

5.1 Training – An Introduction

Training plays an important role in the advancement of human performance in a given situation. Training provides a systematic improvement of knowledge and skills which in turn helps the trainees to function effectively and efficiently in their given task on completion of the training. In KVKs, trainings are conducted at various levels for which the programmes are designed based on the clientele problems and needs. The training programmes are idealistically designed and conducted for inducing changes in the durable aspects of persons, changes in relationships and changes in action. The training strategies vary depending upon the learning outcome the trainer seeks to achieve among their trainees. The training may be for improving the proficiency in the task performed or learning a process. The training modalities also need to be differentiated based on the requirement and type of organization which is imparting the training. Modality is a broader concept than the training method: for example several methods can be used for designing a particular modality. Training modality can be classified on the basis of (i) contact with learner (ii) formalization of training (iii) management of training and content emphasis (Pareek and Lynton, 1990).

Any training programme starts with identification of training needs, followed by translation of training needs into objectives. Based upon the objectives, the contents of the programme are developed, taking into consideration the knowledge, skill and attitude elements needed to achieve each objective. Once the training contents or topics are decided, appropriate training methods suitable for each topic should be selected. Then, the topics have to be put in a particular sequence and a complete course schedule with time and duration is to be decided. All learning and training is best done through active subjects and therefore all extension professionals must understand well the basics of training in order to design and conduct successful training programmes.

5.2 Typology of KVK Training

Normally KVKs have the following types of training conducted by them:

1. Training for farmers (On and Off Campus)
2. Training for rural youth (On and Off Campus)
3. Training for extension personnel (On and Off Campus)

4. Sponsored training programmes (On and Off Campus)
 - For farmers, rural youth and extension personnel
5. Vocational training programmes (On and Off Campus)
 - For farmers and rural youth

Based on duration, the KVK trainings can be classified to:

1. Short duration trainings (1-7 days) &
2. Medium duration trainings (8-14 days) and
3. Long duration trainings (3-4 weeks)

5.3 Basic Concepts of Training

One of the important duties of the KVK scientists is to communicate the research findings, new innovations and technologies to the farmers and needy people. It involves conducting proper demonstrations of the new technologies as well as training the technology users for providing with required knowledge and skills for adopting the suggested technologies. Therefore, training is an essential component for the successful dissemination and adoption of latest agricultural technologies.

Training indicates a planned activity to which a person or group of persons are subjected to induce learning which brings about desired behavioural changes that are beneficial to them in their day to day life or vocation. In terms of Lynton and Pareek (1990) training consists largely well organized opportunities for participants to acquire necessary understanding and skill. Training aims at bringing about lasting improvement on the job. The kind of education we call as training is not for knowing more but behaving practically and differently. Training is a powerful tool in the hands of KVK scientists to develop competence in their clients. New concepts of training such as andragogy, experimental learning techniques such as sensitivity training, transactional analysis, in basket exercise, critical incidence technique etc., provide new approaches to enhance training outcome. Training of farmers, rural leaders and extension personnel is a must to face the challenges posed by the changing technological and economical scenario.

5.4 Definition of Training

Training is a process of acquisition of new skills, attitude and knowledge in the context of preparing for entry into a vocation or improving ones productivity in an organization or enterprise.

ILO (1986) defined training as activities which essentially aimed to provide attitude, knowledge and skills required for employment in a particular occupation or a group of occupations for exercising a function in any field of economic activity.

Iffner and Douds (1989) viewed training as development and delivery of information that people will use after attending the training. Effective training requires that you have a clear picture of how the trainees will need to use information after training. This also requires that people practice what they have learnt before they apply it after training.

Lynton and Pareek (1990) stated that training consists largely of well organized opportunities for participants to acquire necessary understanding and skill. Training aims at lasting improvement on the job. The kind of education we call as training is not for knowing more but behaving differently.

An analysis of different definitions of training will reveal that:

1. Training is a planned, systematic and purposeful instruction.
2. It is a learning process, aims to improve performance of participants so that they can contribute to effectiveness of the group or organization they belong.
3. Training and education are not the same.
4. Training results in changes in knowledge, skill, practice and improves the productivity.

In brief, training is an instrument to induce change in the behaviour of individuals for personal, social and organizational effectiveness.

5.5 Training Vs Education

Even though the terms training and education look alike, often they have commonalities and differences. According to UN (1966) as reported by Misra (1990), the difference is as follows.

“In technological terms, education is designed as preparation for life, not for earning a living, while training is always understood to have a vocational purpose. With particular reference to the public services, education is understood to be the general cultural preparation which a young person receives before entering public employment, while training is understood to be the specific preparation just before entering public employment or a later point in the career and directed towards the performance of the duties assigned to individual.”

Education is vertically focused as it aims to prepare people for future roles. Content of the training are focused on the immediate needs at work place. It is said that education is generally for knowing more whereas training is for behaving differently. Formal education is more rigid and structured but training is non-formal and flexible in nature.

5.6 Training process and Types of Training

Training has been conceived as a process consisting of three phases, viz. pre-training, training and post training (Lynton and Pareek, 1990).

5.6.1 Pre training

Preparatory phase prior to the actual training process is very much essential. Pre training involves planning of training programme. The trainer will assess the training needs and design appropriate course content as well as methods. Arrangements for selection of participants, appraisal of course details and necessary preparations for conducting the training programmes are completed during the pre training phase.'

5.6.2 Actual Training

According to the training plan/schedule the training is organized. The activities such as reception of trainees, boarding and lodging, inauguration, guest lectures, organisation of instructions, demonstration skill training, field trip, evaluation etc. are conducted during this phase. Due care is to be taken for creating proper training climate for the participants to learn new ideas and skills. Good rapport and team building among the trainees need to be encouraged.

5.6.3 Post Training

The success of the training programme largely lies with the follow up activities undertaken after the conclusion of training. Post training tie up with related line departments for continuity, making arrangements with financial institutions for linking up trainees for getting financial assistance, providing them with information about further opportunities available in the field for their improvement, and impact analysis are must for making the training programme successful. The post training evaluation need to be done and based on the feed back, necessary corrections for bringing about further improvement is a must.

5.7 Basic Training Approaches

The training approaches can be classified into traditional, participatory and performance based approaches. In the traditional approach the trainer designs the objectives, contents, teaching

techniques etc. and the participants have no say in the process. In the participatory approach the trainer and trainees jointly decide about the programme. In case of performance-based approach, the emphasis is given to acquiring of specific observable skill or attainment of a specific level of proficiency before clearing the trainee for successive levels.

5.7.1 Learning

A good KVK training programme creates adequate opportunities and situations through which farmers gain the knowledge and skills necessary for successfully meeting their needs and interest in such a way as to attain continuous improvements and self satisfaction. By this process the farmer learner experiences a change in his behaviour through his own efforts. Learning occurs within the learner. Any change of behaviour that takes place as a result of the experience gained is called as learning.

Learning is a process by which sensations are perceived, understood and action taken resulting in desirable changes in knowledge, skill and attitude.

Learning refers to the change in a subject's behavioural or behaviour potential to a given situation brought about by the subjects' repeated experiences in that situation, provided that the behavioural change cannot be explained on the basis of the subjects' native response tendencies, maturation or temporary states.

5.7.2 Learning Principles

A principle is a statement of policy to guide decision and action in a consistent manner. It is a fundamental truth and settled rule of action. The learning principles as applicable to KVK trainees are:

1. Involves active participation of learners.
2. Satisfies the interest and needs of the learner.
3. Learners' participation in planning the learning activities.
4. Involves effective communication, cooperation and inter dependence.
5. Proper physical and psychological environment.
6. Relates theory with practice.

7. Provides challenging and satisfying learning opportunities.
8. Should be meaningful and stimulative.
9. Based on successive reinforcement and interactive method.
10. Individuals differ in their leaning ability and the KVK trainer should facilitate the learning.

5.7.3 Pedagogy and Andragogy

The term pedagogy means the science of teaching children. Andragogy refers to the science of teaching adults. Pedagogy and Andragogy differs in terms of their objectives, curriculum, methods, orientation, teacher role and evaluation. The basic psychological differences between a child learner and adult learner are mainly responsible for the differences that arise between the adult and child learning process. According to Knowles (1993), the child and adult learners differ in terms of their self concept, experience, readiness to learn, leaning orientation and motivation for learning.

5.8 Characteristics of a KVK Trainee

The KVK trainees are self directed individuals, have greater volume and quality of experience. They are problem or life centered and ready to learn according to their perception of developmental needs. They are motivated both by extrinsic and intrinsic rewards.

5.8.1 Characteristics of KVK Trainee Learning

The striking features of KVK trainee learning in terms of their goals, objectives, contents, methodology and evaluation have been summarized below:

1. Goals and Objectives: To help trainees to achieve their human potential
2. Contents: KVK trainee learning is Problem centered, Selection of contents based on their needs.
3. Control: KVK scientist has very less control over learning outcome of a farmer.
4. Method: KVK trainee learning is facilitative.

