CAPACITY BUILDING OF EXTENSION PERSONNEL AND FARMERS

Capacity Building can be defined as "activities which strengthen the knowledge, abilities, skills and behaviour of individuals and improve institutional structures and processes such that the organization can efficiently meet its mission and goals in a sustainable way. Training is one of the essential components of capacity building.

Training for Development

Training has become an inseparable part of HRD. It has become one of the components, which enables any institution to churn out its employees as the most productive and most suitable ones.

Training – Definitions

1. Training is the art of increasing the knowledge and skill of an employee for doing a particular job.
2. Training is a learning process, which seeks a relatively permanent change in behavior that occurs as a result of experience.
3. Training is the process of aiding employees to gain effectiveness in their present or future work through the development of appropriate habits of thought, action, skills, knowledge and attitude (Milton Mall, 1980).
4. Training is the process of changing employee behaviour, attitudes, or opinion through some type of guided experience (Krietner, 1989).
5. Training is a systematic process of changing the behavior, knowledge and or motivation of present employees to improve the match between employee characteristic and employment requirement (Milkovich and Boudreau, 1998)

Need for training

The process of training has caught up mainly in industries. This can be attributed to the sudden and competitive change that is occurring in the world. However, the needs for training can be fixed down to the following:

1. Rapid changes in technologies and jobs people do.
2. Immediate and long term skill shortage
3. Changes in the expectation and composition of work force
4. Competition and market pressure for improvement in quality of products and services.

Types of training given to extension personnel – This is of broadly two types

1. Pre-service Training

It is a process through which the individuals are made ready to enter a certain kind professional job, as in agriculture, medicine or engineering. It is a professional training prior to any appointment, oriented to make an individual prepared to enter into a new profession. Swanson (1984) defines it as a programme of training activities that prepares an individual for a career in extension, and usually leads to some type of diploma, certificate, degree, or other qualification in one or more of the following agriculture, fisheries, forestry, animal and/or veterinary science or home science.

The state departments of Agriculture now prefer University graduates for entry into their extension services and similarly the Veterinary department prefers to to take only Veterinary graduates released from the Universities.

2. In-Service Training

It is meant for in service candidates who are on the job. In-service training is a process of staff development for the purpose of improving the performance of an incumbent holding a position with assigned job responsibilities. It promotes the professional growth of individuals. Inservice training is a problem centred, learner oriented and time-bound series of activities, which provide the opportunity to develop a sense of purpose. broaden perception of the participants and increase their capacity to gain knowledge and mastery of techniques.

According to Arnon (1987), even for the University graduate, learning cannot cease on completion of formal studies. He said that the in-service training is given with the following objectives

1. To keep up with research by regular meetings between researchers and extension workers, joint colloquia etc.
2. To impart basic knowledge not only in the fields directly related to agriculture, but also in sociology, economics, psychology etc.
3. To improve extension methods, by constant evaluation of methods, the joint study of research findings and extension methods, exchange of experiences.

In-Service training are of different types, some of them are as follows:

i. Orientation Training

This training is given usually to newly appointed extension personnel. It provides an introduction to public employment and provides answers to questions which a newly recruited person is likely to ask. This term is also used for training in-service extension personnel in a new responsibility likes a new operational programme so that personnel are appropriately oriented towards meeting the requirements of new situation.

ii. Induction / portal / vestibule Training

Induction training is given to new extension personnel immediately after they have been employed and before they are assigned to work in particular area usually as an Assistant Agriculture Officer or Agriculture Officer, or Extension Officer.

iii. Maintenance or refresher training

This training is originally started for trainers of the training institutes and Universities for refreshing their knowledge and skills for imparting them to trainees. The term indicates any new training for updating professional competence of extension personnel notably in the subject matter area of specialization. This training is usually imparted in the later career of extension personnel. This training is having considerable importance to extension personnel as it relates to updating to technical knowledge and competence of extension personnel. This deals with new information and new methods and review of older materials. This type of training is given to the employees to keep them at their peak performance level and also prevent them from getting into a rut.

iv. Retraining

It refers to the efforts designed to prepare an individual for a new assignment or a broadened aspect of the old specialty.

