

Introduce the Module

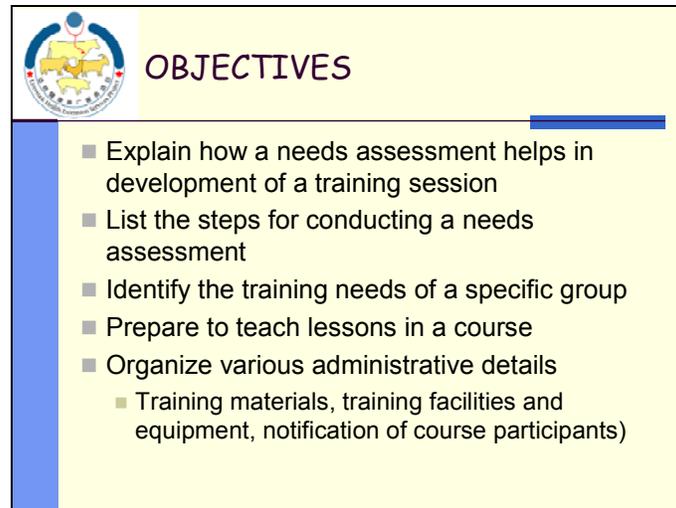
This module is titled *Pre-Course Preparation* and consists of six sessions which take a day to complete.

Whether or not the instructor is required to develop and design the course materials, an understanding of the basic steps in course development strengthens the ability to adapt to and accommodate the learner's needs in the classroom.

There are many approaches to training - we will discuss the systems or behavioural approach because it specifies measurable outcomes that can be achieved by training. It is a systematic process for establishing priorities and making decisions regarding program planning, development and implementation.

The objective is to determine if gaps exist between "what is" and "what should be" in terms of outcomes of training programs and determining the priority of these needs.

Throughout the module we will refer to the participatory training needs assessment (pTNA) results to complete various exercises.



OBJECTIVES

- Explain how a needs assessment helps in development of a training session
- List the steps for conducting a needs assessment
- Identify the training needs of a specific group
- Prepare to teach lessons in a course
- Organize various administrative details
 - Training materials, training facilities and equipment, notification of course participants)

Non-animated slide.

ASK? Would someone volunteer to read the objectives on the slide?

Thank the volunteer.

Introduce the session.

ASK? Have you ever been in a situation where the instructor spent a lot of time covering material that you already knew? How did you feel? How did it affect moral?

In order to reduce boredom or frustration that can occur when training is not appropriate for a particular group, it is necessary to conduct a pTNA, before designing the training.

The pTNA links the needs of the trainee with the needs of the work environment (allows for better skills transfer to the job).

As mentioned during the introduction, we will discuss the systems approach to training program development.

Let's look at the individual components of that approach.



WHY A NEEDS ASSESSMENT?

- Determine what training is relevant to veterinary jobs
- Determine what training will improve performance (make a difference)
- Distinguish training needs from organizational problems
- Link improved job performance with project goals and objectives

A review of the literature indicates that training programs are often prescribed as the drug of choice to problem situations in organizations.

Needs assessment determines that training is the best solution to the problem or approach to the opportunity that has been identified.

Handout 2-1: Is training the right solution?

Handout the exercise and ask participants to comment on the causes of the different performance problems.

ASK? Which performance problems can be solved by training?

ASK? Does a need mean the same as a want or desire?

◆ A need is a gap between "what is" and "what ought to be".

The needs assessment serves to identify the gaps, and considers if the problem can be solved by training. The assessment is part of the planning process focusing on identifying and solving performance problems.

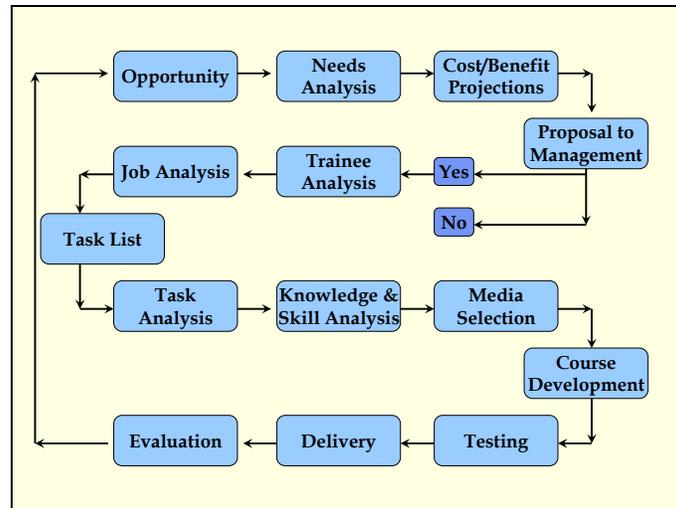
ASK? What are some of the reasons for conducting a needs assessment?