5. Role of KVK trainer: Role of KVK trainer is clearly defined and considered as important to learning of farmers.
6. Examination/Evaluation: Mostly Self assessment are conducted and ranked based on their marks obtained.

5.8.2 Conditions for Effective Learning

Pareek (1981) has listed the following fifteen different conditions for effective learning. They are as follows:

1. Authentic and open system of training institution or the place of learning.
2. Non-threatening climate.
3. Challenging learning task.
4. Collaborative arrangements for mutual support of learners.
5. Organisation of graduated experiences of challenging successes.
6. Mechanisms for supportive and quick feed back.
7. Opportunities to practice the skills learnt.
8. Opportunities to apply learning.
9. Encouragement for self learning.
10. Support for experimentation.
11. Emphasis on learning through discovery.
12. Indirect and liberating influence by trainer/teacher through minimum guidance.
13. Trainers'/ teachers' human values and faith in man.

14. Trainers' / teachers' high expectations from learners and openness to examine own needs.
15. Trainers' / teachers' competence.

5.9 Training Need Assessment

Need is the gap between what is? And what ought to be? Training need refers to the gap between “what is” and “what should be” in terms of the trainees knowledge, skills, attitude and the behaviour in a given situation and time. It is important to analyse the training needs for designing an effective training programme¹. Four major approaches for the training needs identification have been proposed by different authors. They are as follows:

5.9.1 Performance Appraisal

In this method the actual performance of the trainee in a given situation is compared with that of the ideal or expected performance. It can be evaluated through direct observation, evaluation of performance records for a period of time and the individuals' self appraisal about their performance compared with their actual output. Through this method one can link between knowledge and skill requirements with their job performance.

5.9.2 Task Analysis

A detailed analysis of the task performed by an individual as per the standards and job chart is to be done. The data pertaining to the knowledge and skill requirement for the task, their performance in the actual situation need to be collected through interviews, case methods, and direct observation techniques. A detailed interview schedule need to be prepared for the assessment of training needs based on the task analysis for collection of relevant data. The schedule contains the details of different tasks and the frequency of performance of each task. The details such as level of importance and level of competency are obtained in a differential rating manner for each task. The common methods used for task analysis are interview, questionnaire, case method and observation. The task analysis is a process by which one can know the different elements or sub-tasks which are critical for its performance.

5.9.3 Survey method

It is one of the most frequently used methods. The need analysis is done based upon the individual perception and opinion of the individuals for whom the training programme is organized.

¹ Please refer Chapter - XII for model schedules on training need analysis developed by Zonal Project Directorate, Zone – III for farmers and KVK personnel separately.

Data will be collected through structured schedule, questionnaires and interviews. This method is fast and inexpensive. Through this method we can involve large number of people in the training needs identification¹.

5.9.4 Competency Study

Under this method, a thorough job analysis is undertaken to know the different qualities needed for the individual to perform his job effectively and efficiently. Based on the qualities required the individuals are further analysed in terms of their competencies in performing the job. The competencies in terms of knowledge, skills and other qualities required and identified by involving the experts. A thorough analysis is made by matching the individual qualities with the expected competencies required for the job. It involves active involvement of experts and the trainees through a whole hearted open discussion approach to arrive at the right conclusion. This method is relatively fast and inexpensive.

The data on current performance such as the current level of production and productivity, work environment and technological level are need to be obtained for doing the training need analysis.

5.10 Skill-gap Analysis

It is a process of determining the training needs of individual trainee in relation to important tasks-steps or components of tasks identified for training. It determines how skilled or proficient individual trainees are on these tasks or components, how many of them differ from desired performance and whether or not they need training in a precise manner.

5.11 Formulating Training Objectives

A trainer's concerns before starting of the training programme lies mainly on clarifying the training objectives based on the identified training needs. Through the training needs identified we can know the gap in performance. Therefore, the training needs identified have to be suitably converted into training objectives from drawing an outline for the training programme. A well defined training objectives help to design an effective training module. The training objectives give the direction to the entire training programme.

5.11.1 Importance of Training Objectives

1. The training objectives help us to draw the outline of the training programme.
2. It helps us to design the training module and plan the technical programme.

3. The trainer can very well decide upon the knowledge and skill components to be imparted to the trainees
4. Helps the overall management of the training programmes.
5. Helps monitoring and evaluation of the training programme.

In general the training objectives can be classified into specific and general based upon their intensity of reference. The general objectives refer to the overall impact of a training programme. The specific objectives give the details of different components of a training programme. The training objectives deal with the changes in knowledge, skill/practice and attitude of the trainee that needs to be achieved through the programme. While formulating the training objectives care must be taken to ensure that the objectives are formulated based on the needs identified. Similarly, the objectives should also be well defined in-terms of condition, performance and standards with a specific reference to the type of behavioural changes attempted. The stated objectives should be well defined, simple and stated with clarity. It should be realistic, attainable and measurable through suitable evaluation.

5.12 Translating Training Needs into Objectives

A systematic procedure is to be adopted to formulate the objectives based on the needs identified. A general outline of the steps involved is given below:

1. List out all the training needs.
2. Group them according to their category such as knowledge, skill and attitude part.
3. Select those needs which can be met by the present training programme.
4. Analyse them for their suitability and screen them based on the institutional objectives, interest of the people and feasibility of achieving them.
5. Translate the selected needs into the training objectives.
6. Clarifying the objectives is to be done before finalizing the training objectives. The clarification is done based on the analysis of job requirements, trainees' capabilities, available resources and time.

5.13 Designing and Conducting Extension Training Programmes

Designing and conducting an extension programme is more of an art than science. On deciding upon the training objectives, the course contents need to be developed based on the objectives selected. On deciding the contents, the relevant topics to cover the individual area of the content are to be finalized. While deciding upon the topic the different learning demands such as knowledge, skill and attitude need to be kept in mind. Further, the topics are to be arranged sequentially in a logical manner to ensure a meaningful learning to the trainees.

5.14 Principles of designing Training Programmes

While designing the training content, the following principles need to be kept in mind.

1. Principle of theory and practical exercise.
2. It is based on experiential learning exercises.
3. Provision of opportunities for feed back through participation of the learners.
4. Facilitates interaction among the group as well as trainer and trainees.
5. Provision for flexibility based on the demand of the trainees during the training programme.

5.15 Designing of the Training Programme

The designing of the training programme otherwise means sequencing the contents of the training curriculum. It is very important to present the topics in a sequential manner as per their importance and the dependence. The basic knowledge and skills to be learned must precede the next in higher order for an easy learning. Sometimes it will be necessary for participants to learn a particular task before another task. Arrangement of tasks is essential to make the learning more interesting and with out any confusion. Thus an analysis of relationship among various tasks to be learned and arranging them in an order which will facilitate an efficient learning in the shortest possible time is a must. This is called as sequencing of training contents.

While sequencing the contents the following principles may be kept in mind.

1. Introduce the topic which is familiar to the trainees first. After giving the basics to the trainees first the difficult and advanced topics need to be introduced.

2. Introduce the general topic first followed by more specific topics to the learners. This will help the learner to focus their attention in a much easier manner.
3. The topics are to be introduced in a logical order based upon which a phenomenon occurs or in a chronological sequence.
4. Always introduce a general problem first and then discussion on those causative factors which contribute to the problem and ways to solve it.
5. The steps under job performance order follows a sequence in which a particular job is completed.

5.16 Guide for Content Sequencing

The following sequencing guide designed by Tracey (1971) and reported by Parshad (1998) may be kept in mind while sequencing the training topics.

1. Place easily learned task early in the sequence.
2. Introduce early in the sequence broad concepts and technical terms, which have application throughout the training system.
3. Place practical application of concepts and principles close to the point of initial development.
4. Place pre-requisite knowledge and skills in the sequence prior to the points where they must be combined with subsequent knowledge and skills.
5. Provide for practice and review of skills and knowledge, which are essential parts of later tasks.
6. Introduce a concept or skill on the task in which it is most frequently used.
7. Do not overload and task with elements that are difficult to learn.
8. Provide for practice of required skills and review of concepts and principles in areas where transfer of identical or related skills is not likely to occur unaided.
9. Place the complex or cumulative skills later in the sequence.

5.17 Conducting Training Programme

Conducting refers to the process of carrying out the training plan into action. Since it involves the co-ordination of different activities, it poses a number of challenges. The experiences of several trainers show that conducting actual training programme happens to be one of the difficult tasks and needs to be done very carefully. The implementation stage consists of the components such as (i) preparation (ii) actual conducting and (iii) creating favourable instructional environment. The preparation starts with the giving of publicity for training through suitable media. A brochure giving the details needs to be prepared for distribution among the target group. In addition, the local media, journals, news paper coverage may also prove helpful in reaching the target audience. On receiving the application and nomination forms from the interested candidates, the application needs to be processed to select the most suitable candidates. A selection committee may be constituted to select the candidates according to the number of seats available based on the bio-data received. On selection, the candidates need to be informed about the same along with the details of their boarding and lodging arrangements available as well as a brief line about the weather and location details of the city or town.

