

DEVELOPING AN EFFECTIVE TRAINING COURSE



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SECTION VI

DEVELOPING AN EFFECTIVE TRAINING COURSE

Introduction*

This section is aimed at assisting trainers in implementing the steps for planning, organizing and evaluating a training course. It complements the other sections on good agricultural practices for improving the safety and quality of fresh fruit and vegetables by providing information that can be useful in the preparation of a training course. This section is based primarily on cited FAO publications related to training methods and planning for effective training.

Module 1

Planning for Effective Training: Identifying Needs and Setting Objectives

Learning Outcomes:

- *To assist trainees in applying the key steps in planning effective training*
- *To provide practical information on identifying training needs and setting training objectives*

Practical:

- *Problem Solving Exercise: Planning an Effective Training Course on Good Agricultural Practices (GAPs): 3 Scenarios (Questions 1-2)*
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Training is a complex activity and must be carefully planned. Too often when technical experts are hired to conduct a workshop or a training session little thought is given to careful planning and design of the instruction. Design and preparation of a training course usually consumes more time than delivery of the material. This module reviews steps for effective planning and delivery of a training course.

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Visual VI.1-1

Definitions

Training - extends and develops capabilities for better job performance. It involves transfer of new knowledge, skills, behaviors and attitudes to perform specific roles in the workplace

Trainers – include extension educators, university faculty, government officials, industry personnel and consultants

Trainees – are the people responsible for producing or handling fresh fruit and vegetables

Training extends and develops capabilities for better performance on the job. It involves transfer of new knowledge, skills, behaviors and attitudes to perform specific roles in the workplace. Persons charged with training to improve the quality and safety of fresh fruits and vegetables include extension educators, university faculty, government officials, industry personnel and consultants. The audience, or trainees, are the people responsible for producing or handling the fresh fruit and vegetables, i.e. the farmers (both managers and workers) and packinghouse and warehouse personnel.

Visual VI.1-2

Trainee Motivation

People are motivated to learn when they see that

- through learning they can satisfy a need or a want
- they may earn prestige, and/or increase their income and therefore provide a better livelihood for themselves and their family

In all training/learning environments trainee motivation is essential for receptivity and learning. Research has shown that learning is at a maximum when people are motivated to learn (Knowles et al., 1998). For example, fresh food that is produced using good agricultural practices can result in more income to all involved in the production process.

To highlight the importance of improving the quality and safety of fresh fruit and vegetables, trainers may outline the following points:

- agriculture makes an important contribution to the economy of most countries;
- fresh fruit and vegetables have been associated with outbreaks of foodborne illness, some of which have resulted in deaths;
- food produced for rural and urban communities and for the export market must be safe to avoid human illness and lost trade opportunities;
- safe food is vital in protecting consumer health and the reputation of the exporting country;
- safety and quality controls are required at all stages in the food chain, including that of the primary producer: the farmer or grower.

During implementation of training, continually referring to these practical considerations will help trainees recognize the importance of the subject matter and motivate them to learn.

Planning for Effective Training

Visual VI.1-3

Planning for Effective Training

- Identify the participants and set a date for the training course (Module 1)
- Assess training participants needs (Module 1)
- Set training objectives (Module 1)
- Prepare and organize training content (Module 2)
- Select training methods and prepare materials (Module 2)
- Organize the training course (Module 3)
- Develop evaluation strategy (Module 3)

Successful training requires careful planning by the trainer. Planning helps the trainer determine that the appropriate participants have been invited to the training course and that the training is designed to meet their needs in an effective way.

Identify the Participants

Target audiences may be identified by the trainer or by other professionals as an observed group needing assistance. Alternatively, trainers may be approached

by a group of several individuals seeking help to address a common problem or need.

To address a common need it may be necessary to provide two different levels of training: one for workers and one for management. It is important to ensure that all of the trainees have received the appropriate level of information to bring about the desired change and achieve training objectives.

Visual VI.1-4

Adult learning is strengthened when:

- the message is pitched at the right level
- the message adds to or builds on the existing knowledge of the audience
- the learner is motivated and has a desire to learn

Research indicates that learning by adults is strengthened when: (Zemke and Zemke, 1984):

- the message is pitched at the right level;
- the message adds to or builds on the existing knowledge of the audience;
- the learner is motivated and has a desire to learn.

