0

# Theory 4.5

## **Demonstration Plan**

Objectives: At the end of this lesson you shall be able to

- · define demonstration
- · explain the purpose of demonstration
- · explain what is a demonstration plan and its necessity for training
- · describe the elements in the demo plan format
- list the key points to be followed before, during and after the demonstration
- analyse the need for shop talk and its stages in Skill development.

### Introduction

Planning is an important guide, which an instructor should carryout in advance so as to present the matter (Knowledge or Skill) in a correct sequential order. The steps followed in teaching skill are similar to teaching a lesson. Even though there are so many methods available to teach a lesson, "Demonstration method" is the only one method being followed to teach skill in a systematic manner. In this process the Instructor has to tell "What he is going to do and then he himself has to perform the skill and show", like a worker in front of the learners.

#### Demonstration

Demonstration is a planned performance of teaching skill elements to the learners (trainees) in a systematic, sequential order, based on the scientific principle of an experiment.

## **Purpose of demonstration**

- It helps the learner to concentrate and develops their observation power.
- The skill teaching learning process is carried out in a step by step systematic way with safety precaution in handling tools, instruments, equipments along with self safety and others in the environment.
- It increases the efficiency of skill teaching and skill development activities because it puts the skill information in concrete application.
- The step by step activity performed by the instructor becomes interesting and meaningful than illustrated discussion or oral explanation.
- Demonstration occurs when learners have a hard time connecting theories into actual practice or when learners are unable to understand the application of complex concepts.

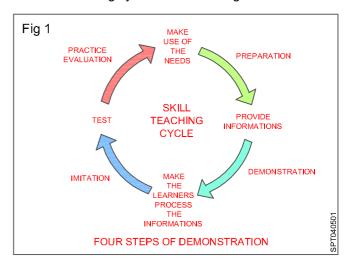
 Teaching skills by demonstration is the only best method followed to transfer skills from an expert (Instructor) to a novice (trainee)

## **Demonstration plan**

It is a guidance plan for the instructor to conduct a demonstration to teach skills to develop the occupation specific physical skills of learners in a systematic manner. The demonstration plan format is similar to lesson plan format consisting of four steps.

- Preparation
- · Demonstration (Presentation)
- · Imitation (Application) and
- Practice/Evaluation (Test)

The skill teaching cycle is shown in Fig 1.



The specimen demonstration format is given for reference and the explanation of each element is described as follows:

DEMONSTRATION PLAN								
	Nar	ne			Admin No			
Trade					Date			
Semester			Demo No	Week No	Time Req	Time Required		
Preparation								
	а	Skill :						
	b	Objectives: A	t the end of this demon	stration, the trainee shall b	e able to			
	С	Tools & equipments required						
d. Madadala as assistant								
	u	Materials requ						
	е	Introduction						
	i	Review :						
	ii	Motivation :						
ı	De	Demonstration (Presentation)						
Procedure (DO)		cedure (DO)		formation points/ fety procautions (Tell/Sh	ow)	Spot hints (Ask to do)		

Procedure (DO)	Information Points/ Safety Precautions (Tell/Show)	Spot Hints (Ask to do)
III Imitation (Applica	ation)	
IV Practice/Evaluati	ion (Test)	
Next skill :		

### **Explanation of the demonstration plan format**

## **Step 1: Preparation**

• Skill title......(the particular Skill to be filled in here) This must be a skill and this demonstration should not take more than 30 minutes at a time. Shorter the demonstration, the better will be its effect.

## Objectives

As the demonstration is for a particular skill, there will be only one objective. But, there could be one or two additional objectives very closely interlinked and not separate ones.

## Tools & other requirements

Indicate here the various requirements of raw materials, tools, equipments, measuring/checking instruments etc. to conduct the demonstration, so that this could be arranged properly before the demonstration commences. You have to correctly furnish the specification of the required items and quantity required, for doing the demonstration of the skill.

## Introduction

Before the actual demonstration of the skill commences, a short introductory talk (Review) of preparing the learners is done.

The importance of the skill, how it is related to other known skills and such information would create a desire (Motivation) in the learners, to learn the skill.

### Step 2: Demonstration (Presentation)

Three columns under this are

- Procedure: The actual step in the performance (do) of the skill in sequence are written here.
- Information points/safety precautions: Against this step, the sequential procedure/any information such as Why? What? or How? (Tell/Show) and important safety precautions that may be relevant at this step are written in the form of/using catch words-key words.
- Questions: Questions to draw attention, stimulate thinking or to recall information and to check understanding, are written against each stage.