Efforts should be made to secure the confirmation of participation from the selected candidates and prior arrangements for filling up the vacancies arising due to the cancellation of the selected candidates at the eleventh hour before starting of the programme. Pre training rapport with the confirmed participants are to be provided with the basic information about the training to be undergone. They may also be asked to come prepared with the required materials, reports or data likely to be used in the training sessions. The training co-ordinator should conduct the review meeting with his co-trainers and associates to confirm the progress of all activities concerned with the programme.

5.17.1 Registration and Inauguration

The registration of the participants in the prescribed proforma is a must. During the registration, the training materials or manuals, writing pads etc. should be made available. The details of topics to be covered along with the experts, time and data are to be provided to the trainees prior hand. The formal inauguration of the programme is needed to open up the session with a key note address and lectures by noted specialists.

5.17.2 Micro lab

This exercise helps the participants to get acquainted with one another before the start of the training programme. Micro lab consists of a number of mini exercises to help the participants get prepared and receive a maximum output from the programmes. It is called as Micro lab because it is intended to provide an abstracted pre review of the main programme.

According to Pareek and Rao (1992), the micro lab exercise helps the participants to unfreeze and open up them to their fellow participants. Through the Micro lab activities, the inhibitions are removed and an open environment is created. It helps the participants to know the likely main contents and training methods of the main programme. In the micro lab participants are encouraged to share an aspect of his or her life with others.

5.17.3 Creating Suitable Training Environment

Favourable training environment is the most important thing for learning. Some of the factors which can help to create a favourable training environment are as follows:

1. A comfortable, spacious and well lighted room is needed for ensuring physical comfort to the trainees.
2. A climate of mutual control and facilitation is required.
3. The objective of the programme and your expectations from the participants should be made clear.
4. Encourage effective participation and interaction among the participants.
5. Receive the ideas of participants with an open mind and show a genuine concern for participants' interest.
6. Make every effort to secure the punctuality among the participants as well as the timings of the session.

5.17.4 Topic Presentation

A good presentation or delivery of the topics is an important component in a training programme. The clarity of the trainer, his enthusiasm, confidence, and presentation style are the factors influencing the success of a training programme. In addition, the voice modulation, facial expression and body language of the trainer are most important in deciding about the attractiveness. Other factors such as expectancy, utility factor and self evaluation are greatly responsible in influencing the success. The best trainers are those who want the trainees to learn and expect that the participants are capable of learning. The effective trainers while presenting their topics, develop and form high but reasonable expectations about the trainees learning and performances. Their expectations are to be communicated to the trainees through verbal and non-verbal means. Effective trainers always ensure that the topics covered are of practical use and evoke interest in the participants. Further, what is learnt are also to be linked with the job or work situation.

The self evaluation is an important aspect of the training programme. The self evaluation helps to improve the trainers' skills and make necessary corrections in their approach in making the training programme a successful one.

5.17.5 Valedictory Function

The formal valedictory function will provide an opportunity for the policy makers and authorities to know what had happened in the training programme and its impact on the participants. It will help the organizers to know the views of trainees. It also facilitates exchange of ideas and views which will help to bring about suitable modification and refinement in the training modules and methodology adopted.

5.18 Selection and Orientation of Trainers

In any training programme the whole subject is divided into different specialized topics for which experts in the relevant topics are usually invited to deliver the lecture and impart necessary training to the trainees. The selection of trainees are very important in the sense, the trainers must be competent and comfortable enough to handle the given subject. According to the training objectives, audience characteristics and degree of specialization are some of the important points to be considered while selecting a trainer. A scientist of super specialization will be a wrong choice if he is invited to impart training to tribals regarding fertilizer application. The trainer should be comfortable with the local language to which the majority of the trainees belong. It is necessary to explain the difficult concepts in the local language for a better understanding. As far as possible the locally available resource persons are to be considered as a first choice. The local experts are well aware of the local situation and practical knowledge that are required for the trainees. Depending upon the subject coverage of the training programme, the trainers belonging to related discipline are also need to be considered. A mix of trainers with varying degrees of experience will invariably help to make the training programme more lively and interesting. It is also important to keep the gender mix among the trainers at an optimum level. According to the nature of the topics and skills to be imparted the male or female trainers are to be decided. The topics involving heavy field work and demonstrations are normally allotted to male members. The topics such as home science, tailoring, nutrition and health are better performed by female trainers. In this way the suitability of the trainers to the subject is to be analysed well and a judicial selection is to be made. It is also needed to consider an assistant for the main trainer to provide technical assistance during the training programme.

The orientation programme for the trainers is to be conducted before the commencement of the training programme. During the orientation programme the following points are to be discussed so that the trainers will get themselves prepared for the programme.

1. The time and duration of the slot allotted to them.
2. The brief description about the technical standard of the training materials and the lecture to be prepared.
3. Details about the trainers regarding their age group, educational status, gender status, purpose of their training etc., need to be appraised.
4. More important is the preparation and use of instructional materials. The type of facilities available with the organisation in handling a particular type of AV aids, need to be made clear before hand to avoid last minute confusion. Some times we can see that trainer has come prepared with a particular AV aid for which there are no operational facilities available at the training centre.
5. If the training programme involves any hands on training, the type of raw material required, machineries used, number of batches to be made and assistance required need to be clarified during the orientation programme itself. Before commencement of the training, a detailed understanding about the way in which it is to be organized is a must.
6. If there is a specialized training equipment or strategy involved, it should be discussed thoroughly with the trainers and it is necessary to conduct a mock training session to make the trainers comfortable with the situation before commencement of the training it self.
7. Finally, the trainers need to be appraised with the details of the physical facilities available with the organisation so that they can come prepared to match with the available facilities without any assumptions.

5.19 Selection and Preparation of Instructional materials

Instructional materials are just tools or aids or vehicle for transfer of ideas, technology or message. The success depends upon the selection of right type of materials or aids at the right time and in the right way. Therefore, the trainer needs to be selective in using the aids in consideration of the different situations of his audience and at different stages in the training process. A poster for example is of little help except in the awareness stage. For creating interest in the audience in adopting new technology such as the use of crossbred bullocks for agricultural work, a movie film is the appropriate one.



There is no inherent magic in the visuals. They have to be used in support of a lecture for highlighting the most salient feature in the lecture to make the audience to understand and remember. Instructional materials are usually of audio visual type. They are only aids to your verbal words and your words depend on them as much they depend on your words. Audio-visual aids are not necessary for each and every type of communication. For example, there are ideas simple enough that can be easily communicated through verbal words. Audio-visuals are therefore need to be used for things that are beyond easy comprehension of the audience or out of his experience or abstract enough or complicated enough for their easy understanding. It is only then that audience will have a sustained interest for learning through audio-visual aids. While planning for the use of audio-visual aids the trainer must think clearly about the objectives, audience, the media, the resources and techniques.

5.19.1 Objectives

Clear objectives are the basis of any good presentation, demonstration or training. Objectives should be specific. Trainer must be specific and clear in his mind that what essential points he wishes to have understood by the audience and what type of action he wants them to take. He has to know well the obstacles or the thought barriers of his audience and should be able to overcome the same.

5.19.2 Audience

Audience or trainees must be known well. A clear picture about them gives an idea for enough preparation. It is also very essential to know their field of experience, cognitive make up and their group norms. At Africa, the slide show on malaria control evoked poor response with certain tribes since, the enlarged projected image of the mosquitoes and larva on the screen could not fit with the cognitive experience of the tribes.



Selection and preparation of training materials

Since the tribes could not follow the concept that the small mosquito is enlarged and projected, they disassociated themselves from the message saying that they rarely come across such big insects in the forests. Since, the meaning always lies with the people, it is essential to take care of the audience and their nature before preparing for communication and selecting the visual aids.

5.19.3 Media

Certain media are well suited for certain jobs. For certain types of scientific teaching such as entomology or pests, film-strips are the ideal visual aids. When motion is important for understanding, a film or a demonstration is good. If you are trying to explain how a crossbred bullock work in the field or a bird flies or a tractor moves, it is good that you show the trainees a film giving in slow motion the movement of the particular parts. A working model, if it can do the job, can also explain the techniques to the audience well. If the operation is complicated involving a number of factors, still pictures, charts or slides may be better used during or after a film show. Where the subject needs close examination of the details such as communicating the idea of different parts, you may go in for the model rather than using a set of flash cards.