Farmers carry out many of the tasks that affect quality and safety of fresh produce. Therefore, they are a primary audience for training on improving the safety of fresh fruits and vegetables. Farmers generally have a great deal of life experience and knowledge about farming practices and can build on this base knowledge through access to information. Recognition of their existing knowledge by the trainer is important for a productive learning environment. A trainer should respect the expertise of the farmers in order not to appear insulting. Farmers may come to the training environment with strong fixed ideas on the subject matter. These ideas may interfere with their acceptance of new information or new skills. A respectful attitude and presentation of training material that adds to existing knowledge will help ensure acceptance of new ideas.

To ensure the information is delivered at the appropriate level, the trainer needs to listen and learn from the target audience about their existing level of knowledge. A formal assessment of their understanding of the subject matter can be made as indicated below.

Once the target audience is identified, the trainer should ensure that they are invited and able to attend the training course. The trainer may need to determine the most appropriate season, days of the week and time to conduct the training course to ensure the participation of the identified group.

Assess Participants' Needs

Visual VI.1-5

Needs Assessment

A needs assessment:

- Identifies the gap between “what is” and “what should be”
- Indicates what training should focus on
- Helps to define the training objectives and the selection of the training activities

Perhaps one of the most important and most often overlooked aspects of the planning stages of a training course is needs assessment. A needs assessment identifies the gap between “what is” and “what should be.” It indicates what training should focus on and helps to define the training objectives. It also aids in the selection of the training activities. (Swanson et al., 1997)

The assessment indicates what the participants want and need from the training so that the training course is useful to the participants (Swanson et al., 1997). Based on this, the training objectives for the course can be established.

Visual VI.1-6

A needs assessment helps avoid common mistakes in training, such as:

- Including a topic that is already familiar to the trainees
- Including a topic that has little relevance for the trainees
- Omitting a topic that is important to the trainees

The trainer may have a perception of the needs of the trainees, but validation of these needs is essential. A realistic look at the situation of the trainees will help the trainer focus the presentation to the needs and realities of the participants. A needs assessment will also indicate additional information that should be presented, identify problems trainees may have with the topic and provide information on possible constraints that could prevent trainees from applying the new information and practices.

An assessment of the trainees' needs can be carried out by meeting with the trainees, administering questionnaires and/or reviewing key materials such as policy documents, annual reports and evaluations. The needs assessment can be conducted in advance of the training or in the initial stages of the training course. The trainer should be alert to any new needs or problem areas the trainees may identify during the course.

A trainer who is less familiar with the specific circumstances and working environment of their trainees may need to conduct a more in-depth needs assessment. It might include gaining an increased familiarity with the trainees' concerns through field visits, discussions with their supervisors and/or more in-depth interviews with the trainees.

Set Training Objectives

Training objectives state what will be accomplished as a result of the training and are defined in light of the needs identified. They arise out of gaps and deficiencies identified in the process of needs assessment. Training objectives may indicate that trainees will display an understanding of certain concepts, demonstrate a given skill or show a change in attitude. Content, method of instruction, reading material, lab exercises and forms of evaluation strategies are all derived from identifying the training objectives. Without measurable training objectives, learning cannot be successfully planned or evaluated.

Visual VI.1-7

Clear training objectives provide a sound basis for:

- Organizing the trainer's work
- Informing trainees of the learning expected
- Selecting the training materials and methods
- Delivering an effective training program
- Evaluating the success of the training course

Well-defined training objectives will keep all involved on the right track throughout the training. They provide an important link between the needs assessment and the design and preparation of the training materials. The trainer can assess if the objectives were met, indicating whether the training was successful in meeting the needs of the trainees. The training objectives therefore provide the basis of evaluation.

Visual VI.1-8

Objectives for training may involve

- Improving Skills
- Increasing Knowledge
- Changing Attitude

In converting needs into objectives, three areas of performance may be identified: skills, knowledge and attitude (Swanson et al., 1997). Skills-related

objectives indicate what the trainee can do, demonstrate or perform as result of the training. Knowledge-related objectives refer to the participants' ability to identify, define or describe given concepts as a result of the training. Attitude objectives are less easy to measure although it may be useful to make explicit the desired attitudinal change.

