

Session 6.2 Principles and methods of training

Key learning points



- Training and communication
- Training techniques
- Types of training aids
- Planning and delivering a presentation
- Organising and managing a training course
- Evaluating training

Main objectives of the session

By the end of this session participants will be better able to:



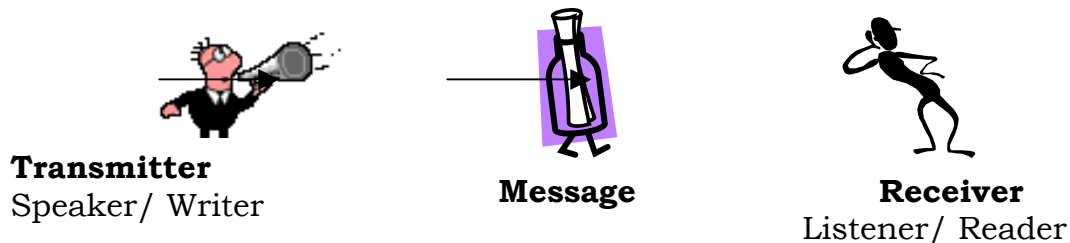
- Understand the role of training in horticultural extension
- Understand the difference between training and extension
- Understand how people learn and adopt new approaches
- Organise and manage a training course
- Prepare and deliver an effective, interesting and informative presentation
- Use different types of participative training techniques
- Use training aids effectively
- Evaluate training, complete self assessments and prepare participants action plans

6.2.1 Training and communication

Training is essentially the instructing of others in information new to them and its application. The most important element in any training situation is the trainer. A trainer who is enthusiastic, energetic and genuinely interested in both the subject and getting their message across will get the greatest response from trainees. Successful training is almost entirely in the hands of the trainer. The trainer is responsible for ensuring that the trainees achieve the maximum possible from the training and for developing a successful training relationship.

Effective Communication

Communication involves a transmitter a message and a receiver. Successful communication ensures that the message being received by the receiver is intact and the meaning is interpreted by the receiver in the same way to that which is transmitted.



Three types of transmission can be identified, spoken, written and gestures (sometimes referred to as “body language”).

A trainers job is to motivate trainees to learn new ideas or skills. As a trainer it is essential to get a message across, otherwise the training is wasted. Personal variations in both the manner and style of trainers are very important in getting a message across. Good delivery requires practice. Frequently a message may suffer from interference and so be distorted. In training this may be due to:

- ❑ Speaking too softly
- ❑ Speaking in a flat tone (monotone) without inflection
- ❑ Not speaking in a direct line with the receiver
- ❑ Using insufficient volume to compete over other noise
- ❑ Using garbled, illogical or unrelated messages
- ❑ Using words, terms, expressions or a language unknown to the receiver
- ❑ A number of competing transmissions due to too many people talking at once
- ❑ Overloading the message with too much information. Trainees are unable to absorb too much information. If the message is overloaded learning will stop
- ❑ Transmitting information beyond the experience of the receiver (such as presenting detailed scientific information)
- ❑ The trainee sitting passively and not interacting
- ❑ The receiver not listening or not interested. The longer (or less interesting) the message the more trainee concentration will decrease
- ❑ Trainee fatigue. A tired receiver is not as receptive as an alert one

Successful trainers understand the process of learning. Trainees use all their senses, ears, eyes, body (touch), nose and tongue in the process of learning. All learning is through the senses. The more senses are brought into use, the more effective is the

learning. 97% of learning is achieved through simultaneous appeal to the eye and ear. Good trainers should aim to make the best use of all effective channels to make training as interesting as possible. It is important to:

- ❑ Speak deliberately, succinctly and clearly
- ❑ Use the voice effectively
- ❑ Use a language and terminologies that the receiver understands
- ❑ Be straightforward and direct
- ❑ Speak at a suitable and understandable pace
- ❑ Include pauses at suitable points
- ❑ Emphasise, demonstrate or illustrate key points
- ❑ Know your subject well and prepare properly
- ❑ Avoid distracting mannerisms
- ❑ Make the presentation interesting, be animated and use a variety of presentation techniques to maintain the interest of trainees
- ❑ Try your best at every training workshop
- ❑ Display interest and enthusiasm particularly through the careful use of your voice, body language and eye contact
- ❑ Sound convincing and sincere and win the confidence of trainees
- ❑ Be confident, relaxed and positive in what you present. Convey to the trainees the importance of the subject
- ❑ Ensure that they have the attention of the receiver and involve them in the training process
- ❑ Listen to and discuss issues with your trainees and don't speak at them
- ❑ Transmit messages in suitable surroundings and where there is little competition.
- ❑ Know what they want to say
- ❑ Create a positive impression and learning environment
- ❑ Prepare the message carefully and in a logical order