v. Career or development training / Training for professional qualification

This type of training is designed to upgrade the knowledge, skills and ability of employees to help them assume greater responsibility in higher positions. This training may lead to the acquisition of higher degree (undergraduate or postgraduate) or diploma by the employees, to motivate them to move up higher levels of administrative hierarchy (promotions) The Directorate of Extension is operating such a scheme on an yearly basis under which, in addition to salary and allowances which personnel get from their own employing organizations, it pays fixed monthly stipends to extension personnel to cover their cost of boarding, lodging and tuition fees. Only meritorious extension personnel and that too below the age of 45 years are eligible for such courses.

Training to Farmers

There is a regular farmer training programme in all agricultural universities. There are training centres for young farmers. In some states, they also arrange short courses for the farmers. The training includes crop raising, animal feeding and management, plant protection. For such training the following points should be considered.

1. Time of holding the training: It should be at the convenience of the farmers i.e., when they are comparatively free from such of the agricultural operations. This will differ according to the seasons and climate. In case T.N March to May for Kharif crop and August to September for rabi crop is ideal time for conducting training courses in Agriculture.

2. Duration of course: For farmers who are engaged in farming, a one week course is sufficient for special topics such as use of irrigation facilities and water management, operation of implements and plant protection etc, it may be of two or three days duration.

3. Venue of course: Besides physical facilities, the appropriate environment under which the course is to be conducted i.e, where the farmers car see the actual crop, method demonstrations, operations with some machines and implements or some treatments such as fertilizer application, venue has to be given due considerations.

4. Production cum demonstration camps and discussion groups of the farmers: These should be arranged in the villages because the farmers cannot afford to remain away from their farms and homes. These should be organized before each main crop. The duration should be 1-2 days only, and the trainees or participants should be from the same village or groups of nearby villages, so that the farmers can walk back to their home the same evening. This will provide technical knowledge to the farmers right in their villages, and the topics can be related to their local problems.

Training Process

In case of training, the focus will be on a person-on-the job-in the organization. Whereas in the case of training process, the focus will be both at the starting point and at the end with difference. The application of what a person has learned during training process is called the effectiveness of training.

The training process has three phases as follows:

- ❖ Pre-training
- ❖ Training
- ❖ Post-training

I. Pre-training phase

- ❖ Pre-training process starts with understanding the situation, which calls for behavior that is more effective.
- ❖ Key aspect of the process is analysis of situation and job on which improved performance is to be achieved.

- ❖ Pre-training begins with description of the job to be changed by it.
- ❖ The technical requirement of the job is not enough but also knowledge on operational description of the job is required so that the training programme can be designed to meet out those requirements.
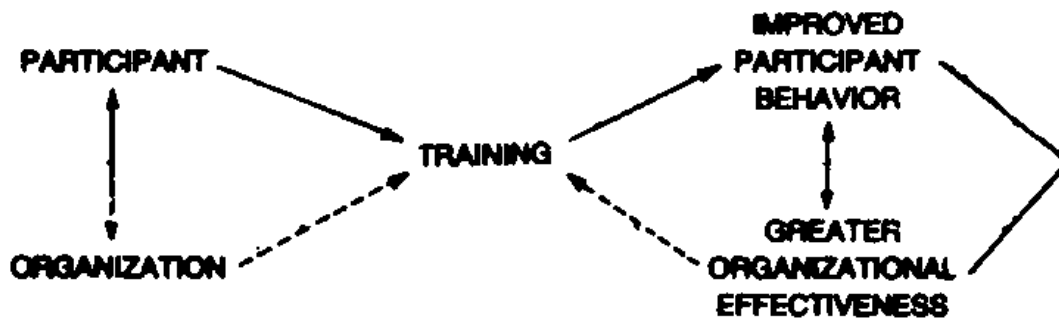
Training process – models

There are several models for training processes, of which there are three important models.
1. Simple model of training process
2. Elaborated model of training process
3. Spiral model of training process

Simple Model of the Training Process

More effective behaviour of people-on-the-job-in-the-organization is the primary objective of the training process as well a whole. In the simple training process, improvement is dependent variable and participants and organizations independent variables. A model of training in its simplest form is presented in fig 1.