The trainer and the trainees should understand and agree on the objectives of the training course. It is a useful technique for the trainer to refer to the course objectives at key times in the course to ensure that the trainees recognize how the training is progressing towards achieving the objectives. When participants know what is expected of them they can organize their efforts more effectively.

Summary

1. Training involves transfer of new knowledge, skills, behaviors and attitudes to perform specific roles in the workplace.
2. In order for training to be effective, trainees must recognize the importance of the subject matter and be motivated to learn. With regard to the safety of fresh fruits and vegetables, training is important because:
 - Agriculture makes an important economic contribution to most countries;
 - Fresh fruit and vegetables have been associated with outbreaks of foodborne illness, some of which have resulted in deaths;
 - Food produced for local use and for the export market must be safe;
 - Safe food is vital in protecting consumer health and the reputation of the exporting country;
 - Safety and quality controls are required at all stages in the food chain.
3. The steps in planning for effective training include:
 - Identify the participants and set a date for the training course
 - Assess training participants needs
 - Set training objectives
 - Prepare and organize training content
 - Select training methods and prepare materials
 - Organize the training course
 - Develop evaluation strategy
4. A needs assessment identifies the gap between “what is” and “what should be.” It indicates what the training should focus on, helps to define the training objectives and aids in selection of the training activities.
5. Training objectives state what will be accomplished as a result of the training and are defined in light of the needs identified. They arise out of gaps and deficiencies identified in the process of needs assessment.

Module 2

Preparing and Organizing the Training Content

Outcomes:

- *To assist trainees in applying key steps in planning effective training*
- *To provide trainees with practical information on organizing the content of the training course*
- *To provide trainees with practical information on selecting training methods and teaching aids*

Practical:

- *Problem Solving Exercise: Planning an Effective Training Course on GAPs: 3 Scenarios (Questions 3 and 4)*
- *Field Site Visit Guide*

Additional Resources:

- *Choosing the Correct Training Aids*
-

The content of the training course should link directly with problem areas identified in the needs assessment and the training objectives. The training content can be organized in outline form to help prioritize and sequence the material (Swanson et al., 1997). The end result should be that the training content is presented at the correct level to meet the objectives of the trainees.

Visual VI.2-1

Preparing and Organizing the Training Content

- The training content and flow of information should maintain the interest of the audience
- The training content can be organized in outline form
- Each step in the outline should contain a distinct message that may be presented in introduction, body and conclusion form

In some instances the trainer may have a very clearly defined objective, even before the needs assessment. For example, when a new law is being introduced, certain groups may need to be informed about the new law, how it will affect them and their responsibilities under it.

Outlining the training content will help identify the key messages to be presented. Presentation of a message is usually organized into the three main parts: introduction, body and conclusion (Carey, 1999). One or more messages may be covered in each meeting session.

Introduction – Opening statements should attract attention. The introduction should include such key points as the purpose of the session, an outline of the information to be covered, how the information will be presented, how it will achieve the purpose of the session and the personal benefit to the trainers. A primary consideration in planning the introduction of a talk is to acknowledge what the trainees have been exposed to prior to this presentation and to address what information will follow.

Body- The information presented should flow in a logical way. The message should not be overloaded. A few well-developed points are more effective than too many.

Conclusion – A summary of the main points should be made. Trainees can be asked what specific action should be taken following this course. Close with a strong final statement. New information should not be presented at this time.

A trainer has the attention of the participants primarily at the beginning and end of a session. Therefore, for greatest impact, it is good practice to make key points in the introduction of the topic and to summarize them again at the end. An adage often used to advise public speakers says “Tell them what you’re going to tell them, tell them, and tell them what you told them.”

Select Training Methods

Once the training content has been outlined and the messages have been identified, training methods can be selected. A training method is a strategy or tactic that a trainer uses to deliver the message so that the trainees achieve the objectives of the program (Wentling, 1993). One or more training methods can be used in the presentation of a message. It is good to use a variety of training methods throughout a training course to maintain the interest of the trainees.

Lecturing is the most frequently used method for delivering a message. There are, however, a variety of other techniques for conveying information to trainees. These are described in the following table.

