
UNIT 1 TRAINING METHODS AND TOOLS

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1.1 INTRODUCTION

Organizations and trainers the world over have intensively explored ways and means to improve training methods. A trainer may use a range of training methods to provide variety in the delivery of training, sustain the interest of participants, and maintain the momentum of the training process. There are several training methods and no single method is inherently better than the other. Hence, a combination of methods is used, depending on the subject, time, resources, and type of participants.

After studying this unit, you should be able to:

- Explain the factors that determine selection of training methods.
- Discuss various training methods.
- Describe various types of training aids.

1.2 TRAINING METHODS

As in the teaching, in training programmes the trainers use different training methods, including the lecture method. There are a number of training methods which have different contextual applications. Some of the methods are discussed below.

1.2.1 Lecture

All of you might have been taught by the lecture method when you were at school / college. This is the classical methods of training. From ancient times, gurus and the sanyasis have used this method to teach their disciples. In this methodology, the trainer delivers lectures on various aspects of a subject that he wants the trainees to learn. He may also lecture about the uses, the merits, and demerits of the subject. A lecture is a method of describing conceptual knowledge. The trainer or the faculty plays the active role, while the trainees play a passive one. The trainees are assumed to be a homogenous group.

Advantages

- 1) A formal lecture helps in the building up of theoretical knowledge which can be used as a base for the participative training sessions and learning of motor or verbal skills.
- 2) It is direct. The learner learns the material directly from the instructor. Hence, there is less time consumed in search for the knowledge and also less distortion.
- 3) One important advantage of the lecture method is that a relatively large number of people can be instructed at one time. There is no other method that can be used to instruct 50-100, or more, trainees.
- 4) A lecture can deal with more facts, principles, and concepts in a shorter time than it would take to teach the same material in a conference, case study, or other group method.
- 5) If teaching resources are scarce, then the lecture method is the best.

Disadvantages

- 1) The most obvious disadvantage of the method is that there is a minimum of active involvement of the trainees. This, consequently, leads to less motivation. Moreover, the monologue may become dull after some time. Therefore, the lecture method cannot be used to teach skills which may require hands on practice.
- 2) It has a limited value in promoting behavioural or attitudinal changes. It is very difficult to convince anyone by merely talking to them; attitudes change when people convince themselves. Participative methods are better for such purposes.
- 3) The main disadvantage of the lecture comes from the fact that it is one way communication. Therefore, there is little opportunity to clarify meaning, to check on whether or not the trainees really understand what is being presented.
- 4) There is little scope for practice, reinforcement, or knowledge of results.
- 5) It has limited usefulness in teaching employees who cannot grasp verbal presentations.

1.2.2 Discussion Method

This is an intensive participation oriented methodology. The learning through this methodology is through discussions on a subject. Discussions involve the exchange of ideas between the trainees and trainers and, also, among the trainees themselves. It is a dynamic methodology. There is a possibility of participation by each and every member of the group. The participants who actively participate are trying to contribute to the ongoing discussion which may be an individualized one or a group discussion. Both methods are useful, but group discussions are more systematic and forceful in making the trainees learn more and more. In the discussion method, trainees can assume different roles such as a chairperson, a reporter, etc., and this makes the discussion methods livelier. The participants

are encouraged to express and exchange their ideas with others. The learning process is made simple and suits the mature adult minds. The participants bring out their real life and actual experiences during the discussion. These are useful for the other participants and for the trainer, too. The solutions and decisions made after the discussions can be useful in practical life. It should be understood by the trainees that discussion in a training situation is not a debate, a talk, or an argument. It is purpose oriented and focused on a specific topic.

Advantages of the discussion method

- 1) It is a participation oriented method and goes very well with the trainees irrespective of their age and designation.
- 2) In discussions, there is an exchange of ideas and experiences among participants. Therefore, synergy takes place and powerful ideas and solutions emerge.
- 3) It is a self learning methodology, and participants need not depend solely upon the trainers for learning. The learning is spontaneous and almost automatic.
- 4) The trainees get on-the-spot feedback from the co-trainees about their opinions and experiences.

Disadvantages

- 1) It is time consuming because, sometimes, everyone wants to add to the discussion.
- 2) Often, the discussions are side tracked from the main objective.
- 3) Some trainees may dominate the discussion, while others are silent throughout a discussion.
- 4) The outcome and decisions of discussions may be controversial and there are no solutions even after prolonged individual or group discussions.

1.2.3 Syndicate Method

The Administrative Staff College at Henley-on-Thames and at Hyderabad have contributed to this method. The Staff Colleges in India and abroad follow the syndicate method in their training and allied programmes. It is a widely known and popular method applicable to all groups of trainees, especially in giving training to supervisors, managers, and executives.

In this method, the trainees are divided into sub groups, called as syndicates and each syndicate has to work on various subjects. The syndicates discuss the issues related to the subject and prepare a report. A syndicate can be formed for any topic. The topic could be one that involves all the departments in an organization, and the members of the syndicate are selected from a cross-section of organizations. The syndicate has to complete the task assigned within a specified date and time.

The nominations of office bearers of these syndicates are by rotation, and so, everyone gets a chance. In some cases, resource persons and facilitators are appointed to keep in touch with the group and to motivate them to achieve the

assigned task. Expert lectures and guidance are arranged from external resources wherever necessary.