Trainers most often achieve the best results by keeping presentations short and by working through a set sequence of discrete steps. It is essential for trainers to:

- ❑ State the purpose of the training and the main learning points
- ❑ Demonstrate and explain, step by step, the operations involved (this will require an analysis of the training procedure by the trainer)
- ❑ Have trainees imitate or practice the necessary actions
- ❑ Ensure that at least 50% of the training session involves trainee practice time
- ❑ Check to see whether you have got your message across

6.2.2 Training techniques

There are a number of possible training methods that may be adopted, including lectures, discussions and on the job training and with varying levels of trainee participation. In the training room participation can be stimulated by the use of techniques such as, role plays, assignments, case studies, training games and group exercises. The training method you use will depend on many factors, including,

- ❑ The ability and level of knowledge of the group
- ❑ The number of trainees in the group
- ❑ Why trainees are there
- ❑ How much time you have to prepare your material
- ❑ Whether the topic can be covered fully in the time available
- ❑ What aids are required and available

- ❑ The experience and confidence of the trainer

Lectures are useful to use when:

- ❑ A group is large - say 30 or more
- ❑ When knowledge or understanding is to be imparted on a particularly specialist topic
- ❑ When a body of factual information has to be communicated in a short time
- ❑ When information is not readily available to group members

Preparation of verbal presentations is important and notes need to be designed to facilitate efficient delivery. After preparing an outline of the material the following questions should be asked:

- ❑ What is it safe to assume that the listeners will know?
- ❑ What parts are they likely to find difficult to understand?
- ❑ Which points will require special care or illustration?
- ❑ What illustrations or demonstrations will be used? Could they be misunderstood or misinterpreted?
- ❑ What new terms or unusual names will be introduced?
- ❑ What precisely should everyone know at the end of the presentation?

The structure of a presentation should include:

- ❑ A statement of the aim
- ❑ A statement of its relevance to previous presentations/sessions
- ❑ Linking aim of the presentation with participant needs
- ❑ An outline of the points that are to be developed with summaries at appropriate points throughout the presentation
- ❑ Reference other materials that need to be read and outline any assignments that need to be completed

The main body of the presentation should be built up step-by-step and have a logical structure. A few well-developed steps that are strongly presented are much more effective than many smaller but unclear ones. The appropriate use of aids and questions will also help to stimulate trainee interest and activity.

Discussions can be used effectively when:

- ❑ A group is smaller - say 20 or less
- ❑ When the members know one another well enough to discuss openly
- ❑ When the material is of a kind that can be assimilated readily, at least in part, or when there is some prior knowledge of it

The most useful starting point for encouraging a discussion is by asking questions, particularly:

- ❑ At the beginning of a presentation to find out what trainees already know and to discover their opinions
- ❑ During the presentation to find out whether the participants understand and are following
- ❑ At the end of the presentation to summarise and test the participants knowledge and understanding

Questions should be clear, brief, stimulate thinking and lead to constructive statements. It is important not to ask too many questions, let discussions go on for too long, argue with the participants or humiliate them with your “superior” knowledge or hold dialogues with single participants. Try to involve all the group members.

On the job training can be summarised as a series of 4 stages:

Step 1

- ❑ Preparing the trainee and putting them at ease
- ❑ Stating the job and finding out what the trainee already knows about it
- ❑ Stimulating the trainees interest in learning the job
- ❑ Placing the trainee in the correct position

Step 2

- ❑ Presenting the operation
- ❑ Telling, showing and illustrating one important point at a time
- ❑ Stressing each key point
- ❑ Instructing clearly, completely and patiently, but teaching no more than the trainee can master

Step 3

- ❑ Evaluating the trainees performance
- ❑ Correcting errors
- ❑ Trainees explaining each key point to the trainer

Step 4

- ❑ Leaving the trainee to work on their own
- ❑ Designating to whom they should go for help
- ❑ Checking frequently
- ❑ Encouraging questions and encouraging on the job improvements
- ❑ Providing extra coaching as required and following up

6.2.3 Types of training aids

Effective use of audiovisual aids can be included in any sort of presentation. Charts, slides, videos, overhead transparencies, computer presentations and films can be used to add interest as well as to supplement verbal explanations.