5.19.4 Resources Availability

When you plan for your aids, the resource potential such as finance, availability of the aids, operational facilities and availability of infrastructural facilities such as power, place etc. for making use of the aids need to be analysed. In case of non-availability of suitable resources and materials, simple visual aids can be prepared using the locally available materials and facilities.

5.19.5 Techniques

There is difference between one visual aid and the other. Therefore, it is necessary to know the techniques of effective use of aids so that the ideas or technologies you want to communicate can go to the receiver.

Preparation of most of the audio-visual aids call for a thorough understanding of the subject matter on which you are trying to prepare on. Different visuals will call for different treatments of the message. While preparing visuals care is to be given to know the local interest. It helps in making the aids more interesting and authentic. Before using the visual aids, technical correctness of the fact that is depicted, operational procedures, and sequence of ideas need to be checked thoroughly. Finally, faith should be kept on the utility of the audio-visual aids and they can be used whenever it is possible and wherever they are necessary during the communication process. The training will be more effective if we opt for the multi media approach than sticking to one aid alone.

5.20 Training methods

The selection of appropriate training methods is important for an effective learning. The training methods refer to a combination of various instructional media used for conducting the training to achieve the learning objective efficiently and effectively. The following items are to be kept in mind while selecting the training methods. It should:

1. Help to minimize the time taken for the learning process.
2. Make the learning process interesting.
3. Allow active participation of the learners.
4. Help the participants to transfer their learning experiences from training to job situation.
5. Provide the learners with knowledge of results about their attempts to improve.
6. Provide some means for reinforcement of appropriate behaviour of the trainees.
7. Provide the learners with an opportunity to practice and to repeat when needed.
8. Help the learners their willingness to change.

The selection of suitable training methods is largely influenced by the training objectives, subject matter handled, participants nature, resources availability such as time, location and budget, organizational considerations and trainers capability.

If the purpose of the training is to increase knowledge, training methods that allow you to present the concepts will be effective. The suitable methods for this purpose are lecture, case study, demonstration, group discussion, buzz session and brain storming.

If the purpose of the training is to help the trainees to acquire new skills, the appropriate methods that are useful are demonstrations, role play, structured exercises, practical exercises and workshop. If the purpose of the training is to change the attitude i.e. to help the trainees to acquire new values, opinions and beliefs, the methods such as role play, case study, demonstrations, field visits, structured games and exercises, instrumented exercises, film and video tape are of useful.

The choice of the training method will also depend upon whether the training is intended to develop a general or specific level of knowledge and skill. The participants learning style, their experience and size of the group are also some of the factors that are to be kept in mind while deciding upon the training methods.

SI. No.	Training methods	Number of participants
1.	Lecture	10-40
2.	Group Discussion	3-10
3.	Case Study	3-10
4.	Role play	5-7
5.	Field visits	5-20
6.	Seminars and syndicate	15-30
7.	Demonstrations	5-15
8.	Simulation method	8-15
9.	Structured exercise	5-15
10.	Instrumented exercise	8-15

Training methods and optimum number of participants

5.20.1 Lecture

A lecture consists of oral presentation of the subject matter along with the help of audio visual aids such as black board, over head projector, slides, charts etc., so as to help the listeners to understand the concept, principle and method being presented. The lecture method is suitable to an audience size of 10-40.

5.20.1.1 Steps in Lecture presentation

1. Make the purpose of the presentation clear to the trainees at the beginning itself.
2. Build the lecture presentation from the existing level of knowledge of the trainees.
3. Organize the presentation in to introduction, body and summary
4. Adjust the pace and language of presentation as suitable to the trainees
5. Ensure the attention of all the listeners and use questions frequently to check the trainees understanding.

Through lecture it is possible to present large volume of information in a short time. Cost effective and it can be used at any place and time.

5.20.2 Seminar

A seminar is one in which different aspects of a particular subject is discussed in a logical sequence under the guidance of experts and experienced professionals. The duration of seminar may be of 2-3 days and specific time is allotted for different speakers or experts. The purpose of the seminar is to pool the expertise of different professionals and come out with conclusions and concrete recommendations to solve the problems or improve the existing situation.

5.20.3 Group Discussion

A group discussion refers to exchange of ideas and thoughts by two or more people on a selected topic. The purpose of discussion may be related to clarification of ideas or help in understanding and application of ideas to practical situation. Some times the purpose of the group is to arrive at a consensus about a debatable subject.

5.20.3.1 Advantages of group discussion methods

1. It ensures participation of the trainees by providing opportunities for contribution.
2. It enhances the motivation and interest of trainees.
3. It helps in pooling of knowledge and experience of different participants, which can form a basis for effective learning by the entire group.

5.20.3.2 Disadvantages of group discussion methods

1. Effective group discussion demands time and organizational skill.
2. Improper group discussion may end up in unnecessary arguments and heart aches.
3. Care should be taken to ensure the participation of 'shy members' and to prevent the domination by a few.

5.20.4 Workshop

A workshop refers to assembly of interested and select group of people to learn and practice specific skills under experienced professional guidance. Emphasis is given for acquisition of proficiency of every member who participates in the workshop. A mix of theory and practice is provided in a workshop situation.

5.20.5 Symposium

Symposium is a gathering of experts who present their findings or ideas on a specific sub-topic related to a major subject. Each speaker under the method is given specified time and discussion among speakers or audience is not a common feature. The output of the symposium may result in the publication of edited papers presented by the experts.

5.20.6 Syndicate

A syndicate is a group of people (8-10) assigned with a task of investigating a particular problem or topic and to find out the solution. The activities of a syndicate are coordinated through a chair-person and a secretary. Entire group works on its own through collection of data, discussion with relevant people and consultation of literature. The findings of the study including recommendation are presented before the entire group along with the main report. Syndicate helps in widening the understanding of the participants.

5.20.7 Panel Discussion

A panel discussion is an effective method for discussion of any particular topic by a panel of three to five experts representing different areas of the same subject.

5.20.8 Simulation Methods

Simulation method consists of simulating real life experiences. The common simulation exercises are role play, in-basket exercises and games.

5.20.9 Role Play

A role play is a technique where in one or a group of trainees enacts a real life situation which helps the participants to experience the true feelings of that situation. The method of role playing is useful for training in effective or behavioural dimensions. It may be mentioned that there is no pre-determined script or dialogue set before the actors. The actors of a play are expected to behave as if it were a real life situation.

5.20.9.1 Steps in Enacting Role Play

1. Choose a problem which is consistent with the learning objective.
2. Explain the topic and set the climate for role play.
3. Describe the purpose and objective of the activity.
4. Provide a brief introduction of the whole play.
5. Ask the group to select different players to enact the play.
6. The role areas and performance are to be made clear to the actors.
7. Specify the role of observers in the play.
8. Arrange the room and set the stage.
9. Enact the role play in its real sense.
10. Ask participants to list out critical incidences surfaced in the role play.
11. Carry out discussions to find out the views of all the observers.
12. Develop a final understanding on the expected behavioural role in real life situations.

5.20.9.2 Advantages of Role Play

1. Role play acts as a traditional stage between theory and practice.
2. It is an effective method to gain insight about the different behaviours of the participants and get to know the strong and weak points in their behaviour.
3. It increases the participants' ownership of learning.

5.20.9.3 Disadvantages of Role Play

1. Role play sometimes over-personalizes the problem situation or end up in stereotype and caricature roles.
2. Role play, if not planned, organized and processed properly will be viewed as a mere fun exercise.
3. The participants will be tempted to act in an unnatural way and will not reveal their true behaviour.

5.20.10 Psychodrama and Sociodrama

Psycho and socio dramas are also simulation training methods. They are used along with the treatment to help the disordered people to relieve from the situations that upset them psychologically or socially. The importance of the drama lies in the process, in the reacting or reliving itself. The performers are given free hand and no control over their skill or play and it may lead anywhere. It gives opportunity to vent out their blocked emotions and feelings. The purpose of the simulation methods of training is to offer opportunities for specific experiences rather than leading to anywhere else.

5.20.11 In Basket Exercise

It is one of the behaviour simulation games designed for evolving role behaviour simulations. The trainees are asked to act as if they have assumed a particular role and their behaviour is critically observed. On the basis of their performance, the trainer critically evaluates their knowledge, skill and attitude to handle a particular role or take when assigned to it. Based on the evaluation result the trainee will be given training to modify his approach by providing the required knowledge and skill. This method is a most elaborate simulation which creates a complex work organisation, rotate participants through key roles in it, and have them deal with specific situations of a kind they encounter

in real life. The trainees may work at an office situation with training intercoms, telephones and full in-baskets. The trainee has to face a number of inter departmental communication letters, data, reports, forecasts, targets etc. He will be posted with a series of problems, emergency situations and incidences for which he has to respond and try to keep the thing moving. The development of such in basket exercises needs a thorough understanding about the work situation, performance, office procedures etc. This technique plays an important role in training the behavioral dimensions.