A trainer provides each syndicate with a carefully prepared document stating the issues and problems to be discussed by the syndicate. This is the base paper for the discussion. The papers prepared by the syndicates are circulated among all the syndicates for evaluation, critical remarks and suggestions.

Towards the end of the session, each syndicate presents their paper in a final form and this is followed by elaborate discussions with the groups. The chairperson of each syndicate presents the paper, and the other syndicate members answer the queries and doubts of the other trainees in the group.

Advantages of the syndicate method

- 1) All the participants are actively involved in the syndicate sessions.
- 2) It cultivates leadership qualities since the leadership roles – president, secretary, etc. - are filled by rotation.
- 3) It is a self learning and development process because each of the syndicate members comes out with his knowledge, experiences, and skills.
- 4) Generally, the issue is discussed in detail and the trainees look at the problem from many angles – production, marketing, finance, personnel, etc.
- 5) The syndicates are formed for certain definite purpose. The group's cohesiveness is enhanced along with competitiveness and conflicting interests. The existence of the syndicate is for some fixed duration and there is consistent interaction and understanding between trainees.

Disadvantages of the syndicate method

- 1) If the syndicate consists of members with wider interests and views, there may be disagreements on the issue till the end.
- 2) The syndicates should be carefully structured by the trainer. Hurriedly structured syndicates do not contribute anything.
- 3) There is no guarantee that every member of a syndicate will participate in the process of learning. The participation of members may be lopsided.

1.2.4 Seminars

Seminars are short term training programmes arranged for a few days – a day or two or maximum three days. Seminars are convened to have in-depth discussion on a subject from various viewpoints. In seminars, there are presentations of papers by various authors followed by discussions, questions, and answers. Trainees participate in discussions that broaden their knowledge and outlook. At the end of the session, the participants can come out with recommendations.

Advantages of seminars

- 1) This method helps participants to obtain the views, opinions, research finding, etc. of the experts through the papers presented by them. The method is faster than gathering knowledge by reading books and holding discussions.

- 2) Some seminars are forceful and thought provoking. They enable the participants to see different points of view, attitudes, and opinions.
- 3) In seminars, the trainees are given the opportunity to listen to experts from different fields who share their views on specific issues.

Disadvantages of seminars

- 1) If the audience for the seminar is too big, Individual attention, as in training situations, is not possible.
- 2) Many seminars have just become rituals without anyone giving much thought to the issues. As a result, no purpose is achieved by convening seminars. Interactions between participants are very limited.

1.2.5 Conference

Conferences are suited to executives and senior officers who are dealing with a complex problem which requires contributions from senior officers for a resolution. The issues and the subject matters of the conference are intimated to the delegates and participants well in advance, and they prepare the papers and related materials for the conference. The delegates present the papers and explain the various aspects of the problem. At the end of the conference, suggestions and recommendations are made, based on the deliberations and discussions. All the members in a conference are expected to have more or less equal knowledge.

Advantages of conferences

This method suits bigger groups and participants benefit from listening to senior speakers. They are induced to think over the problems, issues and solutions.

Disadvantages of conferences

The disadvantage of this method is that it is less participatory and the trainees are inactive during the programmes. It is difficult to determine whether the trainees learnt anything or not.

1.2.6 Symposium

Symposium is a Greek word and it denotes 'a drinking party' or 'a feast'. In earlier times, scholars engaged in philosophical and scientific discussions that were a feast for the intelligent. In a symposium, a particular subject is discussed widely and deeply from the viewpoint of several well-versed authors. The speakers are of approximately equal ability, to avoid one speaker dominating the meeting. The participation of the trainees is more rigorous and learning more thorough.

Advantages of a symposium

The main advantage of this method is the active thinking and participation by participants.

Disadvantages of a symposium

The disadvantage is that a lot of controversy and confusion in thinking may result in futile endeavour.

1.2.7 Role Play

The role play technique is highly participative. Every trainee is involved and absorbed in the session. In this method, some of the trainees assume the role of various characters and enact real life situations, as is done in a drama form. After the acting is over, there is discussion about the roles and functions; strong and weak points; merits and demerits of the situation; commissions and omissions of the characters; applications and criticisms of the roles; causes of the situations; decisions and solutions about the happenings and the final conclusions.

The role play technique is based on human interactions, individual and group, behavioural and psychodynamics, communication process, perception differences, imagination, creative abilities and judgment. The role play session should be carefully designed by the trainer. The trainer should not overdo or exaggerate in the role play.

a) Why Role Play?

- i) To promote understanding about the situation;
- ii) To develop empathy; and
- iii) Self perception is useful in helping individuals develop the art of interpersonal relationship.

The role play may cover the ordinary issues such as

- a) difference in receiving a trainee warmly with a smile and handshake and in receiving a trainee without such warm gestures;
- b) covering decision making situation, like a business meeting about the short fall in sales involving characters such as a general manager, sales manager, production manager, financial manager, etc.; or
- c) about a sensitive problem regarding persistent tardiness of an employee by a manager.

b) Types of Role Play

Role play can be broadly classified into three categories.