Solicit responses and **present slide** for confirmation.

2-1: IS TRAINING THE RIGHT SOLUTION EXERCISE

Following is an analysis results from X Township Vet Station with its institutional Performance Problems, please check on the aspects that you think it is a training related issue.

Functions of A Vet Station	Performance Problems	Training (✓)
Original quarantine	<ul style="list-style-type: none"> • some farmers not understand why have to take quarantine 	
	<ul style="list-style-type: none"> • not able to upload the information of quarantine in producing area due to infrastructure and language 	
Epidemic monitoring	<ul style="list-style-type: none"> • lack of knowledge about zoonosis 	
	<ul style="list-style-type: none"> • do not know investigate method for zoonosis 	
Diagnosis and treatment	<ul style="list-style-type: none"> • female vet is not able to do the treatment for big livestock 	
	<ul style="list-style-type: none"> • lack of medical equipment 	
	<ul style="list-style-type: none"> • lack of knowledge and experience of diagnosis and treatment 	
	<ul style="list-style-type: none"> • knowledge can not update in time 	
Vaccine	<ul style="list-style-type: none"> • female vet has difficulty in vaccine injection for big livestock and pull on the ear mark 	
	<ul style="list-style-type: none"> • 30% vets' salary come from vaccine injection, farmers are not content with this. 	
	<ul style="list-style-type: none"> • bad reaction of vaccine 	
	<ul style="list-style-type: none"> • some farmers can not afford vaccines 	
Breeding	<ul style="list-style-type: none"> • Farmers can not know the estrus time exactly. 	
Policy dissemination	<ul style="list-style-type: none"> • No funds 	
Technique consultation	<ul style="list-style-type: none"> • Limited and outdated knowledge 	
Eliminate parasite	<ul style="list-style-type: none"> • Poor de-worming equipment 	
	<ul style="list-style-type: none"> • not good at choosing medicine and time for eliminating parasite 	



Animated slide - process and arrows

Systems approach models are based on more than 40 years of research into the learning process.

For developing training where the learner is required to perform specific tasks to a defined standard, the systems approach is most successful.

Present the diagram on the slide step by step and describe systems approach using the following handouts:

Handout 2-2: A Systems Approach Model

Handout 2-3: Components of System Approach

Each component has a specific purpose and concrete end products.