Non-projective tools include, chalkboards, whiteboards, charts and diagrams, models, exhibits, handouts and tape recorders. In selecting aids the following should be taken into account:

- ❑ Practicability and suitability
- ❑ Attractiveness, interest and vividness
- ❑ Complexity and clarity
- ❑ Portability, availability and serviceability
- ❑ Location of the presentation
- ❑ The preparation required and the time factor
- ❑ Anything that can be quantified or is factual can be presented visually

It is important to obtain and select the necessary data. Confusing data and confusing information will result in confusing visuals. Plan your visuals and know what you want to include (Sketch an outline of ideas you think will work) and try the visuals out on others before you use them.

Charts and diagrams can be bold and simple or detailed. They need to be large enough to be seen by all and not necessarily self-explanatory. They should be functionally coloured and include only essential information. Detailed charts can be more closely studied at leisure and can be more or less self-explanatory, medium or small size, be suitable for semi-permanent display and artistically produced.

Handouts are specially prepared sheets and notes and are used for reference purposes during the session or course, to substitute for note taking and to retain as a permanent record for reference after a workshop.

The *overhead projector* is one of the most useful training aids. It can replace the need for chalkboards, whiteboards and charts. The overhead projector can be used for presentation to a group of any size. All material for use on an overhead projector needs to be reproduced on to transparencies using either special pens or printers with either non-permanent or permanent ink (the latter if the trainer wants to keep and reuse the transparencies). It is also possible to make either black and white or colour transparencies using a specially designed photocopier. Computer-generated transparencies can also be prepared. Overhead transparencies should:

- ❑ Be kept simple and include only the essentials
- ❑ Ensure lettering is of sufficient height (>5 mm)
- ❑ Use colouring on colourless film or contrasting colours on coloured film
- ❑ Not be cluttered (no more than seven principle points to a transparency)
- ❑ Use illustrations

The *computer pallet* is a device that replaces the computer screen. It is placed on top of an overhead projector and allows the trainer to project material that has been prepared and stored on a computer disk. The same basic principles that apply to the design of overhead transparencies also apply to the preparation of material on a computer for use on a computer pallet. The benefits of using a computer pallet include flexibility and the ability to amend material easily. Particular computer programs, such as powerpoint, if available, can provide a large selection of graphic materials and presentation packages.

Colour slides are relatively inexpensive to procure and have a number of other benefits. In particular:

- ❑ They are easily used
- ❑ They facilitate study of a topic one step at a time
- ❑ All trainees get the same clear view
- ❑ Each frame can be studied and discussed at leisure during the screening
- ❑ They can be used in conjunction with a tape-recorder (tape/slide sequence)

Videos may also be used. It is important to ensure that:

- ❑ Videos are directly related to the subject. They should not be used for entertainment or to give the trainer a rest
- ❑ All trainees can see the monitor
- ❑ Trainees are told what it is about and what they should look for. The video is reviewed in a discussion after screening

With all training aids it is important to allow ample time for preparation and sufficient time to rehearse. It is useful to make a copy of all visuals so they may be used again. In the training room the position of seats needs to be checked to ensure the visuals can be seen by everyone and competing attractions to the visuals removed. Knowing the visuals well means that the trainer does not have to break their commentary to in order to

check points and enables them to maintain constant contact with trainees. Visuals should be timed to coincide with comments. Mistiming is distracting and visuals should be kept moving. Where assistants are used they should also know the visuals well and it is important to check all arrangements prior to the presentation.

6.2.4 Planning and delivering a presentation

Every presentation during a training programme should be planned. Good trainers know precisely how the presentation will flow before they begin. Trainees are quick to sense a lack of planning, and their response will reflect in their disdain for the trainer.