- i) Structured / Rehearsed Role Play.
 - ii) Unstructured / Spontaneous Role Play.
 - iii) Controlled and directed Role Play.
- i) **Rehearsed / Structured / Schemed Role Play:** without any scripts, the participants are told in advance about what action, attitude and behaviour each character should act out. It is a lively visual aid used to portray varying situations in the work field.
 - ii) **Unstructured / Spontaneous Role Play:** participants are involved in the role play without any brief or preparation. They act out according to their mind, attitudes, and styles. In many situations, the organization or departmental culture in which the trainees work reflects in their speech, gestures, and action. Even the trainers are curious to know about the outcome of this type of role play. It is a democratic type of role play.
 - iii) **Controlled and Directed Role Play:** The trainer gives directions to the participants of role play along with the script. The characters have no

choice or freedom except to act according to the wishes of the trainers. They have to memorize the script and present it before the audience. It is an effective tool for the trainer to present to the audience what he wants to say and the topics which he wants to cover.

Advantages of Role Play

- i) The trainees have a feel of a real work life situation. The role play bridges the gap between theory and practice.
- ii) Trainees have opportunities to develop skills in communication, interpersonal relationships, decision making, observation, etc., through this methodology.
- iii) Since it is an active methodology, and can be utilized by trainers during a post lunch session when the trainees feel drowsy and dull. This methodology relieves the monotony and dullness of the participants in hearing continuous lectures, or doing continuous practical exercises.
- iv) Spontaneous role play helps the trainees to think and analyze the situation independently and logically.
- v) There are many constructive criticisms and suggestion which serve as an eye opener for other participants and trainers.

Disadvantages of Role Play

The main disadvantage of role play is that it is time consuming and well experienced trainers are needed to conduct role play sessions.

1.2.8 Case Study

This method has been introduced by the Harvard Business School and widely used by many of the management institutes in India and abroad. Indian Institute of Management, Ahmadabad and Asian Institute of Management, Manila are the institutes that have adopted and extensively used the case study method. The case study methodology, when utilized, develops the analytical and decision making skills of the participants. The group processes e.g. positive meaningful interactions, two-way communication, give and take policy; mutual adjustments are observed spontaneously during the case study method.

The case that is under study could be about a success or a failure of an organization. The study is supported by adequate data and incidents. The case could be prepared on a single event or it may be about interrelated functions of some departments.

Some training experts divided case studies into the following two major headings.

- 1) Cases which require diagnosis by the trainees.
- 2) Cases which require solutions to certain problems.

Normally the trainees have to diagnose, as well as, provide solutions to the problems.

Some authors classify the cases under the following four types.

- i) The narrative type, which gives the details of the situation and the problems.
- ii) The story type, which gives the case in a story form.

- iii) The document type, collected from various files and documents.
- iv) The hybrid type, the mixture of one or two types or all the combination of above mentioned types of cases.

While conducting the case study method, observations from the trainees are also posted.

Advantages

- i) It is a lively and interesting method. It keeps the participant vibrant and encourages participation in the learning process.
- ii) It develops the thinking, analyzing, and problem solving skills of the participants.
- iii) It relieves monotony of listening to continuous faculty lectures.
- iv) Since cases are made out of real life situations, it helps the participants to solve the problems by applying the learning gained during training.
- v) Relationship building skills are developed, co-operation and understanding is found among the trainees while diagnosing and solving the problems.

Disadvantages

- 2) It is a time consuming and may be cumbersome at times.
- 3) Lack of provision of adequate data and incidents may dilute the case study method.
- 4) There is a shortage of appropriate cases.
- 5) If the case studies are lengthy, the participants may lose their concentration.
- 6) It requires skill on the part of trainer.

1.2.9 Programmed Instruction (P.I)

This methodology helps the trainees to learn on their own and at their own pace. It is an innovative teaching method, introduced in recent years. Programmed learning is a self instructional learning and the course material is prepared or programmed in steps. The subject matter to be learnt is divided into small steps and the order or sequence to be followed by trainees is given. The trainees start learning from simple steps and progress towards more complex steps / instructions. The program is structured in such a way that the trainees will be able to know the results or correctness of his learning then and there. The answers are provided at the end of each step or programme. When a trainee commits errors, feedback on errors is provided. Each learner is able to work and learn according to his own speed, the programmes are released in the form of books, brochures, audio and video cassette, exercises etc. The people who design the programmes are called as programmers.

Advantages

- i) This method enables the trainees to learn at their own speed and convenience. They can study the programmes and learn at home. It is a self learning methodology.
- ii) A large number of people can learn through the programmed learning method without any geographical or distance barriers. Large amounts of information can be given in this method.

- iii) The infrastructural facilities such as a well developed faculty, class room, and audio visual aids are not needed.
- iv) This method is highly elastic and flexible. The same programme can be used for many batches of trainees, year after year, and it is easier to introduce modifications in the programmes.
- v) The trainees get the psychological satisfaction due to immediate feedback, self pacing, and individualized learning.

Disadvantages

- i) Writing the programme is tedious, time consuming, and needs greater care, concern, and analysis.
- ii) Learning through this method requires strong motivation on the part of the trainees to learn, but many trainees, especially workers and office goers, may not have enough time and motivation for self learning.
- iii) It is a highly structured routine methodology. Some people may resent directed learning.

Activity 1

Visit any nearby training institute / training department and discuss with the functionaries about common training methods they are using. Write your observations.