Table VI-1. Common Training Methods (adapted from Carey, 1999)

Lecture	<ul style="list-style-type: none"> • Mostly an oral presentation, but may be supplemented with visual aids or handouts • The technique is generally confined to presenting only the expert's point of view • Often used because it is easier to organize and a great deal of information can be presented in a short period of time • Useful when there are a large group of trainees
Lecture/Discussion	<ul style="list-style-type: none"> • Variation of the lecture where the trainer increases trainee participation through facilitation of discussion at set times during the session • Discussion is often initiated through the use of questions • Trainer must plan the discussion and carefully choose the questions to lead the discussion
Demonstration	<ul style="list-style-type: none"> • Oral explanations combined with visual activities • Method demonstrations show processes, concepts and facts and are especially effective in teaching a skill that can be observed • A result demonstration shows the outcome of some practice or innovation, such as field tests of soil treatments or product sanitation procedures and water treatments
Group discussion	<ul style="list-style-type: none"> • Trainer leads the trainees as a group through a discussion of a given topic • May or may not be preceded by a short explanatory lecture
Symposium	<ul style="list-style-type: none"> • A series of lectures presided over by a moderator • Allows for the presentation of several points of view or several related topics
Panel	<ul style="list-style-type: none"> • A dialogue among several experts sitting in front of the room • A moderator coordinates the discussion • Differs from a symposium because panel members have an opportunity to discuss and interact with each other's ideas and views
Forum	<ul style="list-style-type: none"> • Following one or more presentations, the audience interacts and discusses the topic(s), bringing up a wider range of views
Discussion groups	<ul style="list-style-type: none"> • Involves every member of the audience in a small group (4 to 20 people per group) • Groups may have a pre-selected or self-elected leader • The groups may be given a specific topic or asked to develop a list of problems, issues, priorities, questions, etc. and report back to the main group

	<ul style="list-style-type: none">• Discussion groups encourage/allow everyone to participate, even if the audience is large• Group should be monitored to insure that one person is not dominating the activities
Case studies	<ul style="list-style-type: none">• Information is given to the trainees detailing a specific situation or problem and the trainees are assigned (as individuals or discussion groups) the task of making recommendations for the most appropriate action to solve the problem• Introduces a practical aspect to the training environment and creates a problem solving situation similar to that many trainees may face after returning to work
Field visits	<ul style="list-style-type: none">• A visit to an organization or workplace, such as a farm or packinghouse, that demonstrates the practical application of the ideas under discussion• Care must be taken that the place to be visited is aware of the objectives of the field trip• Adds a practical aspect to the training• Trainees need to be properly prepared for the visit and should be encouraged to make specific observations that will be discussed upon return to the classroom (See Field Site Visit Guide – Practical)

Selection of the method most appropriate for the participants in a training session and for the information to be presented is an important part of planning the training session.

Visual VI.2-2

<p>Factors to Consider when Selecting a Training Method:</p> <ul style="list-style-type: none">• Size of audience• Maintaining attention through interaction• Variety• Available resources/infrastructure• Duration of the training session and amount of information to be covered in it• Experience of the trainer• Training aids required to support each method and the time and resources to prepare and use them

Factors to consider when selecting a training method include:

- *Size of audience:* larger audiences often require more formal training methods with less audience participation

- *Maintaining attention through interaction:* methods which involve the trainees in the instruction have the advantage of maintaining attention and involving all participants
- *Variety:* selection of different types of methods often maintains the interest of trainees
- *Available resources/infrastructure:* where resources are limited, the opportunity to use resource intensive techniques like field visits and demonstrations may also be limited
- *Duration of the training session and amount of information to be covered in it:* methods that involve discussion and casework take longer than more lecture-oriented methods
- *Experience of the trainer:* the trainer must be comfortable using the chosen method
- *Training aids required to support each method and the time and resources to prepare and use them*

Visual VI.2-3

In preparing a presentation, remember the 5 “P”s :

- Proper
- Planning
- Prevents
- Poor
- Performance

The organization of the training content and the selection of the appropriate training method for delivering the messages require careful planning. Planning enables the trainer to project confidence and control throughout the training session and to work with the trainees to achieve training objectives.