Steps in planning a presentation checklist

Determine what the trainees need to learn	<input type="checkbox"/>
State the objective	<input type="checkbox"/>
Choose an appropriate training method	<input type="checkbox"/>
Organise your material	<input type="checkbox"/>
Write the session plan and covering: Training needs, training objectives and the method of training	<input type="checkbox"/>
The organisation of material: introduction, body, conclusion (keeping in mind time, questions, subheadings, details)	<input type="checkbox"/>
The training aids to be used	<input type="checkbox"/>
Questions to be asked	<input type="checkbox"/>
Prepare and check aids	<input type="checkbox"/>
Evaluation Obtain feedback on the trainees learning during the session. Use test questions Self-evaluation (How can I improve the session?) Write down on the session plan any comments for future reference before you forget them	<input type="checkbox"/>

6.2.5 Organising and managing a training course

The details that follow amount to little more than a checklist for trainers. However, it is valuable for a trainer to go through each list item by item to ensure that nothing is missed.

- Establish whether the course is part or full time and its duration
- Establish the content
- Plan the syllabus and timetable
- Identify and engage the most appropriate instructors
- Secure suitable training accommodation (well-lit, well-ventilated room)

- ❑ Select and notify trainees, through appropriate channels, of the dates, time and place
- ❑ Select and brief session leaders
- ❑ Select and review preliminary reading materials
- ❑ Prepare course documentation
- ❑ Arrange and check the training equipment, such as: lectern, microphone, chalkboard, chalk, writing materials, visual aids (slide projector, video equipment, screen, spare bulbs, etc.) and other aids
- ❑ Arrange the training room: seating arrangements, name cards, position of chalkboard, screen, etc.]
- ❑ Arrange coffee and lunch breaks
- ❑ Arrange transport for outside speakers/trainers
- ❑ Introduce and thank the session leaders
- ❑ Meet emergencies (give session yourself or rearrange sessions)
- ❑ Ensure trainees receive all the necessary documentation
- ❑ Coordinate all aspects of the course
- ❑ Evaluate the training (based on trainees, session leaders and your own observations)
- Leave the room tidy return the equipment and aids to the proper place
- ❑ Prepare and distribute thank-you letters
- ❑ Prepare reports on course and relevant statistics
- ❑ Each day appoint a "monitor for the day" from among the trainees to assist with the conduct of the course

6.2.6 Evaluating training

It is not sufficient to simply feel self-satisfied after a training workshop without evaluating it. Neglecting evaluation reflects disinterest and a lack of professionalism. Training evaluations are an important and integral part of effective training. The purpose of evaluation is to help in continually improving the training. There are three aspects to evaluation:

- ❑ Course evaluation
- ❑ Trainer evaluation (self-evaluation)
- ❑ Trainee evaluation

COURSE EVALUATION

Break the evaluation into clear and achievable steps and in particular:

Evaluate reaction

How well did the trainees enjoy the session(s)/course?

- ❑ Find out how well the trainees liked a particular training session or sessions or the course as a whole

Evaluate learning

What principles, facts and techniques were learned?

- ❑ Written test questions, oral test questions, skill tests

Evaluate behaviour

What changes in job behaviour have resulted from the training?

- ❑ This is best evaluated through appraisal by on-the-job supervisors
Remember: good trainers can relate to on-the-job experience

Evaluate results

What were the tangible results of the training in terms of improved job performance?

- ❑ Some types of training results are easily measured (e.g. typing)
- ❑ Others are not easily measured (particularly where general management or changing attitudes are involved)

TRAINER SELF-ASSESSMENT QUESTIONNAIRE

Preparation

- ❑ Did your notes show clearly the limited, definite scope of the training session?
- ❑ Was the session planned to enable a specific purpose to be fully accomplished?
- ❑ Did you allow for an adequate introduction, participation by trainees and a summary of key points?
- ❑ Did you arrange for all necessary equipment/materials and teaching aids to be available?

Course introduction

- ❑ Did this step excite the interest of the trainees from the start - was it original or linked strongly with an emotion stirring activity, or some matter of topical or personal interest?
- ❑ Did the introduction provide adequate revision and link to what has gone before?

Course body

- ❑ Was the instruction broken up into steps of reasonable length?
- ❑ Did each step offer maximum trainee participation and activity?
- ❑ Did each step win trainee interest and attention?
- ❑ Did each step offer some way of evaluating the trainees' comprehension before the next step was taken?
- ❑ Was there adequate provision for holding the interest of trainees and giving them worthwhile activity?
- ❑ Did you allow for a period of relief for trainees and yourself after a period of intense and concentrated work?