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In this section you read about several training methods. Now answer the questions given in *Check Your Progress – 1*.

Check Your Progress 1

Note: a) Write your answer in about 50 words.

b) Check your answer with possible answers given at the end of the unit.

- 1) Distinguish between the training methods that emphasize classroom training and the methods that are practical in approach.

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- 2) Define the following:
 - a) Case study.
 - b) Programmed Instruction.

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1.3 FACTORS DETERMINING SELECTION OF TRAINING METHODS

In the previous section, we discussed about the methods of training. Now, let us discuss the factors that influence training methods selection. Broadly, the factors influencing training methods selection are:

- Training objectives
- Subject matter
- Categories of participants, and
- Resource availability
- Time
- Location
- Budget
- Other considerations

1.3.1 Training Objectives

Training objectives specify the type of learning outcomes intended from the training programme. If the purpose of training is to increase knowledge, the training methods that allow you to present the concepts with examples in a logical sequence and review key points will be effective. The suitable methods for this purpose are listed below.

- 1) Reading assignment
 - 2) Lecture
 - 3) Audio and video tapes
 - 4) Case study
 - 5) Demonstration
 - 6) Group discussion
 - 7) Buzz session
 - 8) Brain storming
- 1) If the purpose of training is to help the trainees to acquire new skills, it is necessary to choose training methods that will help in acquiring and

practicing the skills, along with providing positive and negative feedback about achievement of the objective. The appropriate methods include the points that follow.

- 1) Demonstration
- 2) Role play
- 3) Video tapes
- 4) Structured exercise
- 5) Workshop

If the purpose of training is to change attitudes, i.e., to help the trainees to acquire new values, opinions, and benefits, the methods that follow will be useful.

- 1) Role play
- 2) Case study
- 3) Demonstration
- 4) Field visit
- 5) Film and video tapes
- 6) Structured games and exercises
- 7) Instrumented exercises

1.3.2 Subject Matter

The subject matter or contents have a bearing on the choice of training method. For example, if the contents of the training are related to theoretical or conceptual clarity, then it would be necessary to choose methods such as lecture, audio and video tapes, and reading assignments. Again, if the subject matter has got only one right answer which needs minimum debate, training method such as lecture, audio, or videotape will be sufficient. However, if subject matter includes a debatable outcome, then training methods, such as group discussion, workshops, and case study method, are relevant.

The choice of training method will also depend upon whether the training is intended to develop a general or specific level of knowledge and skill. For example, development of a general level knowledge on pest control may involve methods like lectures, videos, and discussion. However, development of a specific level skill and knowledge on integrated pest management, for example, may include the use of field level demonstrations along with on-the-job work experience.

1.3.3 Categories of Participants

A training method may vary according to the participants, learning style, their experience, and the size of the group

- a) **Learning Styles:** The following four different categories of learners need different types of orientation.
 - i) The accommodators like self- discovery methods, independent study, clinical experience, practical exercises, and interviewing.

- ii) The divergers will be interested in group activities, brain storming, role play, simulation, debate, and discussion methods.
- iii) The assimilators prefer theoretical analysis, lecture, conceptual papers, and abstract problem solving.
- iv) The convergers choice consists of methods such as demonstrations, problem based learning, laboratory, and practical exercises.

b) Learners’ Experience

An understanding of participants’ educational level, age, and level of involvement in fieldwork will help in choosing training methods. Participants with postgraduate qualifications may not be averse to the lecture method of self study through reading, for clarification of higher level concepts. However, if the participants have only school level education and are involved in fieldwork, the appropriate training methods would be demonstration and on-the-job training.

c) Size of Group

The size of the trainee group is one of the most important factors in deciding the training method. For example, if one has to use the simulation method, a minimum number of eight to ten participants will be required. A reasonable rule of thumb for optimum number of participants required for use of different training methods is given in Table-1.

Table-1: Training Methods and Optimum Number of Participants Needed

Sl. No	Training Methods	No. of participants
1	Lecture	10-40
2	Group discussion	3-10
3	Case study	3-20
4	Role play	5-15
5	Field visits	5-25
6	Seminars and syndicate	15-40
7	Demonstration	5-15
8	Simulation method	8-20
9	Structured experience	8-20
10	Instrumented exercise	8-15

1.3.4 Resource Availability

Availability of adequate resources to conduct a training programme must be considered while choosing training methods. The following questions should be answered before the selection of methods.

- i) Do the trainers have adequate skills on the methods being contemplated?
- ii) Do you have financial provision to employ external resource persons?

- iii) What are the facilities available with regard to use of demonstration, audio–visual aids, and other electronic media?
- iv) Does the location of training give scope for conducting simulation methods?
- v) What about the availability of commercial audio and video materials related to the subject matter of training in the market?
- vi) Do you have enough financial resources and time to develop new resources?

1.3.5 Time

In many cases, the participants have a limited number of days to be spent for the purpose of training. As a result, the trainers are forced to cover a number of topics within a short period available for training, which has an effect on the selection of training method. For example, the concept of motivation can be dealt through lecture method within one hour. However, to teach motivation through experimental exercises requires a minimum of six to eight hours. The optimum time needed to handle different training methods is given in Table-2.

