Principles of Teaching NSQF and Analysis of Syllabus

Theory 3.3

Analysing the Syllabus - Break up of syllabus and schedule of instruction with time duration

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

- · define syllabus
- · state necessity of analysing syllabus
- · explain the steps involved in analysation of syllabus
- · brief the methods of syllabus analysing
- state the advantage of syllabus analysation
- · steps in breaking up of syllabus
- prepare schedule of instruction with the duration.

Syllabus

A syllabus is usually no more than list of topics to be covered in a course.

There is an unlimited area of work woven around every trade. To determine the objective of trade training depends upon the

- need
- time
- facilities available

An outline of the course called 'syllabus' to be prepared in consolation with the trade experts for the development of specific knowledge and skills required by an occupation.

The outline of the course are divided in to three parts

First part

Trainee should deal with a fundamental training course covering generally the one - sixth of the total training period.

Second part

Trainee should acquiring of an adequate degree of skills, covering generally two thirds of the total training period.

· Third part

Should deal with the intensive aspects of the practical training. On completion of the extensive practical training course in the training centers, under close guidance and should under the supervision of the trainees. This should cover one sixth period of training.

Syllabus is directly responsible for bringing the objectives of the curriculum in to action.

Curriculum: Curriculum is defined as the course of study offered by an institution. It systematically describes the goals planned, objectives, and content, learning activities for a specific timeframe, place tools, and evaluation procedures. Curriculum is planned in terms of a framework of theory and research or past and present professional practice.

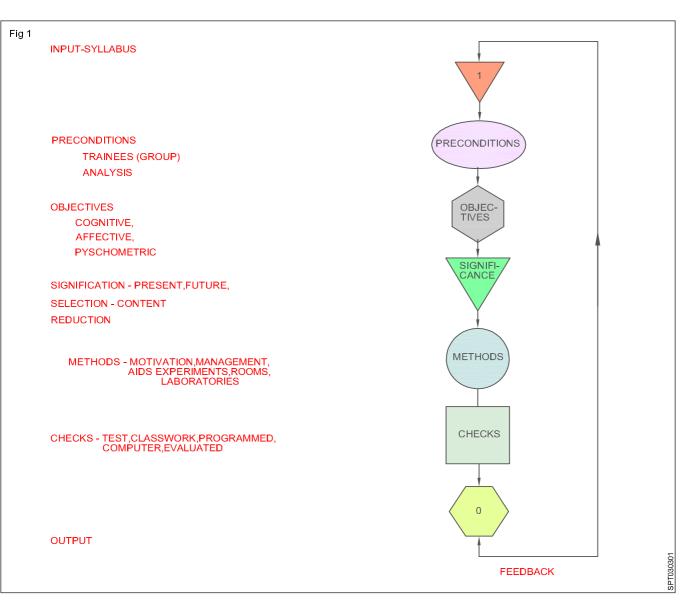
Curriculum covers all the activities and arrangements made by the institution throughout the academic year to facilitate the learners and the instruction.

Necessity of analyzing syllabus

- To weed out unnecessary information.
- To concentrate on the essentials of the job.
- · To teach from simple to complex.
- To prepare instructional material
- To teach in a logical instructional sequence

Syllabus Analysis: Analyzing a syllabus is important in order to find out the sequence of topics to know what to teach, when to teach and how much to teach. If an instructor begins her teaching after analyzing the syllabus, the training programme can be imparted effectively without any confusion.

The given model (Fig 1) indicates that for a INPUTsyllabus for any course the trainees are to be defined with concrete analysis of the pre-requisites for the trainees; the objectives are to be stated with all clarity, objectivity and explicitly with sufficient enumeration on how much knowledge attitude and skills are to be involved; the appropriate values of the topics in the syllabus which have significance both for the present and future. This particular factor alone would guide for selection of the contents and help in the reduction of such topics found to be unproductive. Such selection of contents would necessarily lead the instructor to the selection of methods and media for the topics to be delay in. The tested and test results would then eventually indicate the effectiveness of the syllabus. The feedback information would thus be organised for follow-up actions to be taken for revision / the syllabus, if necessary.