5.20.12 Games

“A game is a structured activity in which two or more participants compete within constraints or rule to achieve an objective. A simulation is an operational model, using selected components, of a real or hypothetical process, mechanism or system. A simulation game combines the characteristics of games and simulations in a game based on a simulation”. A simulation game combines the element of a game-competition for an objective, rule, and closure-and those of a simulation. (Ksiser and Seeler, 1987).

5.20.12.1 Types of Simulation Games

1. **Gamut-running game** which involves overcoming obstacles by the players until they reach a goal.
2. **Allocation game** are related to resource allocation problems where the resources like money, power etc, are scarce.
3. **Group interaction games** are related to human relation problem which help the participants to experience new points of view.
4. **General system games** are related to total system of an organisation i.e., an institution or a company under highly structured set up.

5.20.12.2 Steps in Designing Simulation Games

Steps in designing a simulation game according to Keiser and Seeler (1987) are given below:

1. Determine the training objective of the exercise and its intended users.
2. Develop the basic specification of the exercise.
 - a) Building simulation models.

- b) Develop expectations and parameters of the exercise
- c) Describe the contents of the exercise and its format.
- 3) Develop the components of the exercise: scenarios, rules, roles and an accounting system
- 4) Construct and test a prototype of the exercise including field-testing.

5.20.13 Case Study

A case study consists of material related to an event, or problem. Since most of the case studies are related to real life situation, an analysis of case studies will help in acquiring development of analytical skills. The trainees are presented with cases either through written materials or video and are requested to analyse different situations and make their own decisions. It helps the trainees to develop independent thinking and to discover for themselves the facts and ideas.

5.20.13.1 Types of Case Studies

1. **Case illustration:** Here participants are supposed to evaluate the correctness of decision in the supplied case.
2. **Case problem:** Here the participants have to analyse the given information, make decisions substantiate those decisions using valuable arguments.

5.20.13.2 Steps in Case Analysis

1. Distribute the case study materials to the participants. This means that the trainer should have access to well-prepared case materials related to the learning objectives.
2. Give sufficient time for reading of the cases by the trainees so that they may understand key issues of the cases.
3. Start discussion on the identified questions or issues.
4. Record the key elements of the discussion.
5. Analyse various view points and draw conclusions.

5.20.13.3 Advantages of Case Study

1. It secures active participation.
2. It is an excellent tool to improve analytical thinking, decision making and problem solving.
3. Since good case study materials are based upon real life situation, it helps the participants to apply the concepts into practice.

5.20.13.4 Disadvantages of Case Study

1. Preparation of good case study materials needs expertise and time.
2. Collection of data to prepare cases or case-let may be costly.

5.20.14 Structured Experiences

Though some trainers include all types of simulation under structured experiences, it is note worthy to point out that structured experience is one of the methods of simulation. There is a clear cut difference between games and simulation exercises which could be understood by reading the definition of 'game' and 'simulation exercise' given earlier.

According to Pfeiffer and Ballew (1988) a structured experience is group learning design which is based on the following five stages of experiential learning cycle:

- a. Experiencing** (Activity, Doing)
- b. Publishing** (sharing reaction and observations)
- c. Processing** (Discussion of patterns and dynamics)
- d. Generalizing** (Inferring principles about the real world)
- e. Applying** (Planning for more effective behaviour)

a. Experiencing

This is the first stage of experiential learning cycle which deals with generation of data as a result of going through activities which is a part of structured experience. The participants are given instructions about the goal of the activity including “do’s and don’ts”. Some of the most important activities under structured experiences are:

1. Role play
2. Writing
3. Self disclosure
4. Competing or collaborating
5. Creating objects
6. Making products

The above activities can be done separately by individuals or jointly in small groups.

b. Publishing

In the second stage of experimental learning cycle, the data generated through the first stage i.e. experiencing is made available to the entire group. Efforts are made to collect data at cognitive, effective and behavioural levels. The following methods are used to record the reaction and observation of the participants.

1. Recording of data in the blackboard.
2. Posting the data using flip chart.
3. Collection of data using rating instruments.
4. Interviewing of the participants.

c. Processing

The stage of processing is the fulcrum or the most important step in the experiential learning cycle, which is concerned with analysis of experiences shared by the trainees. Careful planning has to be made to process the data collected and bring out the specific patterns underlying the dynamics of the activity. Unprocessed or ineffective processing will defeat the very purpose of structured experience exercise. Some of the techniques, which can be used in the processing, are: use of process observers, analysis of recorded data and studying the trends and patterns, analysis of role

behaviour of participants. Efforts should be made to help the participants to look back at what happened at the activity stage in terms of group dynamics and “not in terms of meaning”.

d. Generalizing

At this stage the participants are helped to relate a classroom or training room experience to the real world experience. It is important that the participants realize that what happened in the classroom is not an exercise but actually happened in the real world back at the work place. The important question to be answered here is ‘so what?’ Some of the strategies which can be used to develop generalization are:

1. Guided imaginary: Helping the trainees to apply the class room experience to the real world experience.
2. Individual analysis: Helping the participants to make a brief write up on what have been learned and re-learned.
3. The trainer may also bring some theoretical inputs and research findings to help the overall learning process.

e. Applying

Applying is the last stage of the learning cycle to answer the question “now what”? The trainees are assisted in applying the generalizations developed out of learning experience to actual work situation. The actual application of learning results in modification of behaviour. Some of the practices which can be used at this stage are:

1. Goal Setting: The participants may be requested to set goals which reflect the changed behaviour.
2. Contracting: Making agreements with co-trainees about application of the generalization.

5.20.14.1 Examples of Structured Experiences

Some of the most popular structured experiences are:

1. Ring – toss exercise: This game, first used by Kurt Lewin, is effectively used to study risk-taking behaviour.

2. Broken-square exercise: The broken square exercise was developed by Pfeiffer and Jones (1969) which is used to demonstrate one's tendency to collaborate and compete under intra-team situation.
3. Tower building exercise: The Tower building exercise was originally used by Rosen and D'Andrad to investigate the impact of child rearing practices or achievement motivation. The above game can be effectively used to demonstrate goal setting process and to understand the role of helps and expectation (Pygmalion effect) in achievement motivation.

A set of 316 structured experiences have been combined by Pfeiffer and Jones in 1981 and published in eight volumes under the title "Handbook of Structured Experiences for Human Relations Training". Apart from the above publication, Pfeiffer and Company is also publishing an annual handbook since 1972, for group facilitators which contain a number of structured experiences.

5.20.14.2 Advantages of Structured Experiences

1. It helps the trainees to understand different aspects of the behavioural patterns.
2. A lot of interest and curiosity is developed among the participants.
3. It creates an intense involvement among the participants.

5.20.14.3 Disadvantages of Structured Experiences

According to Argyris (1967) as reported by Pfeiffer and Ballew (1988) some of the negative effects of structured experiences are as follows:

1. Lack of theoretical reasoning which support the use of structured experiences.
2. Problem in generalization and its application in real work situation.
3. The participants may become dependent on the trainers due to the dominant role of trainers.
4. Lack of processing skill of the trainer may result in poor learning by the participants.
5. Even if the participants develop some generalization based upon their classroom experience, a true change in their behaviour may not happen as it depends upon so many contextual factors.

5.20.15 Instrumented Exercises

Instrumented exercises refer to use of psychological instruments such as a rating scale, questionnaire and related forms of data collection techniques, which are used to collect information about the trainees' attitude, perception and interest with the purpose of assessing and analyzing their behaviour. These instruments differ from tests, as there is no right or wrong answers while responding to a particular rating scale or questionnaire. The data collected from the instruments can be used to analyse the individual and group behaviour with the purpose of personal growth and understanding a particular concept or theory. For example, an instrument in leadership style can be effectively used to provide information about leadership style of an individual or a group and to discuss the concept of leadership styles. The instrument can also be used to reinforce the learning from the structured experiences (Pfeiffer and Ballew, 1988).

5.20.15.1 Application of Instrumented Exercises

The uses of instrumented exercise are as follows:

1. Providing instrumented feedback to the participants which will help in interpretation of their score in relation to particular behaviour.
2. To introduce new concepts in an interesting way
3. To analyze changes or outcomes out of training programme in human resource development.