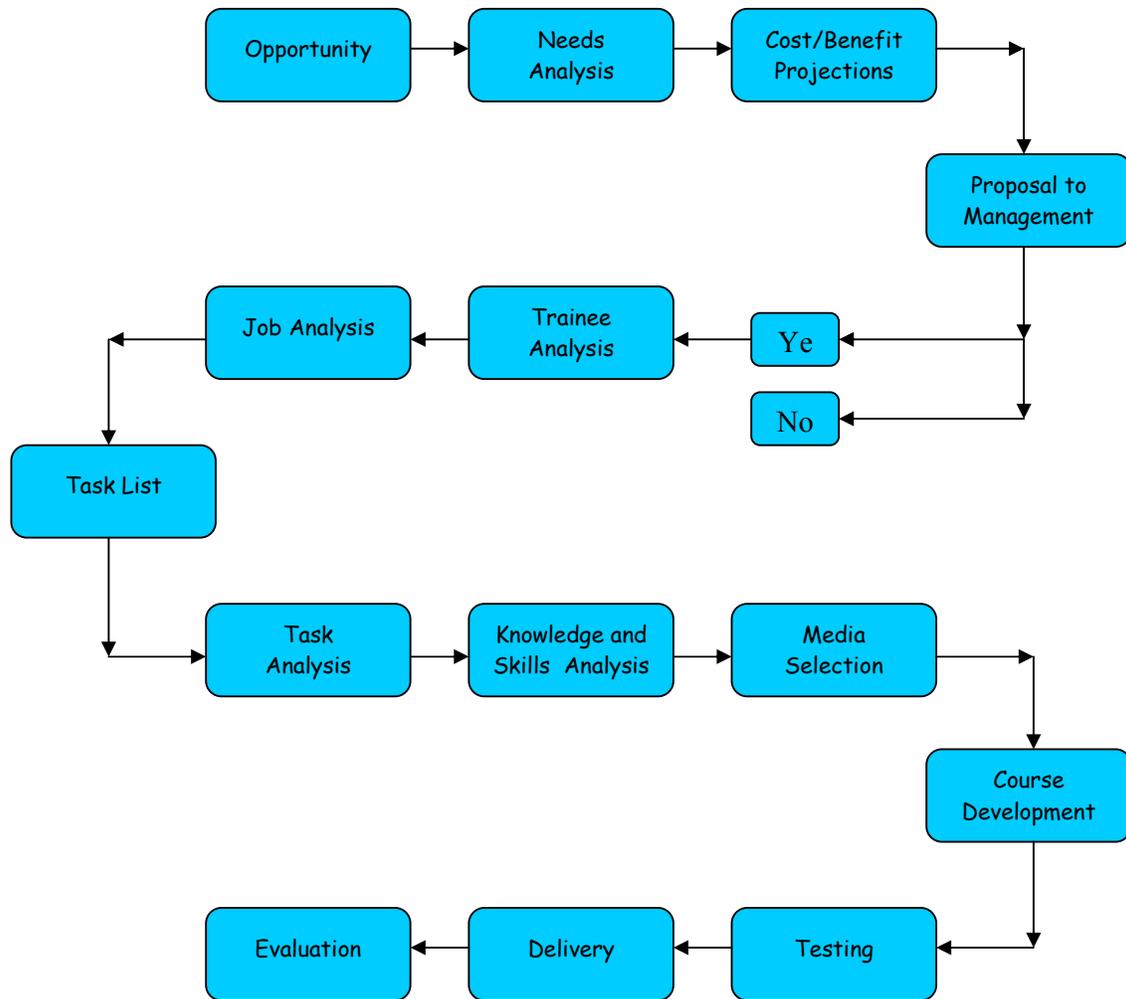
ASK? At what stage of the systems approach model do you think we are now?

- ◆ Use the systems approach model flowchart and the table describing activities in each stage to help you decide.

Answers will vary because not all participants are aware of the baseline survey results and the pTNA results. For this course, we are at the delivery stage.

For the exercises in this session, we are at the problem identification stage and will work through the model identifying needs of the veterinary groups.

2-2: A Systems Approach Model



2-3: COMPONENTS OF THE SYSTEMS APPROACH TO INSTRUCTIONAL DESIGN

COMPONENT	QUESTIONS ANSWERED	END PRODUCTS
Opportunity / Problem Identification	<ul style="list-style-type: none"> Who has the opportunity or problem? What is it? Where and when does it occur? What is the (business) result? 	<ul style="list-style-type: none"> A statement of the opportunity or problem and a solution objective.
Needs Analysis	<ul style="list-style-type: none"> Who needs the training? What type of training is needed? 	<ul style="list-style-type: none"> A report that outlines who needs training and the type of training required.
Cost / Benefit Projection	<ul style="list-style-type: none"> What will the training cost? What are the benefits? What will the return on investment be to the organization? 	<ul style="list-style-type: none"> A statement giving the costs, benefits and return on investment of training.
Proposal	<ul style="list-style-type: none"> What is the recommended solution? 	<ul style="list-style-type: none"> A proposal that identifies the problem and the solution objective, who needs training, the cost of training and its benefits.
Trainee Analysis	<ul style="list-style-type: none"> What are the learning characteristics of the trainees? 	<ul style="list-style-type: none"> A written description of the key characteristics of the trainees who will attend the training.
Job Analysis Task Analysis Knowledge Skill Analysis	<ul style="list-style-type: none"> What tasks need to be trained? What knowledge and skills are required to perform these tasks? 	<ul style="list-style-type: none"> Completed, validated set of job analysis documents.
Media Selection	<ul style="list-style-type: none"> What is the best way to deliver the training? 	<ul style="list-style-type: none"> Instructional methods and media for each training component.
Course Development	<ul style="list-style-type: none"> How should the content be organized? What practical activities are required to reinforce the theory? How should learning be evaluated? How will the course content and administration be standardized? Is the course content accurate? 	<ul style="list-style-type: none"> A course outline showing sequence of learning. A list of properly stated behavioural objectives. A plan for all practical exercises and tests. A master of all handouts, screens, overheads, tests, references, tapes, etc. A complete instructor's guide and a complete participant's manual.
Testing (Pilot)	<ul style="list-style-type: none"> Do the trainees learn? 	<ul style="list-style-type: none"> An edited and revised version of all training materials and the instructor's guide.
Evaluation	<ul style="list-style-type: none"> Are the trainees performing on the job as anticipated? Was the problem solved? Were the costs and benefits as anticipated? What can be done differently next time? 	<ul style="list-style-type: none"> Completed evaluation forms from the trainees and their supervisors that assess the transfer of skills to the job. A completed cost / benefit review. A review of the business opportunity or problem. A post-project review.