Fig.1. Simple Model of the Training Process

But training is actually a more complex process than figure 31 suggests. In the first place, the training system itself needs to be included. It may be temporary system, such as an occasional program, or a permanent institution, such as training department. In either case, the trainers-in-the-system also learns through the various opportunities available for checking their effectiveness, i.e. through feedback. Thus the independent and intervening variables become dependent variables. This elaboration is shown in figure 2.

ELABORATED MODEL OF THE TRAINING PROCESS

Fig. 2. Elaborated Model of the Training Process

The process as a whole, with its three partners and three stages, is depicted in figure 3. It is a spiral model, overlapping the people-on-the-job-in-the-organization. This spiral model is useful in visualizing a training program as an entity, as well as each event and series of events that make up the program. For instance, the phase of actual acquisition and development of new knowledge and skills.

Spiral Model

The spiral model in the figure 3 shows the phases through which participants pass as they learn, then return (with enhanced capabilities, we hope) to their jobs. At various stages in the process the other two partners contribute "inputs" to assist the participants. These inputs are shown as arrows: arrows originating inside the spiral depict inputs of the work organization; arrows originating outside the spiral , inputs of the training institutions. The arrows are merely visual conveniences. The large spiral itself comprises spiral feedback system. We will use this spiral model to explicate the training process, further focussing turn on participants, work organizations.
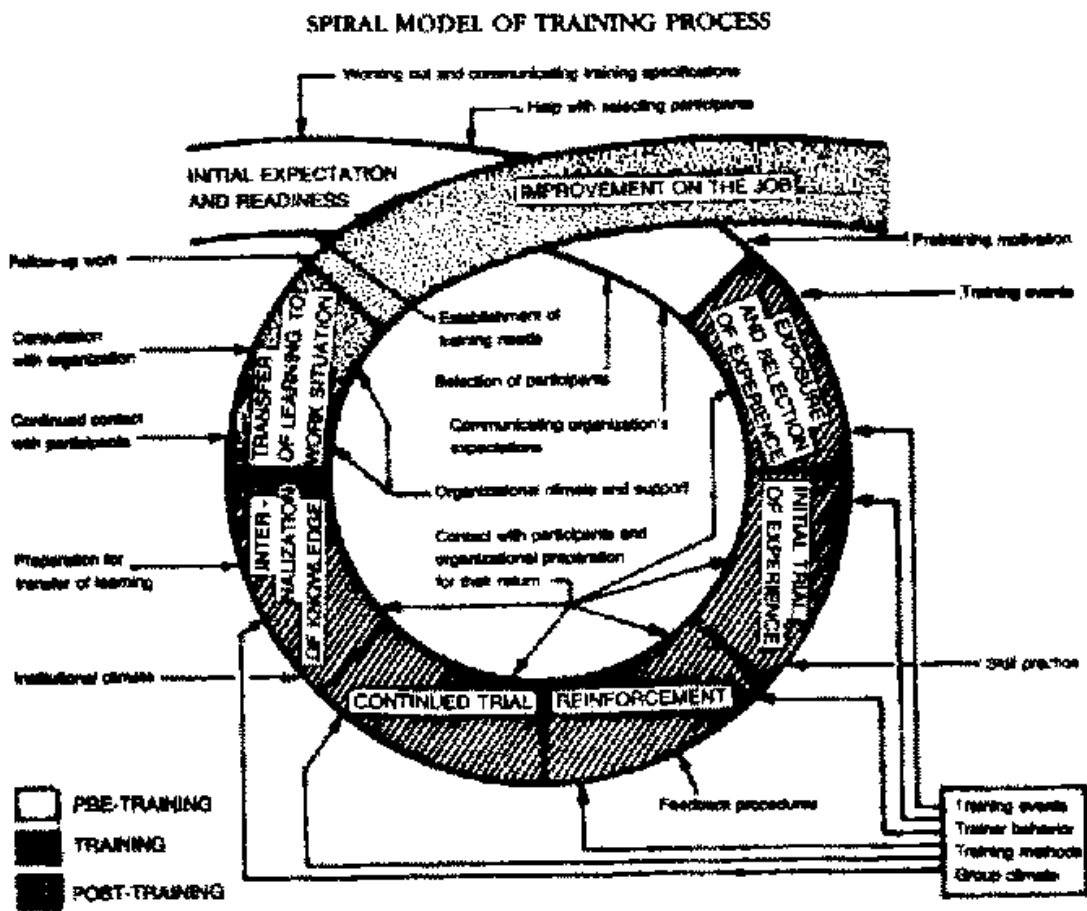
Fig. 3. Spiral Model of the Training Process