5.20.15.2 Steps in use of Instrumented Exercise

Different steps in using of an instrumented exercise in human resource development are as follows:

a. Administration of the Instrument

An appropriate instrument chosen for particular learning objectives are distributed to the participants. Instructions about filling up of the instrument are given and the trainees are encouraged to respond to the question honestly, to promote a higher level of self-learning. The respondents should be told that there are no right or wrong answers to the questions provided in the instrument and the purpose of the instrument is for personal growth. The administration phase may take upto 20-30 minutes.

b. Theoretical Inputs

The phase of theoretical input consists of clarifying the theoretical basis of the instrument. For example, and instrument on motivation may call for explaining the following concepts of motivation briefly:

1. Personal achievement motivation
2. Social achievement motivation
3. Influence

c. Prediction

Under this phase which may only take a few minutes, the trainees are asked to predict whether they will score high, medium or low on the behaviour under study. For example, when the participants are given the instrument on motivation they are asked to predict their motivational level with respect to their personal achievement, social achievement and influence.

d. Scoring

In this phase the scoring procedure for the instrument is explained to the participants and the participants are requested to work out their score. The facilitator may help the participants in scoring. The actual score of the participants and their predicted score are recorded and displayed in the blackboard or poster. The interpretation of the score of the participant is an important phase in an instrumented exercise. The interpretation may vary according to the style of the facilitator or purpose of learning objective. The steps which can help in interpreting are as follows:

1. Comparison of actual score received with predicted score.
2. Comparison of actual score with the group average.
3. Comparison of individual score with others.
4. Evaluation of each trainee's score in terms of absoluteness.

e. Processing

The phase of processing is the most crucial in the instrumented exercise, which depends upon experience and expertise of the facilitator. The processing should help the participants to analyse

their scores and to understand how their scores fit with their self-image. The need and importance of different behaviours and orientations should also be discussed. Effective processing will help the participants to switch from one orientation to another according to the need of the situation.

5.20.15.3 Advantages of the Instrumented Exercises

1. An effective way to learn new concepts.
2. Secures the involvement of the participants.
3. Helps the participants to assess their own behavioural pattern and show the need for its change.

5.20.15.4 Disadvantages of Instrumented Exercises

1. The participants may not respond to the instrument with honesty.
2. The responses may reflect the acceptable behaviour rather than the actual behaviour.
3. Development and testing of instrument including its administration may consume a lot of time.
4. Anxiety may be produced about the test.

5.20.16 On-the-Job Training

On-the-job training is known by different names such as side-by-side training or one-to-one-training. On-the-job training takes place in the work-place and consists of helping an individual trainee to acquire new skills and expertise through practicing them under the guidance and supervision of an experienced trainer or an employee. The trainees under on-the-job-training witness how the work is done. The participants under on-the-job training go through the following stages while learning new tasks (Reay, 1994).

1. Observation of how the job or work is done by his/her trainer
2. Listening to instructions and understanding them.
3. Practicing the job.

4. Receiving feedback from the trainer about the performance.
5. Clarification of doubts and receiving more guidance from the trainer.
6. Practicing the job till performance standard is achieved.
7. Learning another job based upon the above steps.

5.20.16.1 Developing of On-The-Job Training System

The steps in developing of on-the-job training system for any development Organisation are as follows:

1. Prepare a training database on job analysis, learning objectives and individual training needs.
2. Develop a training schedule based upon priorities of training needs.
3. Select the employees (trainers and trainees) for training on phased manner based upon training schedule.
4. Make arrangements for resources needed for the training.
5. Run the training programme.
6. Monitor and evaluate the effectiveness training.
7. Make necessary changes based upon the evaluation.
8. Document the training.

5.20.16.2 Advantages of On-The-Job-Training

1. Training is conducted under real-work situation
2. Skills learnt are relevant to job situation and useful
3. Cost effective.



Trainings in progress

5.20.16.3 Disadvantages of On-The-Job-Training

1. Frequent hindrance during training.
2. The trainer may not be effective in transfer of skill/knowledge.
3. The trainees may feel less enthusiastic to learn from his/her colleagues or supervisors.



Trainings in progress

5.20.17 Programmed Instructions

The programmed instructions individualize the simultaneous training of many participants at a time in several skills. The programmed instructions are given in the form of a teaching machine or a programmed textbook, video or T.V. programme. The programmed instructions consist of an ordered sequence of stimulus items to which a trainee responds in a specified way. The response

given by the trainee is reinforced by immediate results. Therefore, the trainee learns by making right movements and responses from what he knows by a process of successively closer approximation towards what he is supposed to learn from the programme. One of the advantages of programmed instruction over other methods is its flexibility. It also provides in private the step-by-step evaluation and feedback to the trainees. It also provides an uniform training input to the trainees.

5.20.18 Experiential Learning

Experiential learning refers to the type of learning obtained through transformation of experience into knowledge. The learners are encouraged to involve themselves fully into an experience and later reflect and analyse that experience to draw conclusion or knowledge. The experiential learning cycle helps participants draw meaning out of experience through discussion and analysis. This is quite appropriate for skill training because it provides a kind of experience which may easily lead participation to reflection, draw conclusion and identify application points.

In the experiential learning, the participants learn more through group work. Trainers use exercises or problems which involves two or more people in order to encourage team work. The trainer plays a role of facilitator or guide. Trainers settle goals and help in smooth conduct of group work. They intervene to analyse, clarify doubt and draw conclusion. The experiential learning approach involves steps such as experience process, generalization and application. In the experience process, the participant get an opportunity to engage in experience through case study, role play, demonstration etc., after the experience, the trainer guides the group to discuss about the experience critically. The individual reactions, feelings and perceptions are analysed and inferences are drawn. After critically analysing the participants are encouraged to draw conclusion based on the generalized conclusion, how the resultant experience is applied to practical problem situations so that they can plan to use their knowledge to actual work situation.

5.20.19 The Critical Incident Technique

The Critical Incident technique was developed by Flanagan (1950), which provides factual evidences in finding out behavioural characteristics that can qualitatively distinguish between different categories of people.

The methodology of the Critical Incident Technique consists of two steps. The first step involves collection of critical incidents from the respondents with regard to some identified behaviour. For example, a researcher may be interested in finding out the characteristics of effective managers. For this purpose he may interview the employees and ask them to narrate specific incidents which have made them to rate the managers as effective or ineffective. It is essential that the events should have happened recently to avoid the danger of stereotypical responses. The second step consists of content analysis of the critical incidents using the following procedure:

1. Classify all the incidents either as effective or ineffective behaviour
2. Analyse similar behaviours (effective or ineffective) to identify different specific behavioural categories.
3. Editing of specific behaviour category and elimination of repetitions.
4. Work out critical requirements based upon analysis of effective and ineffective behaviour.
5. The final step is to interpret and report the requirements of the effective managers.
6. The T-groups is also known as Laboratory Training methodology. It was first used by the National Training Laboratories Institute, Bethel, USA.

5.20.19.1 Objectives

The main objectives of T-group are: to help the participants to get insight into their own behaviour, to improve their interpersonal relationship with others, to increase one's understanding of group dynamics, to improve ones' sensitiveness to others feelings, to learn the art of giving and receiving feed back, to learn the art of conflict management, and to improve the effectiveness of group functioning.

5.20.19.2 Methodology

Since this method involves active interaction with one another the number of participants will have to be restricted to about 12-15. The task of the group will be to analyze it's own behaviour with a focus on "here and now" behaviour in the group. More emphasis is given on communicating the feeling of the members rather than opinion or information. The members are encouraged to freely disclose their self and to give and receive feedback from others. The duration of the exercise may last for several hours to few days.

5.20.19.3 Role of the Trainer

The role of the trainer is to facilitate the interaction among the participants and not to take the role of a leader. The trainer also helps in helping the participants to learn from the interactions of the group as well as providing direction when necessary. Further, relevant inputs in the form of theory and research results may also be provided.

5.20.20 Transactional Analysis

Transactional Analysis (TA) was developed by Eric Berne in 1950s by watching people's interaction with each other. Transactional Analysis method used popular terminology taken from everyday language to explain human personality and behaviour.

According to Transactional Analysis theory, there are three persons within all people. These are Parent, Adult and Child. These are technically known as ego-states. An ego state denotes the habitual way of thinking, feeling and reacting. The ego states are classified as Parent, Adult and Child.

5.20.20.1 The Parent Ego State

The parent ego state is developed by all the people in early childhood upto the age of six years. When you feel, think or act as you saw parental figures act when you were little, you are in your parent ego state. Parent ego state reflects the life as it is taught. Functionally, it sets limits, gives advice, discipline, protects and nurtures, teaches how to do etc. The parent ego is further classified into critical parent and nurture parent. The critical parent is that part of us which sets limits and makes judgment about ourselves and others. The nurturing parent is the other part of the parent ego state. It gives guidance, supports, protects, nurtures and teaches how to do.

- ⒫Parent
- ⒶAdult
- ⒸChild

5.20.20.2 The Adult Ego State

The adult ego state behaviour is rational, problem-solving and decision-making. Functionally, it gathers the data from the parent adult and child. Eg. how the child feels and what he wants; what the parent says, feels and how he reacts; what the adults has to say based on the past decisions; and what one external situation is. After gathering the data it analyses and evaluates it, generates alternatives and takes a decision. It is the alert and analytical part of the personality. The adult ego state reflects life as it is thought.

The basic vocabulary of the Adult consists of why, what, where, when and how.