BASELINE SURVEY RESULTS

- Problem or Opportunity Identification
 - Using your experience and the case study of the baseline survey, identify the opportunity or problem
- Needs Analysis
 - Using your experience and the case study of the baseline survey, identify the training need
- Proposal
 - Based on the above answers what is the recommended solution?

Not animated - group exercise

ASK? Did anyone here participate in the baseline survey (August, 2006)? Can you tell us about your experience?

Handout 2-4: Case Study of Xinjiang Baseline Survey

Using flip chart paper, ask the group to brainstorm possible statements to the following components of the systems approach model or have participants work within their institutional groups.

Opportunity or Problem Identification (Purpose)

- ◆ Who has the opportunity or problem? What is it?
- ◆ Where and when does it occur? What is the result?
- ◆ Are there differences amongst women, men and ethnic minority groups?

Needs Analysis (Goals and Objectives)

- ◆ Who needs the training? What type of training is needed?
- ◆ Are there differences amongst women, men and ethnic minority groups?

Proposal

- ◆ Do women, men and ethnic minorities advocate for the same solution?

2-4: CASE STUDY FRO XINJIANG BASELINE SURVEY

The Livestock Health Services Project, a joint China-Canada government funded project, initiated a baseline survey in August, 2006 to interview various farmer groups about their satisfaction with the veterinary services available to them in their region.

A number of participatory tools were used to gather the information and following are the key findings and conclusions after analyzing the data:

- ◆ In general, the current service capacity of veterinary organizations does not meet the needs of farmers' in terms of technical services and training delivery.
- ◆ Local veterinarians are the major service providers for routine disease treatments. Their qualification and clinical skills directly affect the productivity of the livestock and, thus, the income of male and female farmers. As well, farmers are losing trust in the vets because the costs of treatment are seen as being too high and ineffective.
- ◆ It was found that small-holders, particularly women, could not express their understanding of the problems or constraints facing their production (i.e. they lacked the language skills and technical knowledge to express their concerns)
- ◆ Women are playing a more important role in small scale production since the men are normally working outside for cash income. In all HH types, except Uighur, women provide the labour for small-holder livestock production with some with some role differences.
- ◆ The training programs for the farmers are seen to be irrelevant and farmers lack enthusiasm in attending training.

Questions for discussion:

- ◆ Who has identified the opportunity or problem?
- ◆ Whose performance should be changed or upgraded?
- ◆ Where does the opportunity or problem occur?
- ◆ What effect does this problem have on the organization?



The slide features a yellow background with a blue vertical bar on the left and a blue horizontal bar at the top right. In the top left corner, there is a circular logo with a map of Ethiopia and a scale. The title 'TRAINING NEEDS ASSESSMENT' is written in purple capital letters at the top right. Below the title, the text is organized into two sections: 'Steps in the pTNA:' followed by a bulleted list of four items, and 'Tools to gather information:' followed by a bulleted list of five items.

TRAINING NEEDS ASSESSMENT

Steps in the pTNA:

- Trainee Needs Analysis
- Job Analysis
- Task Analysis
- Knowledge / Skill Analysis

Tools to gather information:

- Questionnaires, group interviews, semi-structured interviews, observations, organizational records

Animated slide - six steps, then tools

Based on the results of the baseline survey, the project decided to conduct a participatory training needs assessment (pTNA) in October, 2006 of the various veterinary institutions

ASK? Did anyone here participate in the pTNA? Can you tell us about your experience?

Present slide describing steps in the pTNA process.

ASK? What types of activities did the pTNA team use in order to assess trainees' needs?

Present slide describing the tools used to gather information.

Using the results of the pTNA given to the participants previously:

ASK? Do you feel that the results reflect the real situation for your organization?

ASK? What would you change?

For the remainder of this session, we are interested in the results of the pTNA in determining the training needs of a specific group.