Training Strategy

Effective training calls, in the first place, for clarity of objectives and means. In that respect it is just like a manufacturing process, both the ends and means must be appropriate to the purpose. Relating them demands clear specifications for each part of the training task, including the resources of time, skill, and facilities required for it. Ensuring this is a responsibility of the first order.

It is necessary to consider four strategic questions, which shall be examined in turn. The first and second are of external strategies,

1. Establishing training goals
2. Defining training specifications
3. The next two are outcomes of internal strategy

4. Organizing the training inputs and
5. Improving the training institution

❖ The second aspect is the organization's receptivity to more effective behaviour of the trained people. How far the organization would respond to the change in knowledge and skill of the trainee after he returns from training is also to be considered.

❖ Who feels the need for this new behaviour? Is it his immediate superior of the organization itself or the trainee himself has to be taken into account for an effective training programme.

II.   Training phase

1. Most of the training programmes would be for a session or an evening course or a residential program.

2. In the training program, the trainee is exposed to a new subject matter, new people, new atmosphere and the participant would be at unease for a while, later when the subject which would be useful and stimulating is taught the participant would focus his attention on the subject of his interest and would be in line with other participants.

3. There would be several questions in his mind, such that he is lacking, the skill required for his job or is it an opportunity given for his sincere work in the organization or is it a plan of the organization to keep him away from the organization so that it would implement the programme which he had strongly opposed.

4. With all such questions in his mind, there will be no guarantee that the trainee will learn what he has chosen to learn. His mind would deviate and he would learn something of his interest from the training program provided. This error in selection would be due to the lack of necessary capabilities of the trainee or irrelevant training design and methodology followed by that training institution etc.,

5. Finally after overcoming all the hurdles in the initial stage of training programme, the participant would explore in training situation what interests him the more. After exploring, if he finds it useful he tries it again and checks for its effectiveness and satisfaction. There would be several trials repeatedly.

6. If he is satisfied with the results, he decides to incorporate it in his organization, but if he finds it to be not useful he discards it and tries some other variant, in some cases he may discontinue his learning.

III.   Post-training phase

❖ Here the situation changes, the participant goes back to his work place, meets his colleagues, family members etc. He goes prepared with some anticipation; as he had been away from them for a while and also had come back learning some new ideas.

❖ Newly learned skills undergo modifications to fit in with the work situation. If the organization were encouraging and helping, the participant would use his training for the

betterment of his organization. Some organization would offer support to the participants to have contact with the training institution even after the training program.

❖ On the other hand, if the organization resented his absence and if his table is loaded with work, he would feel extra burden and would work to make up for lost time. He would loose his interest to make use of his training and the contact with the training institution is also broken off.

Designing Extension Training Programmes

While a training plan provides a structure for training, the design of a training programme provides its content. A training plan provides broad parameters within which training is required to take place in accordance with the assessed training needs of extension personnel within the frame work of extension training policy. The design of the training programme operationalises the training plan and provides actual training. A well designed training programme will go a long way in ensuring success of training intervention. As a corollary, an ill-designed training programme is deemed to be a failure. The following are the steps in designing a training programme:

A. Objectives of training programmes

The first step in the design of a training programme is a clear statement of the objectives of the training programme. These objectives have to be based on the Training Needs Assessment (TNA) of extension personnel and stated, in order of priority, from general to specific objectives. These objectives have to be stated in terms of knowledge, Skills, Attitudes and Attributes, which the trainee will gain at the end of the training programme.

A clear enunciation of objectives of training programme will enable the trainees to have a clear idea as to what should they expect from training.