Course conclusion

- Did the conclusion adequately recall and test the key points of each session?
- Did you time the session correctly to enable a proper conclusion to be made?

Use of materials and written summary

- Did the chalkboard or whiteboard written summary by participants show what you expected to appear at the end of the session?
- Was the arrangement of training materials (use of colour, diagrams, etc.) attractive?
- Did you use the training aids effectively and without losing contact with the group during the session?
- Were there any materials that you should not have used because they are not clearly visible?

Voice and manner

- Was the use of your voice clearly audible in all parts of room?
- Was your voice restrained enough not to irritate trainees or disturb other session leaders?
- Did you vary the speed, pitch, volume and tone of your voice so as to give maximum interest to whatever I said?
- Was your manner reasonable, brisk and alert?
- Did you sincerely convey a sense of earnestness and enthusiasm in what you were instructing?
- Was your manner reasonably pleasant and positive?

Group management

- Did you get off to a good start and stimulate/interest the group from the beginning?
- Did you show interest in all the trainees?
- Did you take steps to see that no trainee dominated the work of the group or failed to take adequate part any of the sessions?
- Did you work with the trainees?
- Did you become sidetracked away from the main issues?

Questioning

- Were your questions audible to all trainees?
- Were most questions sufficient for all trainees to be able to attempt an answer?
- Were there some particularly stimulating questions?
- Where the response to a question was unsatisfactory, did you take measures to improve the response?

- Did you refrain from unnecessarily repeating the same thing?
- Did you distribute questions widely and encourage the weaker trainees?

General issues

- Did you cover all the steps of each session adequately?
- Did you focus on their objective throughout the session?
- Did you keep as far as possible to the plan of each session?
- Did you and the trainees enjoy the session?
- What did the trainees gain from this session?
- What have you learned by leading this session?

It is also important to evaluate the capability of trainees following their training. If we study trainees' job behaviour after a course we can see whether we changed their job behaviour. We can present at the end of a course clear instructions to the trainees of what is expected of them - both orally and in writing – and how we will follow this up. An important learning outcome is to ensure that the trainees can demonstrate knowledge of the subject material and have improved skills. There are a number of ways of testing trainees, including written and oral examination, but also by seeing how well they have mastered the skill taught. A proven method of testing trainees is to see how they perform in both a training and an on the job situation. The following two models provide examples of simple course evaluations.

MODEL 1: COURSE EVALUATION/REACTION QUESTIONNAIRE

To assist in the planning of future courses it would be of great value if you would complete the sections that follow. Please be frank with your responses. Remember, only your honest reactions will enable adjustments and improvements to our course to be made. The questions asked may not cover all of the aspects about which you wish to comment. For that reason a space headed "general comments" has been provided, and it is hoped that you will use it if appropriate.

Conditions

Were you comfortable?

What improvements, if any, do you suggest for the accommodation of future courses?

Were the seating arrangements satisfactory?

Could you see and hear satisfactorily?

Were the morning and afternoon sessions well balanced?

Course content

Were the subjects covered the ones you expected would be?

Were there any surprises? Why?

Was the coverage sufficiently wide? If not, what subjects would you have liked included?

Was each subject covered in sufficient depth? Name any that you think were not.

Was the course sufficiently practical in the sense that you will be able to apply knowledge and skills taught?

Did the subjects sustain your interest?

What additional subjects would you suggest for future courses?

What subjects would you omit from future courses?

Presentation

Were all sessions presented in a clear and interesting way?
 Were there any sessions that left you confused or uncertain? Please specify.
 Do you think trainers could have done more to improve their presentations? If so, what?
 Were the lengths of sessions satisfactory?
 Did the aids used help sustain your interest and understanding? Name any particular aid that impressed you.

General comments

You are not required to identify yourself on this form unless you desire to do so.

MODEL 2 - TRAINING MODULE OR COURSE EVALUATION

Instructions

You have just completed the training. Now we would like you to tell us about your feelings on what has just been presented. This information is valuable in helping us make following training sessions more interesting and useful to you. Below you will find a number of questions dealing with the just completed training session. Most questions can be answered by circling a number on the scale to the right of the question. Where a written response is required, please write your reply clearly in the space provided. Please consider your responses carefully and answer truthfully. Everything you say will be held in strictest confidence. The information will be used only to help us make this training activity more responsive to your needs.