TRAINEE ANALYSIS

- What are the learning characteristics of the trainees?
 - Age, sex, education, experience on the job, ethnicity, language ability
- Specific needs and interests
- How will they use the knowledge and skills acquired from the training back on the job

Animated slide - three points

Learning is a voluntary activity. When the material to be learned seems relevant, interesting and is easily understood, people enjoy learning.

To design effective, enjoyable training, it is important to clearly understand the trainee as well as the skills that are to be learned. This understanding can be developed by collecting data on the characteristics of the group which could affect their learning.

Handout 2-5: Learning Characteristics

Handout the exercise and ask participants to list the most important characteristics in designing a training course.

ASK? Why are these characteristics important?

It is important to understand the work environment and how potential trainees feel about it and the proposed training. This information is more subjective and you will need several perspectives on it.

Handout 2-6: Collecting Trainee Information

Handout the exercise and ask participants to think about the next training program that they will be conducting. What methods could be used to collect information about trainees and why would you choose these methods?

Handout 2-7: Summary Checklist for Trainee Analysis

2-5: LEARNING CHARACTERISTICS EXERCISE

What should we, as course designers, know about a particular group for whom we are designing training? List the most important characteristics in the space provided below. Discuss why these characteristics are important.

1.

2.

3.

4.

5.

6.

2-6: COLLECTING TRAINEE INFORMATION EXERCISE

What methods will you use to collect information about potential trainees coming to your course? Why?

1.

2.

3.

4.

2-7: SUMMARY CHECKLIST FOR TRAINEE ANALYSIS

Describe who the learners are based on the learners' situation and their needs. Respond to as many of the following questions as you can.

1. Questions to determine the situation of the learners include:

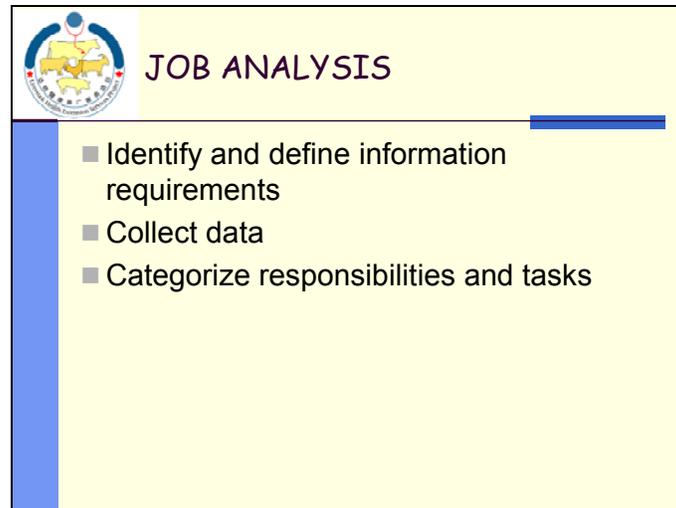
- ◆ What is their job or farming area?
- ◆ What is the average age of the learner?
- ◆ What is their educational background? (range and average)
- ◆ What is the gender mix?
- ◆ What percentage of students is from different ethnic backgrounds?
- ◆ What languages must the training take?
- ◆ Do your learners have access to adopt the tools you use in your training?

2. Questions to determine learner needs include:

- ◆ What knowledge and skills in the topic do they currently possess?
- ◆ What knowledge and skills in the topic are they required possessing?
- ◆ What are the gaps between knowledge and skills learners currently have/need to have that can be addressed by distance education?
- ◆ How do the learners and their employers prioritize these gaps?
- ◆ What are the expectations of learners and their employers regarding how the needs should be addressed?
- ◆ What are the expectations of learners and their employers regarding how learning of the topic should be assessed and recognized?

Information to help answer the questions suggested above can be gained from any one, or a combination of the following information gathering strategies:

- ◆ direct observation
- ◆ questionnaires
- ◆ consultation with persons in key positions, and/or with specific knowledge
- ◆ review of relevant literature
- ◆ interviews
- ◆ focus groups
- ◆ tests
- ◆ records and report studies



JOB ANALYSIS

- Identify and define information requirements
- Collect data
- Categorize responsibilities and tasks

The job competency analysis is the systematic breakdown and examination of all the elements of a job into key responsibilities and tasks.

Handout 2-8: Job Analysis

Every knowledge and skill requirement necessary in performing a specific job must be listed in this analysis.