At a simple level of treatment the objectives of a training programme fall under two categories, namely, General behavioural objectives, and Specific Behavioural objectives. Both types of objectives are required to be stated in the objectives of a training programme.
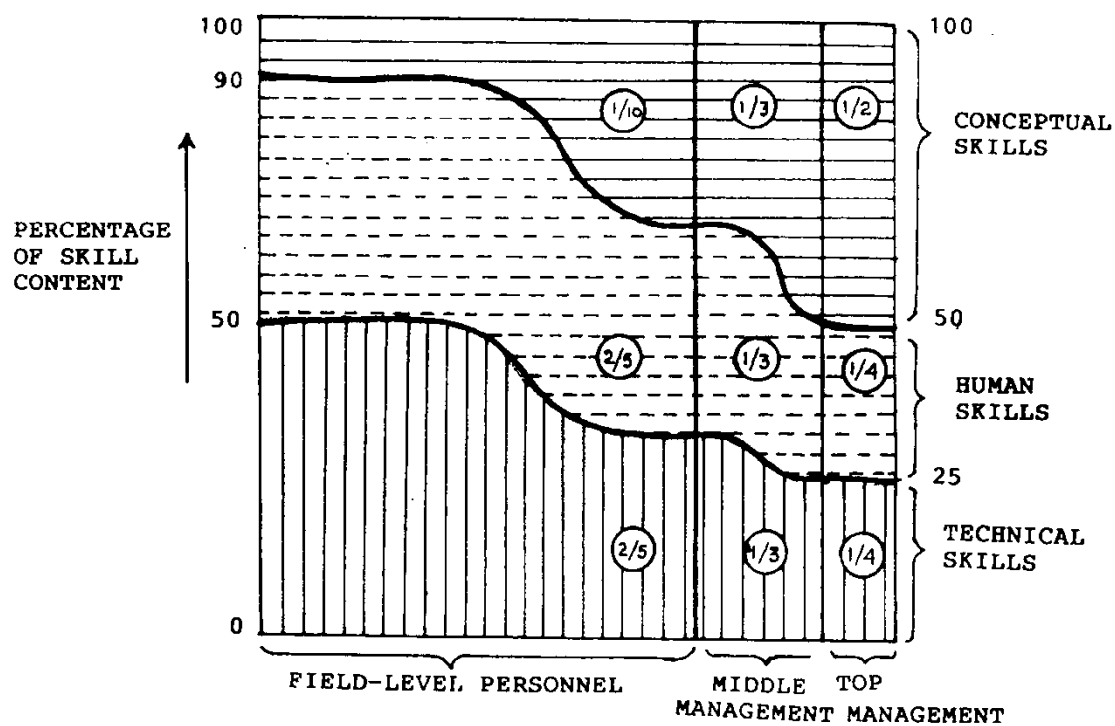
At a more sophisticated level of treatment, following the Bloom's taxonomy of educational objectives, the training objectives can be classified into three classes of Cognitive Objectives, Psycho-Motor Objectives, and Affective Objectives, and their sub-classess.

If the design of a training programme is conceptualised to consist of (a) objectives, (b) learning experience and (c) evaluation, then the objectives provide the base upon which subsequent edifice of learning experience and evaluation could be built and hence their importance in the design of a training programme.

B. Skill - Mix The second step in the design of training programme is determination of appropriate skill-mix for different levels of extension personnel.

Katz postulate three types of skills for a manager, namely (i) Technical Skills, (ii) Human Skills, and (iii) Conceptual Skills as proposed by Misra (1990).

Fig.4. Skill mixes for the different levels of Extension Personnel

Skill Mixes for Different Levels of Extension Personnel.

Source: Misra, D.C. (1990), New Dimension in Extension Training

For example, field-level personnel like Village Level Extension workers and Agricultural Extension Officers require technical skills in ample measure, human skills in fairly good measure and conceptual skills in moderate measure.

C. Curriculum Development

The next step in the design of a training programme is development of appropriate training curriculum. Curriculum is required to be developed for two reasons. Specific curriculum is required to be developed for a specific training course which is organised in response to assessed training needs of extension personnel which emerges out of the changing needs of farmers. Since no readymade curriculum exists for the purpose, specific curriculum is required to be developed for a specific training course which has a specific target group. Its challenge lies in the fact that it is interdisciplinary. Curriculum development is required to anticipate future needs.