An example of an approach that incorporates maximum trainee involvement might be to start with a lecture introducing the reasons why workers should be encouraged to use field sanitation units. The lecture could be followed by a group discussion about the practical difficulties preventing use of these units and how these difficulties can be overcome. The trainees could then implement the new sanitation practices in the field. After a suitable time, a review could assess sanitation unit usage by workers. In a follow-up meeting, trainees might discuss

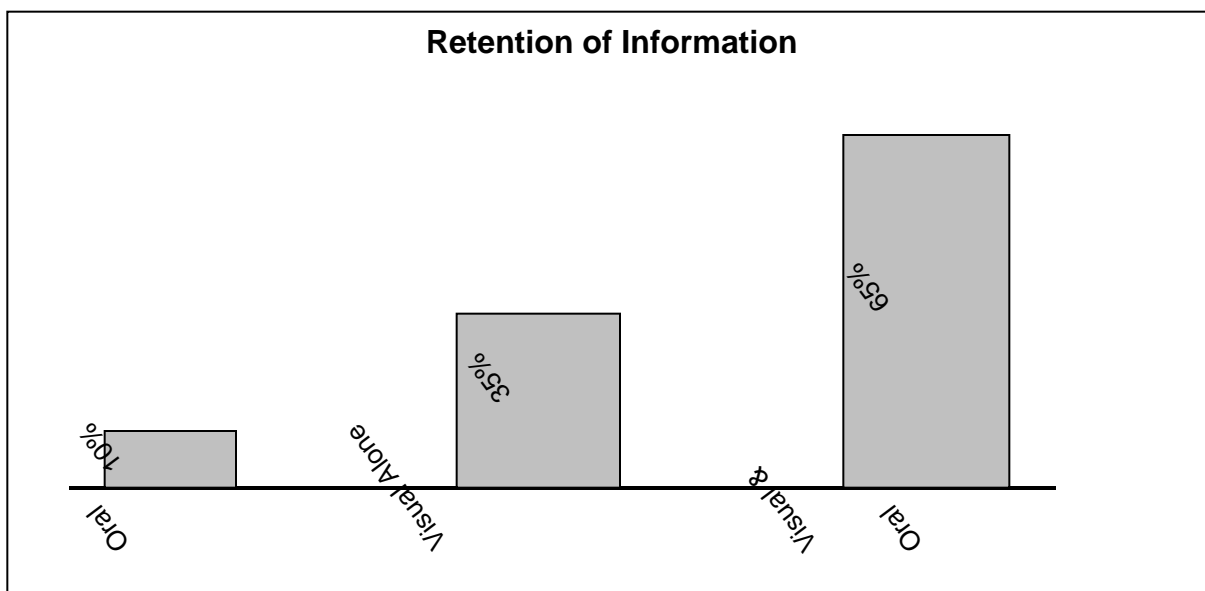
the benefits of the new practices and highlight any other areas of concern that may require further advice and training.

Select and Prepare Materials

Research shows that most people learn things through at least three of the five senses. The trainer should try to use training methods that appeal to the senses of sight, hearing, smell, taste and touch.

In general, instruction by spoken or written word is more effective when it is supported by methods that stimulate the other senses (OSHA, 1996). When participatory, hands-on methods are used, they serve to convert the symbolism of words into images in the learners' mind. Visual aids and hands-on exercises help make an abstract concept into a practical reality. This improves the chance for storage in long-term memory (improved retention and recall). The more senses to which instruction appeals, the stronger the impact of the message.

Visual VI.2-4



Training aids refer to all forms of support prepared for and used in training. As most training courses rely principally (though not exclusively) on the spoken word, carefully chosen well-prepared materials can make an important contribution to effective learning. They often make it easier for trainees to understand the message as the information can be arranged in a logical, clear manner with emphasis on the most important points.

Training aids improve the effectiveness of the trainer (Cheek and Beeman, 1990). To develop effective aids, the trainer must think through their message from the receivers' viewpoint. The trainer can feel more relaxed as the aids help

insure the flow of information. Aids may also help trainers feel less pressure as the trainees are focused on the training aid for part of the time.

Visual aids are especially useful in reinforcing the key points made by the trainer in an oral presentation. They can be very useful in describing points that are difficult to explain verbally. Anything that can be quantified or is factual can be presented visually. Visual aids should be tested on others before using them in the training room. It is also important to check the availability of equipment needed for visuals both in planning for their use and on the day of the presentation.

A variety of print materials can be used to enhance the learning process. These may include handouts, summary notes, workbooks or manuals. They have a clear advantage in that they provide a summary and/or can present additional information and can reduce note taking. They can be made available to the trainees for reference after the training session. A disadvantage is that these materials may distract from the trainer. Care must be taken to insure that trainees are not overwhelmed by so many print materials that they lose focus on the trainer.