Table-2: Time needed for using different Training Methods

Sl.No	Training Methods	Time needed (in hours)
1	Lecture	0.5 to 1.0
2	Seminar and syndicate	1.5 to 2.0
3	Demonstrations	0.5 to 1.0
4	Use of instrumented exercise	1.5 to 2.0
5	Group discussion	1.0 to 1.5
6	Case study	1.5 to 2.0
7	Simulation method	1.5 to 2.5
8	Structured experiences	1.5 to 2.0

1.3.6 Location

The location of the training programme has a definite bearing on the choice of training methods. Most training is held indoors with classroom facilities. However, the field-based training programmes may limit the use of facilities which are easily available in the classroom. Further, if the location of the training is far away from the training organization, it will be difficult to make use of those training facilities available within training organization.

1.3.7 Budget

If funds are not a constraint, one can choose a method appropriate to learning objectives. However, if sufficient funds are not available, one has to be content with the best alternative method, which will fit into budget provisions. Who will bear the training cost? Whether it is borne by the participants or by the training organization will also play a role in the choice of training methods. Participants who bear the expenses of the entire programme are likely to come with higher level of motivation and expectations. Such participants are likely to anticipate some visible results or impact through the programme, on their job performance. Those participants whose training cost is borne by the training organization and

are sent for training as a ritual or a routine matter, and they may not have a sufficiently high level of motivation for learning. Participatory training methodologies will be effective for this group of participants to enhance their motivation and participation.

Besides these factors, there are also other considerations which the trainer has to take into account while choosing methods of training.

1.3.8 Other Considerations

The selection of training method will also depend upon the decision of training to provide opportunities for practice, involvement and feedback. The scope of training methods with regard to involvement, opportunities, and feedback is given in Table-3.

Table-3: Trainees’ Involvement, Participation and Feedback under Different Methods of Training

Sl. No.	Training methods	Level of trainees involvement	Opportunity for practice	Feed back
1	Reading assignment	Very low	Very low	Very low
2	Lecture	Low	Very low	Low
3	Seminars and syndicate	Medium	Low	Medium
4	Demonstration	High	Low	Medium
5	Use of instrumented exercise	High	Low	High
6	Group discussion	Medium	Low	High
7	Case study	High	Medium	High
8	Simulation methods (role play in basket exercise and business games)	High	High	High
9	Structural experiences	Very High	High	High
10	T. Group/ laboratory method	Very High	Very High	Very High
11	On-the-job/ Field training	Very High	Very High	Very High

Activity 2

Visit a nearby training institute / training department and discuss with the functionaries the reasons for using different training methods. Write your observations with reasons.

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Training Method	Reasons for Using
Reading assignment	
Lecture	
Seminars and syndicate	
Demonstration	
Use of instrumented exercise	
Group discussion	
Case study	
Simulation methods (role play in basket exercise and business games)	
Structural experiences	
T. Group/ laboratory method	
On-the-job/ Field training	
Any Other	

In this section, you read about factors determining selection of a training method. Now answer the questions given in Check Your Progress – 2.

Check Your Progress 2

Note: a) Write your answer in about 50 words.

b) Check your answer with possible answers given at the end of the unit.

1) Outline the factors that determine the selection of training methods.

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1.4 TRAINING AIDS

Dear Learner,

In MDV-108 Block 2, we discussed ‘Extension Teaching Methods and Audio Visual Aids’ in the context of ‘Development Communication and Extension’. However, most of the extension teaching methods and audio visual aids can also be used as training aids. Please refer MDV-108 Block 2 for more detailed discussion on them.

In the previous sections you read about training methods and factors to be considered while selecting a training method. Now, let us discuss various training aids that make training effective.

The effectiveness of a trainer is determined by the degree and diversity of skill he or she has in communicating with the trainees. The trainer uses various aids to make his teaching and training effective. The training aids are supportive to learning. They should be carefully and selectively used and contextualized in order to make teaching learning effective. Nowadays, visual and audio-visual aids are extensively used in training programmes. Visual and audio aids offer the trainers unique opportunities to increase the effectiveness and clarity of ideas expressed to trainees. There is a saying that “the best way to a man’s heart is through his stomach but the best way to his brain is through his eyes and ears”. Therefore, use of visual and audio-visual aids in teaching and training programmes cannot be ignored.

For the proper selection of visual and audio-visual aids, the following points are important to be kept in mind.

- i) Decide what you want to say.
- ii) How important are visual and audio-visual aids for what you want to say.
- iii) Outline the subject matter, point by point.
- iv) Use visual and audio-visual aids prudently to delineate those points.
- v) Keep audio-visual aids ready before delivering the lecture.

The main principles in selecting visual and audio-visual aids are given below.