Components of a Standard Curriculum

Course objectives
Achievement Targets
Course Structure
Assessment
Course Contents

Developing Standard Curriculum

Objective
  While developing the curriculum, we must first determine the training objectives - general and specific based on the assessed training needs of extension personnel. The specific objectives should ultimately be broken into specific information units.
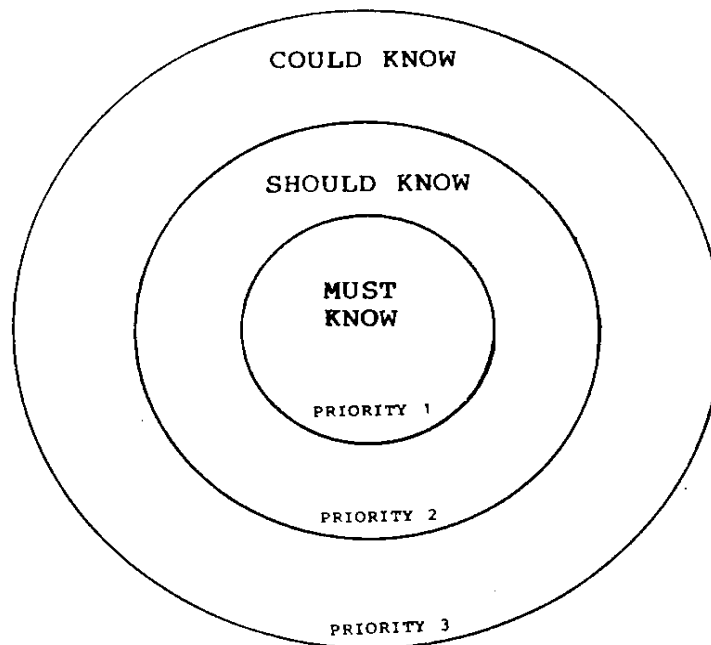
a. Subject Matter - Decision Structure Matrix
  For determining the content of training curriculum, it is essential that the target group is located on a subject matter - decision structure matrix.

b. The concentric circles approach to curriculum
  Thirdly, for making the training objectives, we are required to decide the subjects and their number which are required to be taught. This requires prioritisation of subjects.

Fig.5. The Concentric Circles Approach to Curriculum

  The 'Concentric Circles Approach to Curriculum' divides the subjects into three categories of what must be known, should be known, and could be known..