Information sources - vets, written procedures, equipment manuals.

Collect data - questionnaires, observation, group interviews

Categorize responsibilities and tasks - by grouping the tasks within a general category of responsibility, the initial needs analysis, and future learning materials, training and evaluation is more easily organized.

Order the tasks - one responsibility may have 5, 10, or more individual tasks (or objectives) associated with it. Each task can be sequenced using one or more of the following patterns:

- ◆ simple to complex
- ◆ known to unknown (upgrading training on familiar equipment to training on new equipment)
- ◆ whole-part-whole
- ◆ chronological: training geared to what is done first, second, third, etc
- ◆ most common to least common (learn tasks which are most common to the job first)
- ◆ logical: training parallels the flow of livestock production

COW-CALF BEEF PRODUCTION TECHNICIAN

SKILL TRAINING CURRICULUM

SEE THE **TRAINING OBJECTIVES** FOR EACH OF THESE **WORK SKILLS**

EMPLOYMENT A SKILLS	Communicate Effectively and Interact with Others on the Job	Manage Your Training and Continuing Education	Manage Time Effectively	Manage Your Health and Safety on the Job	Use a Fire Extinguisher and Combat a Small Fire	Perform Basic Emergency First Aid Procedures	Handle Hazardous Farm Materials Safety	Demonstrate Knowledge of Basic Personal Financial Principles
	A1 Z	A2 X	A3 Z	A4 X	A5 X	A6 X	A7 Y	A8 OPT X
CATTLE HANDLING B	Demonstrate a Basic Knowledge of Cattle Behaviour	Handle Cattle in Pastures	Operate Stock Handling Equipment (headgates, chutes & squeezes)	Operate a Scale to Weigh Cattle (e.g. digital, manual)	Mark Cattle for Identification (e.g. tag, tattoo, brand, electronic)	Receive and Ship Cattle to and from the Farm	Haul Livestock with Stock Trailers	Operate and Maintain Back Scratching Equipment
	B1 X	B2 X	B3 X	B4 Y	B5 Y	B6 Z	B7 Z	B8 OPT Y
	Ride a Horse and Provide Basic Care							
	B9 OPT Z							
CATTLE HEALTH MAINTENANCE C	Demonstrate a Basic Knowledge of Animal Physiology and Anatomy	Describe Basics of Common Cattle Health Disorders	Interpret Labels & Administer Animal Treatment Drugs	Perform Basic Animal First Aid	Identify Sick or Problem Cattle	Monitor Cattle During Calving	Perform Post-Calving Routine with Calves	Judge Cattle for Culling and Breeding Decisions by Management
	C1 X	C2 X	C3 X	C4 Z	C5 Y	C6 Y	C7 Y	C8 Z
	Apply Internal and External Pest Control Materials	Implant Cattle with Growth Stimulants	Describe Basics of Current Food Quality Assurance Programs and Beef Food Safety Issues					
	C9 Z	C10 OPT Y	C11 Z					
CATTLE FEEDING PROGRAM OPERATION D	Implement the Feeding Plan	Supervise Supply of Water to Cattle	Operate Tractors with Front End Loaders	Operate Augers and Conveyors and Perform Routine Maintenance	Operate a Bale Shredder / Grinder and Perform Routine Maintenance	Operate Feed Milling Equipment and Perform Routine Maintenance (e.g. rub, grinder, hammer mill)	Operate a Silage Wagon and Perform Routine Maintenance	
	D1 Y	D2 X	D3 Y	D4 Z	D5 Z	D6 OPT Y	D7 OPT X	
GENERAL FARM EQUIPMENT OPERATION E	Construct and Maintain Permanent Fences and Corral (e.g. wood, electric, wire)	Operate a Temporary Electric Fence System	Operate Post Pounders and Post Hole Augers	Use Basic Hand/Shop Tools	Use Basic Equipment and Servicing Tools	Operate Air Compressors and Accessories	Use a Chain Saw and Perform Routine Maintenance	Operate an ATV
	E1 Y	E2 Y	E3 Y	E4 X	E5 Z	E6 Z	E7 OPT Z	E8 OPT Y
TRUCK AND TRACTOR OPERATION F	Describe Working Knowledge of Farm Equipment Road Travel Regulations	Operate Farm Tractors	Describe Working Knowledge of Farm Truck Road Travel Regulations	Operate Two Axle Farm Trucks in Field and on Roads	Operate Trucks with Equipment in Tow	Operate Three Axle Farm Trucks in Field and on Roads and Perform Service		
	F1 X	F2 X	F3 Y	F4 Y	F5 Z	F6 OPT Z		



TASK/SKILL ANALYSIS

Important training tool:

- Clarify what information should be included in the training course (individual block)
- Indicate how a task should be taught;
- Set the standard for evaluation of the task

The output of the job analysis is a list of broad job tasks, based on importance, learning difficulty, and frequency of doing the task. Each task is a complex set of procedures in itself, and therefore it needs further analysis to find out which specific segment of the task is critical in designing a training program.