A detailed discussion on selecting and using visual aids is presented in the Additional Resources section at the end of this manual.

Organize the Training Course

The trainer should envision the flow of the training course before it begins. The more the trainer can visualize the format of the training course, the more prepared he/she is for any questions or problems that may arise. A prepared trainer is a relaxed and more effective trainer.

Questions that should be addressed when organizing a training course include:

- How will the topics be introduced?
- Would a question be a good way to start?
- Which training methods will strengthen the message?
- What questions are the trainees likely to ask?
- What questions should the trainer ask the trainees?
- When should breaks be planned in the session?

Planning will also involve developing the schedule or program for the course. This will set out the course duration and the division of training sessions for each day.

A program for the training course is useful to:

- Guide the trainers in leading the course
- Organize the flow of information
- Ensure a balance between theoretical information and practical sessions
- Prevent repetition of information between different trainers
- Include adequate breaks
- Allow adequate time for all sessions
- Ensure the interest and motivation of the trainees
- Summarize and conclude the session and look ahead to the following session

Attention spans will vary from person to person, with the subject matter involved and with the situation. In lecture-oriented training sessions, the presentation should not exceed 20 minutes. Trainers often allow 40–45 minutes for practical and casework sessions. Trainers need to allow time for adequate interaction with the audience when using questions, exercises and visual aids. Breaks in a lecture presentation such as demonstrations, illustrations or question periods have the effect of refreshing the training session. It is important however that the breaks support the main body of the message. Also, time must be allowed periodically (every 1-2 hours) to allow trainees to stretch their legs and use the facilities.

Summary

1. Outlining the training content will help identify the key messages to be presented. Presentation of a message is usually organized into three main parts:
 - *Introduction* – should include key points such as the purpose of the session, an outline of the information to be covered, how the information will be presented, how it will achieve the purpose of the session and the personal benefit to the trainees.
 - *Body*- the main message presented as a few well-developed points flowing in a logical manner
 - *Conclusion* – summary of the main points. May include specific action that should be taken following this course.
2. A training method is a strategy or tactic that a trainer uses to deliver the message so that the trainees achieve the objectives of the program. Lecturing is the most frequently used method for delivering a message. There are, however, a variety of other techniques for conveying information to trainees. These include: lecture/discussion, demonstrations, group discussion, panels, forums, discussion groups, case studies, and field site visits.
3. Instruction by spoken or written word is more effective when it is supported by methods that stimulate the other senses. Visual aids and hands-on exercises help make an abstract concept into a practical reality. Print materials are useful to supplement lectures since they reduce note taking and provide a reference after the class has ended. Care should be taken that supplemental

material does not distract the trainees, taking attention away from the message.

4. Developing a program for the training course helps the trainer organize the flow of information, avoid repetition between trainers, ensure interest and motivation of trainees, and assure continuity between trainers and between sessions.

Module 3

Conducting and Evaluating the Course

Learning Outcomes:

- *To assist trainees in applying key steps in planning effective training*
- *To identify considerations in using a team teaching approach*
- *To assist trainees in applying key elements of evaluation to training activities.*

Practical:

- *Problem Solving Exercise: Planning an Effective Training Course on GAPs; 3 Scenarios (Question 5-7)*
-

Using a Training Team

Visual VI.3-1

Using a Training Team

When the training course takes place over several hours or a number of days and different types of information are covered a team of trainers may be used.

When the training course takes place over several hours or a number of days and different types of information are covered a team of trainers may be used. An advantage of a team approach is that the diversity of different trainers makes the course more interesting. It can become difficult to maintain attention if trainees have to listen to one trainer for an extended period.

The members of a training team should be chosen to ensure they have complementary styles, skills and knowledge. All trainers should be technically competent in their subject and have experience as a trainer. Team members must have credibility with the trainees. In addition to being technically competent trainers must be familiar with the real circumstances in which the trainees work and the problems they face. Trainers need to be willing to participate in the total training activity. They may be called on to add comment to a co-trainer's topic during the discussion sessions, prepare for an additional training session if required, interact with the trainees during free time between the training sessions and contribute as needed to practical exercises.