It is essential to concentrate the efforts on the inner circle of 'must know' not to drift to middle or outer circles at the cost of inner circle as has often been observed in practice.
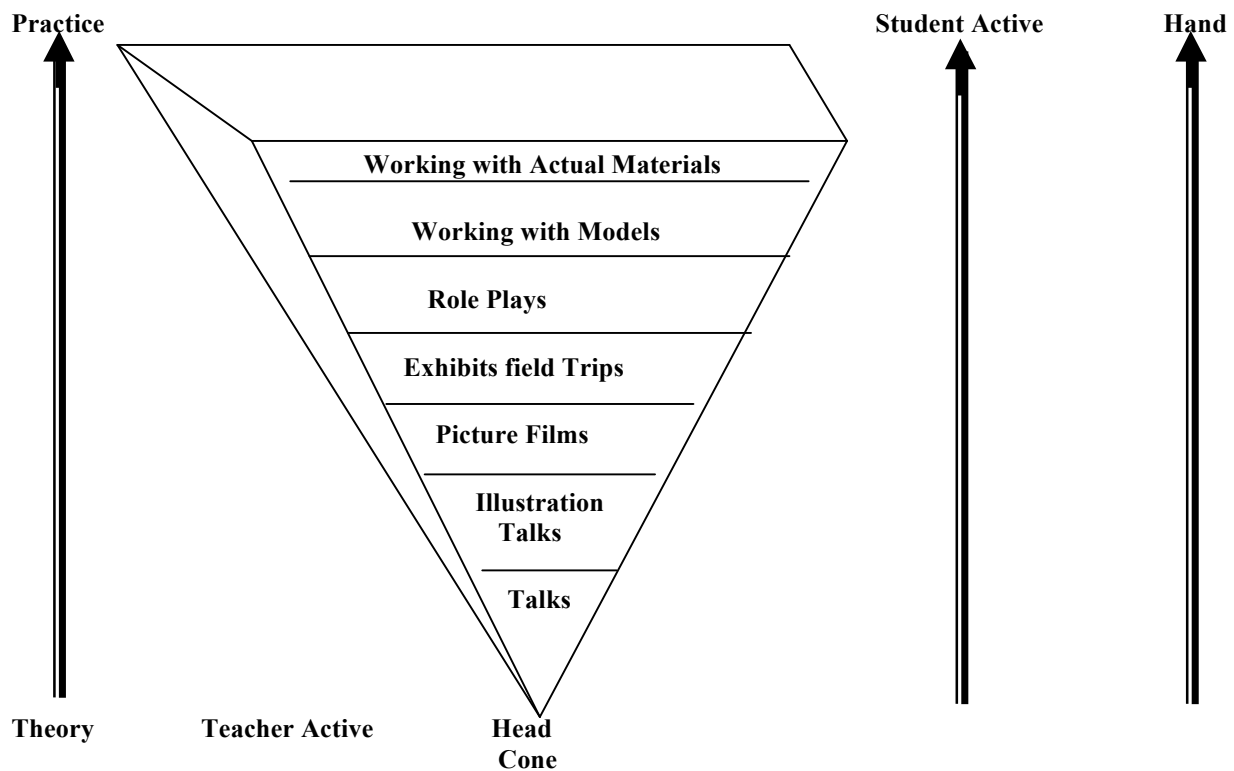
c. The information unit

An information unit is a definition or a description of a single idea. Every aspect of the subject matter is expressed in terms of an identifiable technical unit which may be analysed, improved and linked to others in logical or psychological sequence. This breaking down of all the subject matter for each activity into information units makes it easy for it to be updated and objectives combined in order to obtain new training responses.

d. Training Methodology

If curriculum is the 'heart' of a training programme, training methods could be described as the 'arteries' and 'veins' of the training system through which training messages reach the trainees and trainees and trainers receive concurrent feedback on the training programme from the trainees. The choice of appropriate training method is required to be guided by the level and background of trainees as well as by the training curriculum and the time available for training. While the appropriate choice of the training methods will certainly enhance the effectiveness of a training programme, an inappropriate choice of training methods is equally likely to mar or reduce the effectiveness of a training programme.

Fig.6.The Extension Training Methodology Cone

Practice Student Active Hand

Working with Actual Materials

Working with Models

Role Plays

Exhibits field Trips

Picture Films

Illustration Talks

Talks

Theory Teacher Active Head Cone

Source: Misra, D.C. 1990. New Direction in Extension Training

A training method should never be forgotten. It is only a means, for attainment of training objectives. It should never be treated as an end, and an end in itself. In training practice, such a tendency is often noticed and is required to be curbed as such a tendency displaces the training objectives reducing the effectiveness of a training programme. The detail of training methodology is illustrated in the Fig.37.

e. Training media
1. Non-Projected media - Including books, hand-outs, graphics, flipcharts, photographic prints and other printed materials, real objectives, specimens, models and simulation devices, chalkboards, and magnetic and flannel boards.
2. Projected media - Including opaque projector (epidiascope), projection, slides and filmstrips, microfilm, movie films, broadcast television, closed circuit television video tape.
3. Sound media - such as broadcast radio, reel and cassette tapes, records and public address system.

The choices of appropriate training media will not only depend upon the nature of audience and the training objectives but also upon the training methods. For group discussion, chalkboard and overhead projector may be adequate but may also be supported by handouts.   Training media should be used only when required and not used because they are there.

f. Training manuals and handbooks
The training manuals and hand-books, in their coverage and content, lie in between the comprehensive text books and scattered leaflets and bulletins . Additionally, they focus on a carefully selected subject matter of specialisation.