5.20.20.3 The Child Ego State

The child in you is what you were when you were very young. The child ego state is associated with behaviours that are evoked when a person is coming from an emotional base. The child ego state reflects life as it is felt. The child ego state is the centre of feelings and energy, the source of our creativity, curiosity and intuition and site of our early experiences including those ways we have chosen to get attention from and get along with authority figures.

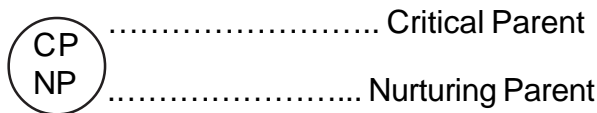
The child ego state is divided into three parts; the Natural Child (NC), the Adopted Child (AC) and the Little Professor (LP).

The Natural Child (NC) is spontaneous, energetic, curious, loving and uninhibited. It is characterized by behaviour such as the joy of solving a problem, the happiness of getting the better of someone, enjoying the feeling of comfort etc. The natural child is not entirely without fault. It can be self centered, impatient and greedy.

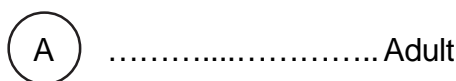
The Adopted Child (AC) acts in patterns learned from the environment. It is developed when you learned to change (adopt) your feelings and behaviour in response to the world around you. Learned feelings of guilt, fear, anxiety, depression and envy are characterized in the AC. The pride you feel when somebody praised you for your good performance often comes from the AC. The little professor (LP) is the intuitive part of the child which thinks without knowledge all the facts believed to be needed. The LP part of us gets those brilliant, non-logical insights that give us solutions to problem.

The three ego states with their sub-parts are diagrammed as shown below:

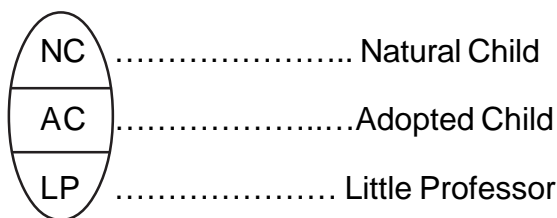
Parent



Adult



Child



Second Order Ego State Diagram

All of us evoke behaviour from one of the three ego states at different times. A healthy individual maintains a balance between all the three ego states. Each ego state has an appropriate time and place. To realize one's potential in life, it is important to be able to move flexibly from one ego state to another as different situations arise.

While all the people are structurally alike, in that they all have a PAC, they differ in two ways: content differences and functional differences.

5.20.20.4 Content of Parent, Adult and Child

Differing people will be dominated by one ego state or the other. A normal person will have a proper balance between the three ego states.

The parent dominated people do not engage in rational problem solving because they already know what is right and what is wrong. They seem to have an answer for everything. The Adult dominated people can be troublesome because they will be very boring to work with. They are often "Workaholics". They are never able to "let their hair down" and have fun. The Child dominated people, like parent dominated people, do not engage in rational problem solving. They learned in their formative years that they can get things by screaming and being emotional. These people are very hard to reason with in many situations.

A proper balance between ego states and flexibility to move from one to another depending on the situation is essential for a healthy personality.

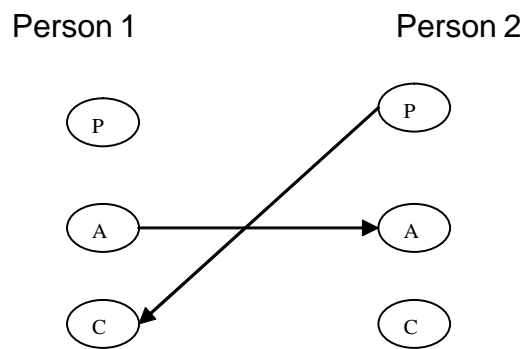
5.20.20.5 Analyzing Transaction

The transaction consists of stimulus by one person and a response by another, which in turn may become a new stimulus for the other person to respond to. It is a unit of social interaction. The purpose of analysis is to discover which part of each person PAC is originating each stimulus and response. The clues to identify these are not only in words but also in tone of voice, body gesture and facial expressions. The transactions may be verbal or non verbal. The transactions may be:

1. Open or complementary or parallel
2. Blocked or uncomplimentary or crossed
3. Ulterior or hidden or disguised transaction.

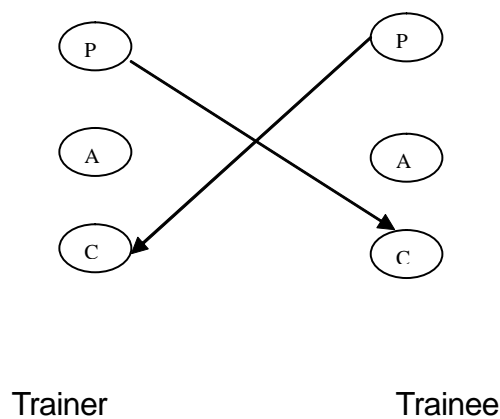
5.20.20.6 Blocked or Uncomplimentary or Crossed Transactions

When the stimulus and response cross on the PAC diagram this is called crossed transaction and communication stops. Here the response to the stimulus is either unexpected or inappropriate. It is out of context with what the sender of the stimulus had originally intended. For example, if a person asks his colleague what is the time? The expected response is telling the time of the day. But if the colleague says ‘Why don’t you wear a watch?’ then a crossed transaction has occurred. The stimulus calls for an adult to adult response, but instead a critical parent response is made, as shown in the following illustration.



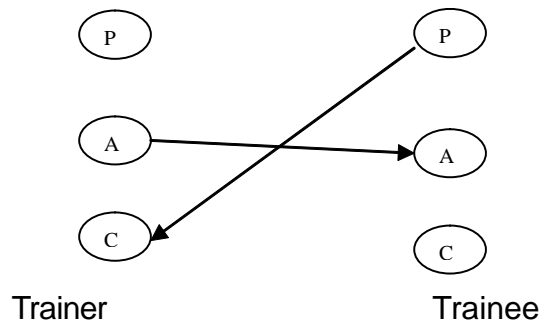
Additional illustrations of crossed transaction are shown below.

- 1) Trainer: You must complete the work (P → C)



2) Trainer: Give me your report on poultry farming.

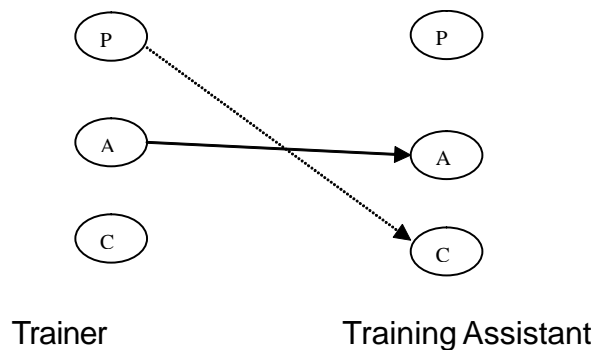
Trainee: You have your own copy. Why don't you look for it?



The crossed transactions often terminate communications and thus are disruptive. However, they can be beneficial in certain cases. For example, if a subordinate avoids taking decisions and always seeks advice, the boss can cross his transactions seeking guidance and force him to take decisions for himself.

5.20.20.7 Ulterior or Hidden or Disguised Transaction

In this type of transaction there is one overt stimulus and simultaneously there is another covert stimulus. For example, consider the following transaction; Trainer to Training Assistant Where did you hide the posters?



The main stimulus is the adult seeking the information, but there is a secondary communication in the word 'hide'. This is 'You never keep anything in the proper place' or 'you keep reorganizing the arrangement too often'.

To sum up, the complimentary transaction involves two ego states and occurs when stimulus originated from one of the ego state of a person gets the intended response from the same ego state of other person. Crossed transaction involves three or four ego states and occurs when the

stimulants received an unexpected response. Adult ego state of one person may desire to engage in complementary adult transaction with another person but second person in transaction is from child stage. The result is crossed transaction. Difference between complementary and crossed transactions is the one effect that they have on the flow of communication. Complementary transaction encourages communication whereas crossed transaction disrupts communication.

Ulterior transaction is one where there is a hidden described meaning. When people say something and mean something other, they are using ulterior transaction. In the ulterior transaction three ego states are involved and it is something sales man type of transaction. They are social (over or open) communication and psychological or covert type of communication. Four ego states at social and psychological level take place in duplex ulterior transaction. However, at psychological level it can be child – child or parent – child communication or vice versa. These transactions are the means of analyzing the common communication problems that usually arises during a training programme. Knowledge about the above transactional analysis will help the trainer to understand the ego states of the trainees and co-trainees for making necessary adjustments in his approach for a favourable communication atmosphere. This will largely improve the training climate and favour the learning situation very much.