- i) **Who is your audience?** The following considerations have to be made while dealing with the nature of trainees:
 - a) Age level of the trainees.
 - b) Educational background of the trainees.
 - c) Experience of the trainees.
 - d) Inquisitiveness of the trainees.
 - e) Knowledge level of the trainees.
- ii) **The aid must be *easy to see*.** The size of visual and audio-visual must be of standard size and not too small. Besides, it must be placed in such a manner, so that it is visible to the entire audience. The trainees need to be seated in a way that the presentation is easily viewed..
- iii) **Easily Understandable:** The ideas expressed through the visual and audiovisual aids should be easily understandable by the trainees. The diagrams and pictures used in the visual must be clear and understandable.
- iv) **Easy to Handle:** The trainer must be trained in handling the audio-visual aids. Big and bulky teaching aids can be awkward to handle and difficult to transport.
- v) **Explain One Idea at a Time:** The visual and audio-visual aids used in explaining a subject matter, need to cover a single idea at a time. There may be more than one idea in a topic but a visual or audio-visual appearing in the screen must try to explain only one idea at a time. For various ideas, more than one visual aid may be used.
- vi) **Attractive and Clean:** To be effective, visual aids should be neat, clean, and colourful.

1.5 VISUAL AIDS

The following are some important visual aids.

- i) Blackboard
- ii) Charts
- iii) Flip Charts
- iv) Film Strips
- v) PowerPoint presentations
- vi) Overhead Projectors
- vii) Posters
- viii) Models

1.5.1 Blackboard

Blackboards are the most widely used teaching-training aids and are mostly used by trainers for writing down important points. It is either a black wooden board or a blackboard on the wall of the training hall. Different types of chalks are used for highlighting various points.

Some rules for the effective use of blackboard follow.

- i) Keep it clean and use clean dusters.
- ii) Make letters and drawings large enough so that they can be easily seen.
- iii) Do not stand in front of the board.

Advantages

- i) It is inexpensive and more durable than other visual aids.
- ii) It is easy to handle.
- iii) It creates interest among the trainees.

Limitations

- i) It is not suitable for illiterate learner.
- ii) Complex problems cannot be explained effectively.
- iii) It is not suitable for a large audience.

1.5.2 Charts

According to Dale (1954), a chart is “a visual symbol summarizing or comparing or contrasting or performing other helpful services in explaining subject matter”.

Charts are of the following types.

- 1) Table Charts: presents information in ordinary sequences.
- 2) Tree Chart: highlights the development or growth of a thing.
- 3) Flow Charts: lines, arrows, rectangles, etc. depict the organization, or structure of an organization, institutions, etc.
- 4) ISO type Chart: a pictorial representation of statistics.

- 5) Pie Chart: a pie or a circle is divided into segments, each representing a percentage of the whole.

The following points should be considered while using charts as aids in a teaching method.

- i) Large, short, and neat heading.
- ii) Complete and simple idea.
- iii) Related to topic or comparison of two ideas.
- iv) Support by other related aids.
- v) Large enough to suit the size of the class.

Advantages

- i) It is inexpensive and more durable than other visual aids.
- ii) It is easy to handle.
- iii) It creates interest among the trainees.

Limitation

- i) It is not suitable for large audience.
- ii) It is more time consuming.
- iii) Complex problems cannot be explained easily.

1.5.3 Flip Charts

Flip charts are a set of charts, where the pictorials are sequentially displayed to explain a particular subject matter. While preparing a flip chart, the trainer has to keep following points in mind.

- i) The pictures and graphs should be clearly drawn.
- ii) The sequence must be properly maintained.
- iii) The main outcome of the chart must be written on the bottom.
- iv) Chart paper must be used.

Advantages

- i) It is inexpensive and more durable than other visual aids.
- ii) It is easy to handle.
- iii) It creates interest among the trainees.

Limitation

- i) It is not suitable for large audience.
- ii) It is more time consuming.
- iii) Complex problems cannot be explained easily.

1.5.4 Filmstrips

A filmstrip is a series of still photographs, diagrams, drawing or letterings on a strip of 35 mm film. Perforated edges of the film fit over projector sprockets. Once adjusted to project, the first frame, each succeeding image will be in focus and in proper position on the screen. When audience participation is placed, projection can be placed at a speed suitable to the trainers as well as to the

trainees. From the 1940s to 1980s, filmstrips provided an easy and inexpensive alternative to 16mm projector educational films, requiring very little storage space and being very quick to rewind for the next use. Filmstrips were once commonly used by educators but now they have been overtaken by newer and increasingly lower-cost full-motion videocassettes and DVDs.

Advantages

- i) Filmstrips are light, easily stored and condense and give much information in a small package.
- ii) Film strips and filmstrip projectors are less costly than film projector.
- iii) It makes teaching-training interesting.
- iv) Most suitable for illiterate audience.
- v) It is suitable for large audience.

Limitation

- i) Costlier than visual aids like posters, charts, etc.
- ii) Preparation of filmstrip requires technical skill.
- iii) It depends on availability of electricity and, in case of load shedding, the method fails.

1.5.5 PowerPoint Presentations

Today, a number of training centres use PowerPoint presentations. At the outset, slides are prepared on a computer and then displayed to an audience. Some of the points which must be kept in mind while preparing PowerPoint presentations follow.

- i) The slides need to be properly prepared in sequence.
- ii) In case of power cut or computer trouble as a backup, the trainer must have lecture notes.
- iii) Rehearsal of presentation is a must in order to identify and rectify any errors.

Advantages

- i) The method is quite useful for large audience.
- ii) The method is interesting and more subject-matter can be covered in a shorter time.
- iii) Case studies pictorial can be scanned and shown on a PowerPoint presentation.

Limitation

- i) It is more expensive than some other visual aids.
- ii) It is less suitable for illiterate learner.
- iii) It requires skill trainer having knowledge on power point presentation.