The Design of Training Programmes (DTP) falls within the purview of the training institutions. The training institutions are required to pay special attention to various sub-systems of DTP. It is only when different sub-systems of DTP have been attended to professionally by a training institution, it could be claimed that a training programme has been designed. Training institutions have to realise this responsibility. Reputations are built the hard way and training institutions are no exception to this general precept.

Conducting an Active Training Programme

A training program can be totally successful only if effective exercises have been worked out previously. Attention should be paid on the physical setup, rapport building and content of the program. Programs that look gorgeous on paper are worthless if the trainer doesn't have delivery skills to carry out the design requirements.

Steps to conduct an active training programme

1. Preparing yourself mentally

Feeling comfort with the course content

Thorough preparation well in advance

Preparation of material activities for training program

Course materials, manuals, rooms, audio visual equipments etc. and get connected with the participants

If a question is asked and you do not know the answer give it as a group exercise; another way is to write them down and promise to find the answer.

Repeating a course may be a bored one to the trainer but not to a new trainee - Focus your attention on the participants and not on oneself and make opportunities to learn from their experience through discussions.

2) Arranging the physical environment

The physical set up at first the participants receive will create permanent impressions of the program.

The seating arrangements should depend on many factors like number of participants, method of speech, and the like.

In case the program has little of writing work, the participants can get rid of tables and they can arrange the chairs to their comfort.

In other case, if small subgroups should be formed, care should be taken to leave enough space so that one group does not disturb another group.

A well-known arrangement is horseshoe type. This can be modified into a square or a circle. All these arrangements favour group discussions with face to face contact with each participant.

These arrangements can be formed with the help of the participants themselves for their own comfort.

3) Greeting participants and establishing program

The best and most desired start is a good welcome address. The trainer should be able to reach the mind of each person, make each feel good in the new situation, allow his feelings to flow without any hesitation. Hence a trainer should ensure that his program should have a good greet and hence to build rapport with the participants.

A short refreshment before the actual training enables participants to mix well among themselves. Trainer himself can build relationship by knowing their names and making them feel comfortable. During the opening session he/she should introduce the participants to each of them and he himself should be introduced with a touch of un boastful higher knowledge.

There are number of wordings which can be addressed. To mention a few 'I have got something for you'

This should make a feeling among the participants that they have a person with much greater knowledge and experience to his credit.

"I've been through this too"

This makes a 'we' feeling among the participants and the trainer. The participants feel that the trainer can understand one's problems and this workload so this helps to bring out their own experience in this field.

"I admire you"

This greeting puts the participants on a higher stand. This is the way one can express one's admiration over the participant's qualities and deed. It may be on very simple actions of theirs but such an admiration heartens the people to a much higher extent.

4. Getting the best from the first 30 minutes of trainers

The first 30 minutes of any classroom period is the most crucial period which a trainer should not trample upon. It is called the 'grave period' according to Napien and Gershenfeld (1983) during which any over hostility or antagonism will be submerged under a veneer of politeness, watchfulness and reserve. It is during this time that the participants perceive what role they expect to play during the training program, what they intent to accomplish during the course.

Begin the class at the time intended without creating impatience among the participants, once competence should be made known to the members. One should make himself compatible

with the group and create trust. The trainee should be clear on what activities are there for the participants and how and when they can get connected to their home town.

5. Reviewing the agenda

In the beginning moments of the program, one should be made clear of what is going to be done i.e. What is expected of the programme and What is expected of the participants. The training objectives should be given in writing and these should be explained clearly. The list of what is to be accomplished should also be presented. They should be informed of how the program will be done with indications of the stay place, food arrangements, telephone messages etc. A content outline and a description of the activities designed should also be given.

6. Inviting feedback

After reviewing the agenda, one must not fail to get the feedback on the agenda. This gives the participants an opportunity to give their views or to tell what they expect more of the programs. The simplest approach is to ask directly "Does this m match what you hope to gain from this program?" "Is there anything you would like to add to it?".

The feedback helps the trainer to change his program if feasible to the requirements of the participants and remains compatible with them. Otherwise, the programme will be a waste with a content not interested to the participants.

After all these steps, one can readily and confidently enter into the actual training programme.