Topic discussed: _____

I. Content

1. Relevance of the topic to your job	Not relevant				Relevant
	1	2	3	4	5
2. Clarity of the module's objectives	Not clear				Very clear
	1	2	3	4	5
3. Level of instruction	Too basic				Too advanced
	1	2	3	4	5
4. Lecture coverage	Inadequate				Very comprehensive
	1	2	3	4	5

5. Time allotment	Too short				Too long
	1	2	3	4	5
6. Emphasis on details	Too brief				Too detailed
	1	2	3	4	5
7. Organization and direction	Disorganized				Well organized
	1	2	3	4	5
8. Treatment of the topic	Abstract				Practical
	1	2	3	4	5

9. Additional comments you may have on these or other aspects of the content of this training module/session

II. Training aids and handouts

1. Effectiveness of teaching aids	Not effective				Very effective
	1	2	3	4	5
2. Readability of _____*	Not readable				Very readable
	1	2	3	4	5
3. Clarity of message of _____*	Not clear				Very clear
	1	2	3	4	5
4. Appeal of _____*	Not appealing				Very appealing
	1	2	3	4	5
5. Usefulness of _____*	Not useful				Useful
	1	2	3	4	5

*Here you would insert the names of instructional aids used: handouts, slides, videos, overhead transparencies, etc.

6. Additional remarks you may have on these or other aspects of the teaching methods, aids, and handouts used in the training session

Instructor effectiveness

1. Mastery of the subject	Not knowledgeable				Knowledgeable
	1	2	3	4	5
2. Ability to transfer/communicate information and knowledge effectively	Very poor				Excellent
	1	2	3	4	5
3. Ability to arouse and sustain interest	Very poor				Excellent
	1	2	3	4	5
4. Openness to ideas of trainees	Not receptive				Receptive
	1	2	3	4	5
5. Encouragement of trainee participation	Did not encourage				Encouraged
	1	2	3	4	5
6. Time management	Very poor				Excellent
	1	2	3	4	5
7. Speed in talking	Too slow				Too fast
	1	2	3	4	5
8. Clarity of speech	Not clear				Clear
	1	2	3	4	5

9. Additional remarks on these or other aspects of the instructor's effectiveness

IV. General

1. Please state the three most important ideas or concepts that you have learned from this session
2. Suggestion(s) to improve the session

V. Training logistics/administration

1. Quality of the meals	Very poor	Very good
	1 2 3 4	5
2. Quality of accommodation	Very poor	Very good
	1 2 3 4	5
3. Quality of transportation	Very poor	Very good
	1 2 3 4	5
4. Contact with staff members	Very poor	Very good
	1 2 3 4	5
5. Quality of training facilities	Very poor	Very good
	1 2 3 4	5

6. Please use the space below to indicate any suggestions you might have that will help us to improve the facilities and administration

TRAINING PRESENTATION EXERCISES

Trainees should first be advised of the presentations at the beginning of the course and the following notification should be distributed halfway through a course.

GUIDELINES FOR INDIVIDUAL PRESENTATIONS

During the concluding days of the course each trainee will present a 20-minute training session on a selected topic related to production, harvest, post-harvest marketing and management for fresh fruits and vegetables. Topics will be chosen by the trainer (or trainees). As part of the presentation the trainee will:

- ❑ Produce a plan for the session
- ❑ Produce a handout for distribution to other course members following the presentation
- ❑ Prepare visual aids (charts, overhead transparencies, slides, etc.) for use in the presentation

In the presentation trainees will be expected to make use of training skills (including communication techniques, visual aids, questions, etc.) and technical knowledge learned during the course.

Presentations should be developed progressively by trainees during the course, and maximum guidance in their presentation should be available from the trainer.

Each presentation will be followed by a ten-minute evaluation by the group.

DISCUSSION TO AID PREPARATION OF PRESENTATIONS

Trainees should be requested to complete a form comprising the following questions for discussion with the trainer before preparing the presentation.

- What is your subject?
- Have you given thought to a plan for your presentation? (brainstorming)
- Have you jotted down thoughts, especially main points you wish to emphasize?
- Do you need assistance with information?
- How do you propose making the greatest impact?
- What aids do you propose to use?
- Do you propose giving a demonstration?
- Do you propose using handouts?
- Have you in mind to ask questions?
- Have you discussed your subject or its presentation with others? Do you intend to do so?