1.5.6 Overhead Projector (OHP)

Transparencies on a subject are prepared and displayed to participants through the overhead projectors. Some of the guidelines to be kept in mind while using OHP follow.

- i) The OHP need to be kept in a proper distance from the projecting screen and must not have any technical fault.
- ii) Transparencies should be carefully prepared and a transparency must not contain more than 20 to 25 words.
- iii) The word used in the transparency must be large so that it can be clearly visible to all participants.
- iv) Separate transparencies need to be used for graphs and pictures.

Advantages

- i) It makes teaching-training interesting.
- ii) It enables trainers to impart more focused training.
- iii) If presented properly, it makes teaching-training more systematic.

Limitation

- i) It is not suitable for illiterate participants.
- ii) It requires a trainer who is trained to use OHP equipment.
- iii) It is costly as compared to other visual aids.

1.5.7 Posters

Posters are an important visual aid for teaching and training. Although through posters, it is not possible to educate all aspects of a subject-matter, yet it can stimulate and enthuse participants to learn about an idea and to get more and more information about the idea. The trainer must collect posters on a subject matter from different places about different ideas and display it before trainees in the teaching training programme. Some of the guidelines for the effective use of posters are given below.

- i) One poster should convey one single idea.
- ii) The poster should be clear, colourful and attractive.
- iii) The posters must be more pictorial and with less words.
- iv) Appropriate use of poster can make teaching training effective.
- v) Posters should be hung in places so that they are visible to the target audience.
- vi) After use, the posters should be properly folded and kept in IEC (Information, Education, and Communication) room.

Advantages

- i) It makes teaching training interesting.
- ii) It is appropriate for illiterate trainees and trainees with a low level of literacy.
- iii) It reduces monotony in teaching-training programmes.

Limitation

- i) It is more expensive than other visual training methods like charts, blackboard, etc.
- ii) It is difficult to get pictures for all issues in a subject matter.
- iii) A complex issue cannot be explained through poster.

1.5.8 Models

Models are prepared in different materials on specific aspects of a subject. It is used particularly in teaching science topics. Teaching-training through models makes it interesting and practical.

Advantages

- i) It makes teaching-training interesting and learner centred.
- ii) It is useful for illiterate and less literate learners.
- iii) It makes learning more practical.

Limitation

- i) It is costly.
- ii) It is not always easy to get model for all topics.

1.6 AUDIO AIDS

The record player, tape recorder, CD, MP3 and DVD players and radio are some of the commonly used audio aids. These methods are usually not used in classroom situation. Trainees are asked to listen to radio programmes related to a specific subject being broadcast either on the national or regional channels.

Some aspects required to be given considerations are:

- i) Encourage the trainees to listen to the radio programme regularly on the subject.
- ii) Encourage them to correspond with the broadcasting station and express their views, needs and opinions.
- iii) Supply trainees with cassettes and encourage them to listen by using their cassette players.

Advantages

- i) The learning is reinforced.
- ii) Talks by specialists serve the educational purposes.

Limitation

- i) Many people lack radio set.
- ii) The audio players may not be available with all trainees.
- iii) The audio quality is not always good.

1.7 AUDIO-VISUAL AIDS

An old Chinese proverb says, “If I hear, I forget; if I see, I remember; if I do, I know”. This proverb amply supports the belief that hearing alone is not enough in the learning process. One must see and do, along with the hearing in order to gain understanding. In recent years, television is widely used in the teaching-training programme. The Educational Television (ETV) has made teaching-training interesting and learner-centred. Kinder (1959) aptly remarked, “Television has literally captured the country. Its expansion has been much more dramatic than that of radio or the automobile. It has become an important part of our way

of life, so much so that it is difficult to say whether it is a luxury or a necessity.” Besides, its use in the class-room situation, the broadcasting of group-discussion, talks and panel discussions on different subject-matters has re-enforced learning. Crassiner (1960) said that when television lessons are presented with imagination, students are stimulated to active participation, in short when television teaching is at its best; it makes a distinct contribution to the institutions. According to Tyler (1958) the use of television to educational institutions can be classified as follows:

- i) Total television teaching.
- ii) Supplemented television teaching.
- iii) Television supplementing classroom.
- iv) Television as a teaching aids

Sinha (1961) told that, “audio-visual materials supply a concrete basis for conceptual thinking; they give rise to meaningful concepts to words enriched by meaningful associates. Hence, they offer the best antidote available for the disease of verbatim.”

Dale (1954) on the basis of his research work has highlighted the following advantages of audio-visual materials.

- i) They supply a concrete basis for conceptual thinking and hence reduce meaningless word responses of students.
- ii) They make learning permanent.
- iii) They offer a relativity of experience, which stimulates self-activity on the part of pupils.
- iv) They develop a continuity of thought; this is especially true of motion pictures.
- v) They contribute to growth of meaning and hence to vocabulary development.
- vi) They provide experiences not easily secured by other materials and contribute to the efficiency, depth and variety of learning.

Some of the guiding principles for the effective use of TV are given below.