Handout 2-9: Task Analysis

2-9: SKILL/TASK ANALYSIS

JOB TITLE:

Cow- Calf Beef Production Technician

RESPONSIBILITY:

Maintain Cattle Health

SKILL:		
Interpret Labels and Administer Animal Treatment Drugs		
C3	X	

Livestock Health Extension Services Project

*see the **JOB COMPETENCY CHART** accompanying these
PERFORMANCE OBJECTIVES

May 2007 Edition

IMPORTANT TASK THAT COMPETENT PERSON SHOULD DO:	KEY POINTS OF PERFORMANCE FOR TRAINING & TESTING	TRAINING NOTES
<p>1) Describes the basic differences between the following kinds of medicines/drugs:</p> <ul style="list-style-type: none"> a) antibiotics b) sulfonamides/sulfa c) vaccines d) implants e) parasite control 	<p>Key points include:</p> <ul style="list-style-type: none"> ◆ knows that antibiotics are a chemical which can inhibit the life processes of micro-organisms they come from living organisms or are synthesized ◆ identify common types of antibiotics such as penicillin, streptomycin, tetracyclines, neomycin ◆ recognize that sulfonamides or sulphas are synthetic drugs which prevent bacteria from multiplying - they don't kill bacteria - often used in the early stages of infection ◆ vaccines are immunizing agents that contain live organisms (most common) or contain killed organisms (select viral disease application) ◆ recognize the purpose of vaccines is to initiate development of immunity ◆ recognize that vaccines may result in allergic reaction and these are treated by antihistamine products such as epinephrine ◆ describe the use of implants and recognize that they are synthetic hormone or hormone stimulating chemicals used as growth promotant in colves and feedlot cattle - injected in ear usually ◆ describe parasitic controls which are systemic insecticides or parasiticides - go into the body from an external application and to kill some stage of the parasite - worm, egg, cyst 	

<p>2) Describe the personal hazards associated with handling and storing drugs and demonstrate techniques to minimize the dangers</p>	<p>Key points include:</p> <ul style="list-style-type: none"> ◆ recognize the danger of infections or disease spreading to human food if drugs are stored in the family fridge ◆ recognize the danger of self-injection when handling loaded syringes or applicators ◆ recognize the danger of drug injection or passage through skin ◆ recognize that drugs may be transmitted to others if improper clothes are worn by operator ◆ call a doctor to verify/check situation ◆ parasite control materials can be very dangerous if they are allowed to contact human skin ◆ knows the physical hazards such as pin points, animal caused injuries and other hazards ◆ describes key points of personal protection which can be used to minimize injury - hand, eye, leg and foot protection (see hazardous materials safety skills) 	



NEEDS ANALYSIS

- A systematic process that aims to analyze training needs by identifying the skills that exist within an organization or workplace, and comparing these to the skills that are, or will be, required for that workplace.
- Includes job analysis, task list, task analysis, knowledge and skill analysis

Not animated - needs analysis process

Present slide.

Once needs have been identified and training activities have been decided as part of the solution, a needs analysis should be done to determine knowledge, skills and attitude requirements and performance deficiencies.

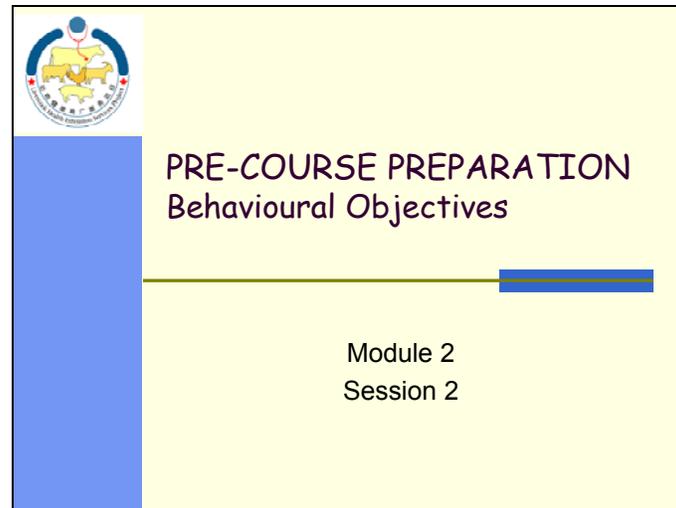
Needs analysis procedure involves breaking down the "training need" into its basic parts in different successive phases to identify and understand the important components in each phase.

