Principles of Teaching Instructional Material

Theory 5.1

Written Instructional Materials

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

- · define written instructional materials
- · state the 4 uses of written instructional materials
- · list the various types of written instructional materials
- · describe the various types of written instructional materials
- · brief the points to be kept in mind for the preparation of written instructional material.

Written Instructional Materials (WIM)

The development and usage of teaching and learning materials is essentially needed in the vocational training programme. We do not have enough teaching and learning materials like many of the developed countries and hence improved learning materials will result only when it is used by the instructor/trainer for the efficient benefit of the trainees/learners.

It is essential that instructors must be able to produce necessary inputs for the vocational training system. In any media system the multimedia is the goal, whereas other written instructional materials are the starting points of development of instructional, teaching, learning materials.

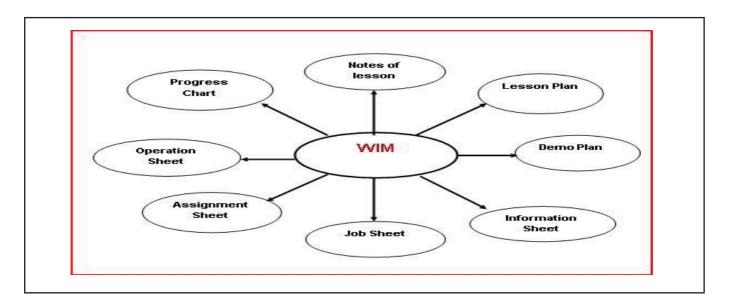
These items may be available as a kit or package form and may consist of textbooks, consumables, learning materials, slides, films, recordings, electronic media, computer programs, online services, DVDs, CDs and other commonly accepted instructional tools. Hardware to utilize aforesaid resources are not considered as written instructional materials. Written Instructional Materials are resource materials prepared by an Instructor.

The four important uses of instructional material are

- a To impart uniform instructions.
- b To attend to the individual learning problems.
- c To save learning time in the class room and shop floor and
- d To increase the learning time.

The following are the W.I.M prepared by the instructor for his own use to better presentation in class room and shop floor.

- a Lesson plan
- b Demonstration plan
- c Information sheet
- d Operation sheet
- e Job sheet
- f Experiment sheet
- g Pre-job check sheet
- h Final-job check sheet



Lesson Plan:

Lesson plan is a detailed description of the course of instruction for an individual. Lesson related to theory is prepared by an instructor for a specific duration of time.

Demonstration Plan:

Demonstration plan is a detailed description of a practical lesson or a skill prepared by an instructor for a specific duration of time.

Information Sheet:

These are materials prepared to suit specific needs of your learners. It aids better understanding and knowledge of the related information and procedures for learning. They usually contain such information as technical facts; definition of terms; machines, materials and tools required; processes and principles involved in various operations and other information which is not readily available in text books. They must be written with a view to review the classroom teaching or shop talks or to supplement what has been learnt. In fact they contain all that is required to enable the trainee to know 'Why of the job?'

Assignment Sheet:

Assignment sheet is prepared by an instructor which consists of objective and subjective type of questions given to the trainees to prepare and write exact answers by referring the information/notes of a particular lesson.

Job Sheet / Operation Sheet:

Consists of detailed information points, step by step procedure, safety precautions to be followed of a particular skill. The difference between job sheet and operation sheet is that a job sheet consists of number of tasks/number of operations to be performed for a particular skill where as. Operation sheet consists of procedures to be followed for a particular task or specific operation of a skill.

Check Sheet: (Prejob & final)

Check sheet is a document, used for:

- Collecting data, used to reduce failure,
- Safety to ensure critical items that are not forgotten. It is a document typically
- Present in blank form that is designed for the quick, easy, and efficient recording of the desired information,
- Which can be either quantitative or qualitative. When the information is quantitative,
- The check sheet is sometimes called a tally sheet.
- Two types of pre-job check sheet and final job check sheet are used to list the important relevant actions, or steps to be taken in a specific order.