The instructor should be critical in analysing the syllabus and thus take into account these factors and bear in the mind that anything that can be taught and can be learned, can also be broken down into elements so that instruction can start from the simple or easy and gradually develop and progress to the complex or difficult. Anything, we observe as a whole and complete is composed of small parts and are built up or developed to become the whole or complete. Similarly in the training of craftsmen and the development of complex skills it is essential that the skills are broken down so that learning can start from the simple and easy skills and progress towards the more difficult and complex ones. This is the only logical and correct method of imparting training. The process of breaking down the skills of the trade to enable to obtain a satisfactory sequence for instructional purpose is called analysis.

Method of syllabus analysation

There are many methods of analysing the syllabus. The major and vital consideration in selecting the method being the purpose for which training is organised.

A Job analysis method

If we are training for the satisfactory performance of specific job or if we are imparting on the job, the job analysis method would be a suitable one. By a proper breaking down the job into their different elements which are also called skills or operations and re-arranging the jobs in accordance with the order of difficulty from simple to difficult, an instructional sequence could be obtained. This would be satisfactory starting point. Job here means a completed piece of work (or) work-job as against job for which we get paid or payroll job.

B Skill analysis method

Another method would be to list all the skills or operations in which proficiency is desired and again re-arrange them according to the order of difficulty and also according to the order of applications. Then select and decide activities or experiences to develop the skills in the order. In any method it has to be borne in mind that it is not the job that is important but the skill developments in the learner. What the job does to the learner is more important that what the learner does to the job.

For analyzing a given syllabus, following steps are to be followed:

- · Study and understanding the syllabus
- Prepare a list of all basic and advanced skill of the trade
- Prepare a list of theoretical and practical job to be completed during the course
- Arrange the topics from simple to complex dividing into modules and units
- Calculate time required to complete the syllabus in hours
- Distribute hours for each activity depending upon its complexity
- · Prepare master schedule
- Prepare time table, monthly schedule and weekly schedule
- Prepare instructional material for each lesson

Advantages of syllabus analysis:

- After analyzing the syllabus, Instructor understands what exactly has to teach, collect proper information and prepare well.
- Training materials can be prepared well in advance.
- Training programme will be completed within the prescribed time.
- Learners can be aware about the teaching activity and get confidence.
- It helps to maintain logical and psychological sequence.
- The teaching activity proceeds in a definite direction.
- It assists in achieving the aim and objectives of the course.
- The success of a training programme is assured.

Break up of syllabus and schedule of instruction with time duration.

Break up syllabus is forming the modules with relevant group of skills /area with time duration after analysing the syllabus.

Schedule of instruction is to provide a planned schedule for the various day to day instructional activities depending on the requirement of the practical exercises to be done as per trade practical book.

This schedule is prepared for 26 weeks each week consisting of 5 actual working days.

In order to develop the occupation specific professional competencies of the learners, the instructor has to impart the theoretical knowledge required to perform the set of skills in the particular trade. For this purpose, the instructor has to analyse the syllabus and prepare the list of graded exercises with different complexity levels in a simple to complex skill sequence.

With the split up of syllabus the instructor has to prepare the topics arranged in an order to implement with appropriate date and time allotment for lessons and demonstrations.

The pictorial representation shown in Fig 2 depicts the step by step activities required to be taken by the instructor to prepare the information sheet, select or prepare the appropriate teaching aids to accompany the lesson plan.

For example the trade syllabus of Electrician (table 1) 1st semester (NSQF-5) consist of 14 exercise for week no 1,2, & 3 under safety practice - hand tools module (75 hrs) for that the schedule of instruction is prepared and shown in the table 2 (for 1st week).