Visual VI.3-2

Tasks of the Training Team Leader

- Brief trainers on their role in the training course
- Facilitate introductions and allow time for trainers to become familiar with each other's strengths
- Create a teamwork atmosphere
- Discuss the training objectives
- Provide information on the participants and local circumstances
- Hold regular meetings to assess progress of the training and any improvements required

In team teaching it is common to have a leader or facilitator to coordinate the training course. This person may be responsible for the selection of the training team. They should assure that all trainers are familiar with the other members of the teaching team and that they are working together to assure the training objectives are met. The team leader may need to hold meetings or arrange conference calls to assess the progress of planning and training and to determine when improvements are needed. The lead trainer should also provide leadership in developing the schedule or program for the course.

Logistical Support

The steps above have focused on aspects of training related to content development and presentation and the preparation required before training begins. In addition to these issues there are logistical arrangements that need to be considered before, during and after the training course. The trainer should ensure that the logistical support arrangements are in place and satisfactory to accommodate each session of the training course.

The following sample list includes key points that the trainer may consider.

Before the Training:

- Identify and engage appropriate instructors
- Select suitable training venues (well-lit and well-ventilated with adequate space away from sources of noise)
- Select and notify the trainees, through the proper channels, of the dates, time and location
- Prepare training materials: handouts, overheads, etc.
- Arrange for appropriate training equipment (may include microphone, chalkboard and chalk, flipchart paper, writing materials, slide and/or overhead projector, LCD projector and computer, video equipment, screen, spare bulbs, etc.)

- Arrange training room, seating arrangements, name cards, position of chalkboard, screen, etc.
- Arrange coffee and meal breaks during course
- Arrange transportation/accommodation as needed for outside speakers/trainers

During the Training:

- Remind other trainers of their sessions
- Introduce and thank trainers
- Meet emergencies (rearrange or cover sessions)
- Check facilities and equipment (projects, boards, chalk, etc.)
- Ensure trainees receive course materials
- Have trainees introduce themselves
- Introduce visitors

Following the Training:

- Leave room tidy – return equipment and aids to proper place
- Compile feedback/evaluations from course participants
- Prepare thank you letters as needed for guest speakers, volunteers, etc.
- Prepare reports on course

Checklists:

Visual VI.3-3

Sample Checklist for the day before your session

- Visit the training room and be sure you know how to control the lights and ventilation
- Check the arrangement of the tables and chairs. The trainees should be able to see trainers and visual aids clearly
- Confirm the catering arrangements for coffee breaks, lunch and/or other refreshments
- Arrange the projector to have the largest, most focused picture possible
- Check supplies – handouts, visual aids, flipcharts, markers, pens, etc.

Since there are many details to remember when making the final arrangements for the training course, trainers may wish to develop more detailed checklists to support them in their preparation for the training. Examples of checklists that may be developed include ones to assist the trainer in assuring required facilities, equipment, supplies and materials.

Visual VI.3-4

Sample Checklist: For a field demonstration

- Fix a time for the training session
- Visit the farm or food plant the day before the training session
- Ensure that work will be conducted during the time of the training session
- Verify the practices that you want the trainees to observe
- Explain the objectives to the farm or plant manager
- Agree with the manager on the conduction of the training session, number of trainees, what they will observe, etc.

Evaluating Training

Although evaluation is presented as the final portion of the discussion on developing effective training, it is important to plan the evaluation strategy well before the training takes place. Evaluation is not merely an activity at the end of the training course, but is an on-going process throughout the training that allows the trainer(s) to assess how well the course is progressing and that objectives are being met.

Visual VI.3-5

Training Evaluation

“A systematic process of collecting information for and about a training activity which can then be used for guiding decision making and for assessing the relevance and effectiveness of various training components.”

Training evaluation has been described as a systematic process of collecting information for and about a training activity which can then be used for guiding decision making and for assessing the relevance and effectiveness of various training components (Raab et al., 1987). Training evaluation gives a measure of the extent to which the training has been successful in accomplishing the training objectives. Evaluation methods result in feedback from the trainees. Proper evaluation allows for continual improvement of the training program.