## Step 3: Imitation (Application)

After the demonstration is over, opportunity is provided to learners, to do the skill by themselves independently and instructor (should rectify their mistake, if any - then and there) guides them to learn the skill correctly and quickly.

 Summary: The sequential steps in the performance of the skill and important information/safety precaution are stressed and repeated.

### Step 4: Practice/Evaluation (Test)

In this step the instructor provides opportunity to learners to practice the above skill such that they attain accuracy, speed and quality through repetition following safety precautions. During this step the instructor has to evaluate the trainee performance.

 Next skill: Write the title of the next Skill to be demonstrated here.

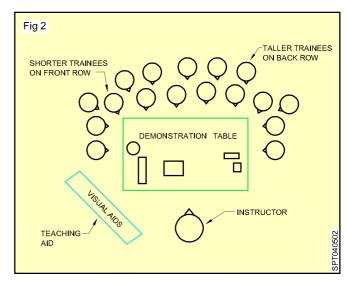
## Well plan your work and work your plan

## **Demonstration Technique**

Holding a hammer, a screw driver, a plum-bob for a straight edge or even positioning of arm during filing, form a demonstration. All basic skills must be demonstrated before trainees with required tools, instruments, raw materials arranged on the demonstration area with the learners.

## Key points for conducting effective demonstration

- In order to ensure the success of demonstration, the instructor must prepare the plan minutely and very seriously, collection of material related to the demonstration needs to be well-planned in advance.
- The demonstrator must rehearse the activity several times before the real demonstrations for a smooth sequencing of the steps as well as accuracy of the result.
- Arrange the learners around the demonstration area or at a distance where they will be able to observe fully what is going on as shown in Fig 2.



- Arrange the tools, instruments, raw materials etc. required for the demo on the table in a sequential order systematically according to the step of its use as per the demo plan.
- The place must be quiet in order to sustain the observers attention and interest during the activity; Remove irrelevant items from demo area if any, to avoid distractions.

0

- During the demonstration, the clear language should be used so that learners may understand the instructional step easily.
- They are allowed to take down short notes or record some data which may be analysed afterwards.
- The instructor can use various teaching aids like models, chalkboard, graphs etc. during demonstration. It helps learning easier, and quickier for permanent learning.
- After the demonstration learners should be involved to do imitate the simple or complex part of the step of activity demonstrated by the instructor.
- Depending on the kind of demonstration to be undertaken, pointers or questions may be used to focus learner's attention and avoid distractions.

While the workshop trade instructor arrange the trainees standing around the demonstration table, the computer trade instructor may arrange the trainees comfortably sitting and observing the effects of step by step activities on the image displayed over the big screen with the help of multimedia projector. (Fig 3 and 4)





Each trade instructor has to plan and arrange the demonstration activities according to the specific skills and their complexity to transfer them to the learners.

Learning by imitation or copying is a very fundamental and common kind of learning. A novice copies an expert in a field of skillful work. Somebody serves as a model for somebody else. You as an instructor serve as a skilled expert of your trade for your trainees. You should be always aware of that.

## You will have recognized that your trainees

- Sometimes do wrong although you demonstrate right
- Sometimes do not execute the operation although you did so in the past
- Sometimes executes something which you did not demonstrate
- Do it differently/quicker/slower
- Develop their own 'style' of executing the operation
- Sometimes copy observable behaviour and even develop habits, attitudes and values
- Sometimes not only copy the skill but even modify it and transfer if to new application

These possible results of learning by imitation or 'model learning' can be easily understood if the basic processes which are involved in 'learning by imitation' is understood.

Skill learning is a complex process which involves the four processes i.e.,

- Attention process
- Motivation process
- · Cognitive process
- Psychomotor process

Teaching skills by demonstration alone, without verbal (audio) and visual support will result in a blind imitation - without understanding of functional relationships.

For the successful demonstration, we have to follow certain points during the planning stage and then we have to follow certain other points during the demonstration and some more relevant points after the demonstration also.

# I Points to be considered while planning to teach skill

- Be specific in the objectives as to what you expect from the learner to learn or to acquire proficiency in the skill.
- The main points to be explained during the demonstration should be listed out in order.
- Availability of the time according to the steps to be covered.

- Check in advance the materials, tools, equipments, etc., to ensure that they are in good working condition.
- Check up the space availability for the demonstration, so as to accommodate the learners to observe the demonstration properly.