Progress Chart:

Formative information prepared for a teacher or a student which shows the progress of their tasks completed or yet to complete to which progress of teaching learning activities are shown Student's progress can be tracked by their monthly marks statement.

Characteristics of instructional materials

The desirable characteristics of instructional materials are:

- a To give accurate information and direction;
- To be written in simple language to be understandable by all;
- c Tequenced correctly in a step-by-step procedure;
- d Provided to which learning from simple to complex can be done.
- e To stimulate thinking and help learning;
- f Provided to clearly state objectives;
- g Provided for self tests and criterion tests to check learning and attainment of objectives;
- h Provided as references for further study; and
- i Guides to adopt safe working habits

Points to be kept in mind while preparing instructional materials

Following points may be kept in view by instructors during the preparation of written instructional materials:

- a Use simple, direct, and easily understandable language;
- Supplement written information should be given with many sketches as would help the trainee grasp the information with clarity;
- c Using impressive layout;
- d Giving specific guidelines wherever necessary;
- e Do not give a volume of information, rather limit the contents that are absolutely essential;
- f Provide questions that lead to the attainment of objectives;
- $g\quad \hbox{Follow syllabus, and titles that will cover the syllabus;}$
- h Provide references for additional study if required;
- Provide the specific objectives or learning outcomes in clear terms, to enable the trainees to know what exactly is expected of them at the end of each learning task.

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- The instructional materials should be prepared keeping in mind, considering the standard of the trainees/learners.
- The objectives are to be easily identified and should be expressed in simple clear terms.
- The selected topics should directly be related to the knowledge of trainees and the skills of trainees, should be inter-related/integrated with knowledge.
- The principles of learning related to Pedagogy and Andragogy.
- Topics should be organized and sequenced to support need of the trainee in the following manner.
- Pre-requisite skills and knowledge should be introduced in advance. Those are combined with subsequent items and applied.
- Knowledge and skill are attained through a series of information and task of gradually increasing difficulty.
- Skill and knowledge acquired in one task are immediately used as an exercise and assignment.

- Methodology: Self learning (programmed learning exercise sheet etc).
- Presentation time: An important factor over looked by the trainer/instructor.
- Validation of instructional materials.
- Reshape if needed after summative and formative evaluation.
- Formative W.I.M. must have the following qualities.
- Description should be free from errors of grammer, spelling and typography.
- Sentence structure and picture should be clear, simple, concise and straight forward.
- Aim of the instruction on information/sentences should communicate the instructional goals completely.
- Use of punctuation abbreviations and hyphens should be correct.
- Ambiguity should be avoided in statement and it should be clear and straight forward.

	Lesson Plan			
Trade:			Module/Unit:	
Date:			Time:	
Les	Lesson No:			
I	PREPARATION:			
Titl	le:			
1	Objectives: At the end of the	lesson the trainee shall be able to		
	1			
	2			
	3			
	4			
2	Teaching Aids:			
3	Introduction			
	a Review:			
	b Motivation:			
II	PRESENTATION:			
	Developments /Topics	Information Points	Hints	

Developments /Topics	Information Points	Hints

Developments / Topics	Information Points	Hints
III APPLICATION:		
Summary:		
IV. TEST:		
Assignment:		
Reference:		
Next Lesson:		

Demonstration Plan

Trade:		Мос	dule/Unit:	
Dat	te:	Tim	e:	
Dei	Demo No:			
1	PREPARATION:			
Ski	II:			
1	Objectives: At the end of this demonstration, the trainee shall be able to			
	1			
	2			
	3			
	4			
2	Tools & Other requirements:			
3	Introduction:			
	a Review:			
	b Motivation :			
II	PRESENTATION:			
	Procedure	Information Points / Safety Precautions	Hints	

Procedure	Information Points / Safety Precautions	Hints	

Procedure	Information Points / Safety Precautions	Hints
II APPLICATION:		
Summary:		
V TEST:		
Assignment:		
Reference:		
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Operation sheet				
Trade			Semester	
Week No	Skill No	Time	Required	
Title:	Title:			
Objectives: At the end of this of	demonstration, the trainee shall be ab	le to		
A				
В				
C				
D				
Introduction				
•				