Visual VI.3-6

Evaluation Strategies

- Pre-training
- Process
- Terminal
- Follow-up

The choice of evaluation strategy depends on the purpose of the evaluation (Hakimian and Teshome, 1993):

- Pre-training evaluation occurs during course development and allows for pre-testing of the adequacy, scope and coverage of the training program under preparation. This type of evaluation checks out shortcomings of the training and allows corrective steps at an early stage. Pilot tests of presentations and materials are part of pre-training evaluation.
- Process evaluation is conducted while the course is in progress. This ongoing assessment allows for adaptations to be made during the course as needs are identified. This evaluation may involve a formal evaluation where feedback is sought from trainees at the end of each day, each session or on a particular schedule. Also included may be observations by the trainer regarding trainees' responses.
- Terminal evaluation occurs upon completion of the course. This type of evaluation allows trainers and trainees to assess how well course objectives were met and where adjustments are needed for future training efforts.
- Follow-up evaluation is usually conducted at some point after the training. Since a training program is often conducted to bring about changes in behavior or attitudes related to the working methods of the trainees, training effectiveness is best assessed following a lapse of time, for example two months, after the training course. By this time trainees have had time to re-think the training that they received and to incorporate the information into their work.

Terminal evaluation, at the end of a training course, is most common and is used to allow trainees an opportunity to provide feedback on the usefulness of the training and on aspects of the training that could be improved for future training courses. Four criteria have been suggested to evaluate training programs: reaction, learning, behavior and results (Kirkpatrick , 1976). Each criterion is used to measure different aspects of the training program. *Reaction* measures how the trainees liked the program in terms of content, methods, duration, trainers, facilities and management. *Learning* measures the trainees' skills and the knowledge they were able to obtain during the training. *Behavior* is concerned with the extent to which the trainees were able to apply their knowledge to real field situations. *Results* are concerned with the tangible impact

of the training program on individuals, their job environment or the organization as a whole.

Evaluation can be informal or formal. Informal methods involve feedback provided by trainees through language, questions, interest and enthusiasm for the topic. The trainer may request formal feedback by asking questions to assess the trainees understanding and appreciation of the subject discussed. Common formal evaluation methods include written evaluations or questionnaires completed by the trainee or a structured interview with the trainee about training techniques and information gained.

Feedback should be analyzed. This will allow the trainer to amend and improve materials for subsequent training. It may also identify gaps in training that need to be addressed. It is essential that the best use is made from all feedback received and that it is not simply an exercise on paper.

In addition to feedback received from the trainees on the use and effectiveness of the training course, self-evaluation by the trainer is essential. Every time training is conducted, the trainer should assess how he/she functioned as a trainer and make adjustments before the next training program. If a team teaching approach is used, team members should be asked for input regarding training organization and effectiveness. A meeting of the teaching team after the course to assess the training is a good way to conduct this evaluation.

Although trainers often view evaluation as a necessary exercise with very little value, effective evaluation can be a valuable tool. Benefits of conducting evaluation include:

- Measuring how well the course objectives were achieved
- Improving the efficiency of training to allow better use of limited resources
- Highlighting the value of the training and increasing the organizations' commitment to training
- Fostering interest in training at all levels of the organizational structure

Summary

1. When the training course takes place over several hours or a number of days and different types of information are covered using a team of trainers desirable. An advantage of a team approach is that the diversity of different trainers makes the course more interesting.
2. A training team leader may be identified. This person may be responsible for the selection of the training team; for assuring that all trainers are working together to assure the training objectives are met; for assessing the progress of planning and training; and for developing the schedule or program for the course.

3. Since there are many details to remember when making the final arrangements for the training course, trainers may wish to develop detailed checklists to support them in their preparation for the training.
4. Training evaluation is a systematic process of collecting information for and about a training activity. This information can then be used for guiding decision making and for assessing how well the course is progressing and that objectives are being met. Evaluation is not merely an activity at the end of the training course, but is an on-going process throughout the training.
5. The choice of evaluation strategy depends on the purpose of the evaluation.
 - Pre-training evaluation occurs during course development and allows for pre-testing of the adequacy, scope and coverage of the training program under preparation.
 - On-going process evaluation throughout the course allows for adaptations to be made during the course as needs are identified. This evaluation may involve a formal evaluation where feedback is sought from trainees and/or observations by the trainer regarding trainees' responses.
 - Terminal evaluation, the most common evaluation strategy, occurs upon completion of the course and allows assessment of how well course objectives were met and where adjustments are needed for future training efforts.
 - Follow-up evaluation after the training looks at training effectiveness following time for trainees to re-think the training that they received and to incorporate the information into their work.

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