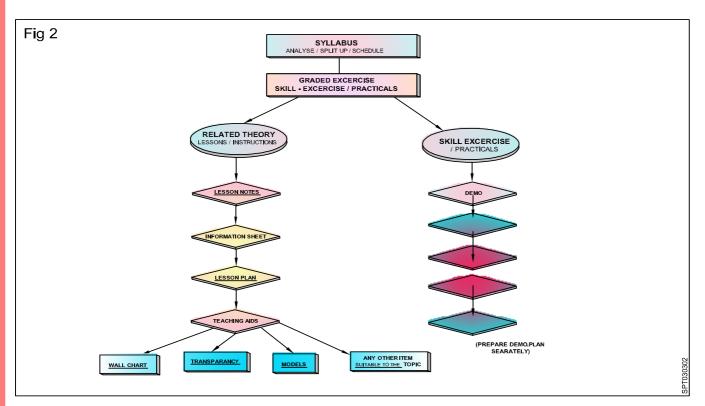


Table 1

SYLLABUS FOR ELECTRICIAN TRADE									
FIRST SEMESTER – 06 Months									
Week No.	Reference Learning outcome	Professional Skills (Trade Practical) With Indicative Hours	Professional Knowledge (Trade Theory)						
1	Apply safe working practices	 Visit various sections of the institutes and location of electrical installations. (05 hrs) Identify safety symbols and hazards. (05 Hrs) Preventive measures for electrical accidents and practice steps to be taken in such accidents.(05 hrs) Practice safe methods of fire fighting in case of electrical fire. (05 hrs) 	Scope of the electrician trade. Safety rules and safety signs. Types and working of fire extinguishers.						
		5 Use of fire extinguishers. (05 Hrs)							
2	 Apply safe working practices Comply environment regulation and house- keeping 	6 Practice elementary first aid. (05 hrs) 7 Rescue a person and practice artificial respiration. (05 hrs) 8 Disposal procedure of waste materials.(05 Hrs) 9 Use of personal protective equipments.(05 hrs) 10 Practice on cleanliness and procedure to maintain it. (05 hrs)	First aid safety practice. Hazard identification and prevention. Personal safety and factory safety. Response to emergencies e.g. power failure, system failure and fire etc.						
3		11 Identify trade tools and machineries. (10 Hrs) 12 Practice safe methods of lifting and handling of tools & equipment. (05 Hrs) 13 Select proper tools for operation and precautions in operation. (05 Hrs) 14 Care & maintenance of trade	Concept of Standards and advantages of BIS/ISI. Trade tools specifications. Introduction to National Electrical Code-2011.						

Semester: 1 Table 2 Trade: Electrician

Week No.: 1 Safety Practice and Hand Tools

Week No : 1 SCHEDULE OF INSTRUCTION Safety Practice and Hand Name of the Instructor :

		SCHEDULE OF INST	me of the Instructor:		
Date/ Hrs	Exercise No. & name	Demonstration	Shop talk	Classroom lessons	Remarks
5	Ex.No.1.1.01 visit various section of the institutes and locations of electrical installations	Arrange the visit to the various section of workshop, classrooms. Instruct and guide the trainees to prepare and draw the layout of electrician section including switches etc.	Introduction to skill/ vocational scheme Introduce to structure of organisation/ITI Preparation of layput	Organisation of ITI's	R.T 1.1.01
5	Ex.No.1.1.02 identify safety symbols and hazards	Explain the road safety, traffic police signal. Show the safety sign chart and explain the type and uses of signs.	Brief about road safety Accident - causes - necessity of signs	Safety rules Safety practice	R.T 1.1.02
5	Ex.No. 1.1.03 Preventive measure for electrical accidents and practice steps to be taken in such accident	Rescue victim from electric contact. Prepare the victim for artificial respiration.	Necessity of first aid application of each method. Effect of cardiac arrest and treatment. Treatment for bleeding	Basic first - aid treatment	R.T 1.1.03
	Hrs 5	Fig. 1.00 Section of the institutes and locations of electrical installations 5 Ex.No.1.1.02 identify safety symbols and hazards 5 Ex.No. 1.1.03 Preventive measure for electrical accidents and practice steps to be taken in	Date/ Hrs No. & name 5 Ex.No.1.1.01 visit various section of the institutes and locations of electrical installations 5 Ex.No.1.1.02 identify safety symbols and hazards 5 Ex.No. 1.1.03 Preventive measure for electrical accidents and practice steps to be taken in	Date/ Hrs Exercise No. & name Demonstration Shop talk	Date/ Hrs Exercise No. & name Demonstration Shop talk Classroom lessons

Week No : 1 Trade : Electrician

Safety Practice and Hand Yools

Day	Date/ Hrs	Exercise No. & name	Demonstration	Shop talk	Classroom lessons	Remarks
4	5	Ex.No.1.1.04 Practice safe methods of fire fighting in case of electrical life.	Operate the fire extinguisher	Classification of fires fire extinguisher. Types of extinguisher for electrical fires.	Safety practice extinguisher	R.T 1.1.04
5	5	Ex.No. 1.1.05 Use of fire extinguisher	Selection of fire extinguisher Operation of fire extinguisher extinguishing the fire	Types of extinguisher for various types of fire	Method of using various types of fire extinguisher	R.T. 1.1.05