skills - First Aid

- Preparation of First Aid kit
- Dressing of wounds and bandaging.

Organisation of Activities

S.No.	Activity	Agriculture and Horticulture Skills	Learning Outcome
1.	Identification of common fertilizers	Plants need nutrients to grow and thrive and fertilizers help them to grow (Why)	Differentiate between urea, ammonium phosphate and murate of potash
2.		Nitrogen helps a plant use carbohydrates to gain energy. It also controls the plant's form and internal function in order to make protein. Examples – Urea and ammonium nitrate (What)	
3.		Phosphorous is important in the photosynthesis of plants by helping plants respire, transfer and store energy and use water more efficiently. Ex.: Monoammonium and diammonium phosphate, triple super phosphate (What)	
4.		Potassium plays an important role in the plant's metabolism by controlling water and chemicals inside the plants and then turning them into energy. It helps plants in absorbing water through their pores. Ex.: Potassium chloride (What)	
		Choosing the right fertilizer or the mixture after soil analysis is essentially needed for the growth of the plants (How)	

Activity 1: Who Am I ?

Objective: To expose the students to a variety of occupations in the world of work and the tasks performed by people working in these occupations.

Procedure:

- Trainees are divided into teams
- Each team is given some names of the occupations, like mason, carpenter, plumber, technician for home appliances, floriculturist, microirrigation technician, beauty therapist, gardener, solar power technician, etc.
- The team members will write the tasks performed by the persons in different occupations
- A member from the team shall come forward and state the task (s) performed by a skilled person
- The other team members shall guess the occupation. Points shall be given for each right guess.

Activity 2: Group Discussion

Objective: To orient the participants on developing an understanding of the importance of work based education.

Procedure:

- Form groups with three trainees in each group.
- Ask each group to discuss on the historical perspectives on work based education and vocational education
- Each group shares their knowledge on the events that followed during preindependence and post-independence which led to the development of vocational education in India.

Activity 3: Group Work on Leading Pre-vocational education in Upper Primary/ Elementary Schools

- Connecting skill based activities with general academic subjects, like science, language, social science etc.
- Discussion on vocational education, vocational courses/curriculum, roles and functions of a vocational teacher and opportunities for children if they choose vocational education

Reflective Questions

- 1. What do you understand by work experience programme in schools?
- 2. Give your responses for/against What is the need for work experience programmes in schools?
- 3. What have been the limitations of work experience programme in schools?
- 4. How work experience programme is different from pre-vocational education?

Thank You