5.21 Evaluation and follow up of Training

Evaluation means assessment of value of merits of a programme. Evaluation can help in assessing gain in knowledge, skills or attitudes due to training. Reactions of participants can be known. Usefulness of methods and approaches used can be gauged. Above all, overall impact of training on work performance and production can be measured. Evaluation should be done soon before training begins, during the course of training and after the training is over; Pre-training evaluation helps in understanding level of participants at entry point. Observations and data collected during the process of training point out lacunae and merits in implementation of training. Post-training evaluation is meant to measure impact.

5.21.1 Methods of Evaluation

There are many methods of evaluation viz. pre-post test, oral evaluation, structured observations and skill test, as discussed below.

5.21.1.1 Pre-post Tests

In order to measure gain in knowledge due to training a set of questions are prepared to be administered both before and after training is done. Similar test is provided both the times and results are compared.

5.21.1.2 Oral Evaluation

In case the number of participants is not very large, it is easy to get reactions of people about different aspects of training. Trainer may begin with purpose of such exercise so as to stimulate participants to express their reactions. Good aspects, problems and suggestions for improvement of training can be discussed.

5.21.1.3 Skill Test

In case of skill training it is possible to design tests, exercises with scores allotted for every step of performance. The participants may be given exercises to complete within allotted time period. Experts can observe and judge them.

5.21.1.4 Reaction Sheet

Relevance of content and methods as well as extent of satisfaction of participants with training may be taken on quick participant reaction sheets. Simple statements may be formulated to encourage spontaneous expression of feeling about training. It is ideal to prepare evaluation report on training incorporating observation and other data with suggestions for modifications.

Monitoring and evaluation is the third phase of management of training programme. Monitoring refers to “a continuous or periodic review and surveillance (overseeing) by management at every level of the hierarchy of the implementation of an activity to ensure that input deliveries, work schedules, targeted outputs and other required actions are proceeding according to plan” (UN 1984, as reported by Misra, 1990). On the other hand, evaluation is a process of investigating how far the objectives of the training programme have been achieved. It also involves analyzing the strengths and weakness of the programme, reactions of the participants, and its over all impact on behavioural change and job performance of the participants. Different steps in evaluation include collection of relevant data at various phases of training programme and analyzing them to assess the effectiveness of training activities.

5.21.2 Types of Training Evaluation

Evaluation can be classified into four types such as Planning Evaluation, Process Evaluation, Terminal Evaluation and Impact (Misra, 1990)

5.21.2.1 Planning Evaluation

The evaluation for planning of the training programme consists of two phases. In the first phase the training needs of the participants are assessed through one of the following four approaches:

- Performance analysis
- Task analysis
- Competency study
- Training needs survey

The skill gap analysis is also a part of assessing training needs. In the second phase, an assessment of instructional methods is done and the most appropriate training methodology and instructional strategy is worked out.

5.21.2.2 Process Evaluation

The process evaluation is also known as formative evaluation. This is done when the training programme is running and it helps in solving the problems arise while implementation of programme.

According to Raabetal (1987) as reported by Misra (1990), “process evaluation is performed to detect or predict defects in the procedural design of a training activity during the implementation phase”. As a part of process evaluation, investigations are made on the following:

1. Monitoring of training to know whether it goes on as per the plan.
2. Appropriateness of training methods or audio visual aids used.
3. Effectiveness of delivery or presentation
4. Effectiveness with regard to proper mix of theory and practical
5. Changes in the knowledge, skill and attitude among participants
6. Satisfaction of trainees with boarding and lodging facilities
7. Effective utilization of finance

5.21.2.3 Terminal Evaluation

Terminal evaluation is done at the end of the programme to find out to what extent the objectives and desired benefits of the programme have been achieved. The strengths and weakness is of the programme as perceived by the participants are also analyzed, the results of which will be useful to

make future improvements. 'The terminal evaluation is primarily concerned with learner performance' which can be analyzed using two approaches namely norm-referenced and criterion-referenced. Under the norm-referenced evaluation, the gains in learning are determined based on pre and post training scores. The criterion-referenced evaluation is related to investigation of what was taught and what was learned.

5.21.2.4 Impact Evaluation

Impact evaluation refers to assessing the programme impact on the job-performance of the participants. It attempts to find answer to the following questions:

- a) What are the improvements in the performance of job as the result of training?
- b) What are the benefits accrued to the participants and organisations as the result of improved job performance?
- c) What are the problems in applying the skills learned in real work situation?
- d) What can be done to enhance the application of newly learnt knowledge and skill in the work place?

5.21.3 Alternative Evaluation Models and Approaches

An understanding of alternative models of evaluation is necessary to make right choice about the model to be followed in evaluation situations. A brief description of six evaluation models as discussed by Deshler (1997) is presented below

5.21.3.1 Expert Model

Under expert model, evaluation of a programme is done by a team of external or internal experts. Data collection and analysis is done using appropriate tools and techniques. The final report will contain recommendations to make improvements in overall planning and implementation of training programme so as to achieve desirable outcome.

5.21.3.2 Goal-free Model

This model originally developed by Scriven (1972) aims to analyze the impact of training in relation to the interest and utility of participants irrespective of stated goals of the programme. Evaluation of any programme strictly by its stated goals may be narrower in its scope and goal free

model takes a multidimensional approach to uncover the consequence of training which is directly related to the interest of the participants and organizations

5.21.3.3 Attainment of objective Model

As the name suggests the above model is concerned with assessing how far the programme has achieved its stated objectives. This model assumes that the success of the training programme can be worked out through 'measuring a programme outcome against its own goals'. The problem under this approach is that often the objectives of the programmes might be set as a lower level so as to ensure its success.

5.21.3.4 Management Decision Model

Evaluation under decision model is mainly concerned with collection and analysis of data for the purpose of decision making by managers and policy makers.

5.21.3.5 Naturalistic Model

'This model assumes that a programme is a natural experiment and that the purpose of evaluation is to understand how the programme is operating in its natural environment'. The data collected under this method is used for a discussion of issues related to programme objectives, procedures, methods, expectations and benefits.

5.21.3.6 Experimental Model

The experimental model of evaluation is concerned with investigating to what extent the changes occurred or impact can be attributed to training programme as well as due to other extraneous factors or influences.

5.21.4 Frame work for Evaluation

Four criteria such as reaction, learning, behaviour and results can be used as a framework for evaluating training programmes as reported by Kirkpatrick (1976).

5.21.4.1 Reaction

Reaction is concerned with the trainees' opinion of the programme in terms of its contents, methods, duration, and effectiveness of presentation, relevance and utility. Under this evaluation,

the trainer and training environment are evaluated using questionnaires, interviews, group discussions and other appropriate methods.

5.21.4.2 Learning

Learning is concerned with acquisition of new skills, knowledge and attitudes by the trainees as a result of the training programme, in accordance with its objectives. Some of the evaluation techniques for this purpose are : tests, examinations, workplace based assessment of competence, projects etc. It can be done during or at the end of a training programme.

5.21.4.3 Behaviour

Behaviour is concerned with the extent to which the trainees were able to apply their knowledge to real field situations. In other words, the change in the on-the-job performance, which can be attributed to the programme. Assessment of improved performance may not be easy all the times.

5.21.4.4 Results

It is concerned with the overall effect of the training on individuals, their job environment, or the organization as a whole in terms of cost savings, quality improvements and increase in output. Because departmental and organizational results depend on many facts and it is difficult to attribute improvements to the efforts of specific individuals. Experimental approach is needed here.

5.21.5 Tools and Techniques for Evaluation

The most important techniques and tools which can be used for collection of data for monitoring and evaluation are as follows:

1. Questionnaire
2. Interview
 - Structured
 - Unstructured
 - Group interview

3. Projective techniques
4. Observation
 - Participant
 - Non-participant
5. Critical incident techniques
6. Case study
7. Analysis of report
8. Ratings by self, peer & supervisors
9. Use of scales and checklist
10. Document analysis

5.21.6 Steps in Evaluation of Training

According to goal model the essential steps involved in evaluation of training programme include:

1. Identify the objectives of the training programme to define the parameters of impact in terms of knowledge, skill, attitude etc.
2. Develop test and measures to measure the identical parameters.
3. Develop necessary tools and techniques to collect data at various stages as per the objective of the evaluation.
4. Test for reliability and validity of the data collection devices.
5. Collect necessary data from the participants using the developed instrument.

6. Analyze the data and prepare the reports.

5.22 Follow up

Many KVK training programmes end up without evolving expected impact because of lack of adequate follow up support to the trainees. Ex-trainee meetings are a must and have to be conducted by the concerned SMS of the KVK. The trainees require repeated persuasion, guidance and support put into practical application of the newly acquired skills. Linking up with the financial institutions, state departments, rural development institutions, marketing agencies etc., is a must for KVK trainees to sustain themselves in the field. Most of the time we can see the trainees could not do practically because of lack of financial assistance or continued technological support or marketing support. Such field level constraints need to be addressed carefully by providing them with adequate post training support as per their needs.