## Il Points to be followed during the demonstration

- We should use such tools and equipments during the demonstration that will be used by the trainees for their practice after the demonstration
- Observe all safety precautions and emphasize their importance
- Perform the demonstration step by step in a sequential order.
- Provide immediate participation by the learner
- Adopt only one method of demonstration at a time
- Clear the doubts if any in the minds of the learners

### III Points to be followed after the demonstration

- Providing materials for immediate practice under your close supervision
- Correcting the doubts of the learners or wrong method of doing work during your supervision
- Insisting on observation of safety precautions all the time.
- Paying more attention to individual differences if necessary, re-demonstration has to be done to weaker
- Check/observe the progress of each trainee in learning the skill
- Let the trainees know the mistakes committed by them and explain
- Show interest in each individual.

## **Shop Talk**

Shop talk is also another type of teaching method. But by this, precise information very much relevant to develop skills only are presented to the learners at shop floor situations.

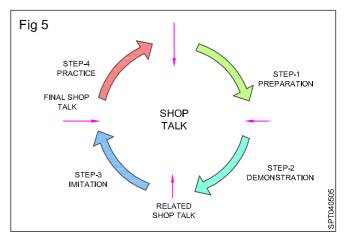
Regarding the teaching cycle, shop talk can be differentiated according to the purpose they serve in the teaching cycle. They are

- Introductory shop talk
- Related shop talk
- Final shop talk as shown in Fig 5.

## Types of Shop talk

### Introductory shop talk

Introduction into a new skill



- Precise description of the skill (working steps and drawing of the exercise)
- Skill related knowledge is taught (skill information, working steps and drawing of the exercise)
- Demonstration of materials, tools, machines
- Demonstration of skills

### Related shop talk

- Praise in the case of progress in executing the working
- Remedy in the case of learning difficulties
- Counseling in the case of difficulties concerning working steps machine operating, characteristics of tools and materials
- · Providing specific job know, how.
- Providing basic job knowledge e.g. security rule, energy saving etc.

## Final shop talk

- Control of the job
- Explaining the meaning of the exercise in the sequence of the exercises for the next exercise
- Individual feed back with counseling for future improvement

A shop talk can be addressed to an individual trainee, to a pair of that of a small group (up to 6 trainees)

An introductory shop talk will always be given to a small group, whereas the related and final shop talks can be given to individuals pairs and small groups. It depends on the given circumstances.

The following steps and the following form are proposed for the preparation and the presentation of every type of shop talk. You may modify them according to your experience and your needs.

O

N

### Step 1: Basic considerations

- With the help of the information (specific objectives, instructional activities, skill information, working steps, drawing of the exercise) set the objectives, describe your class in terms of previous knowledge and abilities, consider the resource needed/available.
- It is also very important to consider that the trainees have in their hands the skill information sheet, the specific objectives, the drawing of the exercise and the working steps.
- Regard especially the skill information sheet as learning aid. Allow them to use it and emphasize important information, add new ones and explain functional relationships.

The trainees need your shop talk to relate the "What", "How" and "Why" of the skill.

## Step 2: Organize the content

 Set the key words, find the logical sequence and the teaching aids you need.

### Step 3: Prepare the plan

Sequence your subject matters, put key questions.
 Match the teaching aids to the elements of the subject matter. Anticipate the trainee's behaviour and consider how to ensure that the trainees have understood the talk.

## Step 4: Prepare yourself

 Practice your talk on a colleague or on a tape recorder or on internal speech.

## Step 5: Present the talk

- · Here are some basic points.
- · Position the trainees along side you. Do not face them
- Make the trainee to do/to understand the job right first time
- Wrong or bad habits or knowledge is hard to extinct

## Step 6: Review your talk

Use the feedback information you have collected in order to improve this talk for the next time and your ability to develop future shop talks.

## **Model Questions**

### Theory 4.5

- 21 Which method is best suitable for skill teaching?
  - A Lesson method
  - B Lecture method
  - C Project method
  - D Demonstration method
- 22 Which is the third step in skill teaching cycle?
  - A Practice
  - **B** Imitation
  - C Demonstration
  - **D** Application
- 23 In which step the instructor has to evaluate the performance of learner?
  - A Presentation
  - **B** Imitation
  - C Application
  - D Practice

- 24 Why the instructor must rehearse the demonstration?
  - A Time saving
  - B Quick learning
  - C Develop own style
  - D Smooth sequencing of steps
- 25 Which process makes the learner to perform the skill?
  - A Cognitive process
  - **B** Attention process
  - C Motivation process
  - D Psychomotor process
- 26 When do the instructor given remedial instruction for skill learning difficulties?
  - A During demo
  - B Introductory shop talk
  - C Final shop talk
  - D Related shop talk