- iv) The TV programme should be shown after the lecture-discussion on the topic.
- v) The trainees must be told about the contents to be shown in the TV.
- vi) Discourage discussion during the running of TV programme.
- vii) Keep TV in such a place so that every participant can comfortably see it.
- viii) It is better, if a separate room is kept for audio-visual.
- ix) Keep generator set ready, so that in case of load shading, the audio-visual communication is not interrupted.
- x) Initiate discussion after the end of the TV programme.
- xi) Use of colour TV will make teaching-training interesting.

Advantages

- i) It makes teaching-training interesting.
- ii) It is more useful for illiterate and less literate trainees.
- iii) Learning is reinforced.

Limitation

- i) It is expensive.
- ii) It is difficult to get TV cassettes on all issues.
- iii) Its use is conditional on the availability of electricity or a generator.

In this section, you read about various audio-visual aids. Now, answer the questions given in the Check Your Progress – 3.

Check Your Progress 3

- Note:** a) Write your answer in about 50 words.
 b) Check your answer with possible answers given at the end of the unit.

1) Differentiate between PowerPoint and an OHP presentation.

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2) What do you understand by audio-visual aids and how is it different from audio aids?

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1.8 LET US SUM UP

In this unit we have discussed in detail various methods of training and the factors that determine the selection of a training method which includes subject matter, participants, resource availability, organizational factors, and other considerations. We have discussed the advantages, disadvantages, and applications of various methods, like lecture, discussion, syndicate, seminar, conference, etc. Lastly, we have discussed about the various audio-visual aids necessary for the conduction of training.

1.9 KEYWORDS

- Lecture** : It is a one way communication of the words spoken by the trainer.
- Seminars** : They are convened to have in-depth discussion on a subject from various view points.
- Case Study** : It represents a real life situation or hypothetical in the field and allows the participants to learn on the basis of a summary of a well documented series of events, centered on an organization, an individual, or an issue.
- Role Play** : It provides opportunities for participation, involvement and for action learning.
- Programmed Instruction** : This methodology helps the trainees to learn on their own and at their own pace.

1.10 REFERENCES AND SELECTED READINGS

Agochiya Devendra (2002), *Every Trainers Handbook*, Sage Publications, New Delhi.

FAO. (2012). Capacity Development: Learning Module 2. *FAO Approaches to Capacity Development in Programming. Processes and Tools*, Food and Agriculture Organisation of the United Nations

FAO. (2013). Capacity Development: Learning Module 4. *Organization Analysis and Development* Food and Agriculture Organisation of the United Nations

GFRAS. (2012). *The New Extensionist: Roles, Strategies, and Capacities to Strengthen Extension and Advisory Services*, Global Forum for Advisory Services.

Hansra, B.S and Kumar B (1997), *Training Methodology for Human Resource Development*, Classical Publishing Company, New Delhi.

Lynton, R P and Pareek U (1990), *Training for development*, Vistaar Publications, New Delhi.

Misra D C (1990), *New Directions in Extension Training*, Directorate of Extension, Ministry of Agriculture, New Delhi.

Rao P Punna and Reddy M S. (2001), *Human Resources Development Mechanisms for Extension Organizations*, Kalyani publication, Ludhiana.

Sulaiman RV and Mittal N. (2016). Capacity Needs of Extension and Advisory Services (EAS) in South Asia. Policy Brief No 1. Agricultural Extension in South Asia.

Suvedi, M. and Kaplowitz, M.D. (2016). Process skills and competency tools – what every extension worker should know – Core Competency Handbook. Urbana, IL: USAID-MEAS.

Vijayaragavan, K and Hansra, B S (2001), *Training Management- A Manual for Trainers*, Classical Publishing Company, New Delhi.

1.11 CHECK YOUR PROGRESS – POSSIBLE ANSWERS

Check Your Progress 1

- 1) The training methods that emphasize classroom training are lecture, discussion method, syndicate method, seminars, conference, and symposium. The methods that emphasize the practical aspects of training are role play, case study, and programmed instruction.
- 2)
 - a) Case study is a method that has been introduced by Harvard Business School and is widely used by many of the management institutes in India and abroad. The case study develops the analytical and decision making skills of the participants to a greater extent. Group processes like positive meaningful interactions, two – way communication, give and take policy, and mutual adjustments are observed spontaneously during the case study method.
 - b) Programmed instruction is a methodology that helps the trainees to learn on their own and at their own pace. The subject matter to be learnt is divided into small steps and the order or sequences to be followed by trainees are given. The answers are provided at the end of each step or programme, so that the trainee can know the correctness of his learning.

Check Your Progress 2

- 1) The factors that determine the selection of training methods are as follows:
 - i) Training objectives.
 - ii) Subject matter or content of training method.
 - iii) Participants, learning style, their experience and size of group.
 - iv) Resource availability.
 - v) Other considerations.

Check Your Progress 3

- 1) PowerPoint presentation is made by preparing slides on a computer and displaying it to an audience. The use of overhead projectors is common in many training programmes. The transparencies are prepared and displayed to participants through the overhead projectors.
- 2) Audio-visual aids are used for learning whereby both the senses of seeing and hearing are simultaneously used leading to an enhanced learning process. They supply a concrete basis for conceptual thinking and hence reduce meaningless word responses of students eg. Television. Audio Aids are the aids used for learning where only the hearing aspect of the learner is involved in the process of learning. eg Radio, Tape recorder and Record player.