Ultimately it leads to identifying and understanding the training content because areas of development are identified and training interventions can then be planned and designed to meet the education and training needs of individuals.

The systematic identification of peoples' needs for skills and knowledge help to focus on professional development interventions.

This ensures that peoples' professional development needs are adequately addressed and professional development programs planned are well structured.

Using the results of the pTNA, we will work through the steps of the needs analysis process.



Any job requires proficiency in a variety of key tasks.

At the end of training, we expect the trainees to be able **to do** something - to operate, to measure, to write, etc.

It is important that the expected outcome be described in a way that we can measure whether or not the trainee has achieved it - the expected outcome or objective must be behaviourally stated.

REMEMBER - learning was defined as a measurable change in behaviour (Introduction).

Behavioural objectives are precise statements describing exactly what the trainee is expected to **be able to do** as a result of the training.

In order to write sensible objectives, we need to look at the job competency analysis because it tells us everything that is involved in the performance of the tasks we intend to teach.



OBJECTIVES

- Describe at least two ways in which objectives are useful to the learning process
- Develop at least two good learner objectives based upon needs identified in the case study

What is a learner objective?

- A statement of exactly what the learner will be able to do at the end of the training

Animated slide - objectives, then definition

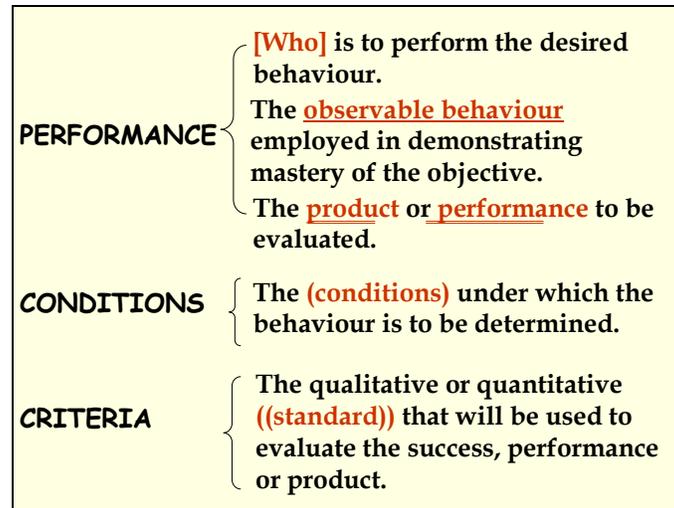
Introduce the session

ASK? Has anyone had previous experience with objectives? If so, was the experience easy or difficult. What was the most difficult?

ASK? What is a learner objective?

A statement of exactly what the learner will be able to do at the end of the training.

Underline the word do and stress that it is DO, not "know" or "believe" or "think".



Completely animated slide (see hand-out).

Behavioural objectives will answer 2 key questions:

- ◆ Did the trainees actually learn to do what we wanted them to?
- ◆ Was the training program successful?

A good behavioural objective states 3 things:

- ◆ The expected behaviour (performance);
- ◆ The conditions under which the trainee will perform;
- ◆ The minimum level of proficiency (standard) desired at a given stage in the training process.

(Orally, given fifty words), [the learner] will be able to spell ((ninety percent)) of the words ((correctly)).

(Using the correct tools (tags, tattoo, brand, electronic device), [the technician] will be able to mark cattle for identification choosing the ((best time(s) and location on the animal)).

(Given a blank diagram of a cow and a bull), [the technician] will be able to identify the reproductive organ name (provide list) ((with no more than one error each)).

(Using sample materials provided), [the technician] will be able to stock a livestock first aid kit, ((within 10 minutes)), describing maintenance procedures.

Animated slide - answer key to assignment.

Handout 2-10: Instructional Objectives Worksheet.

- ◆ Give all participants about 10 minutes to complete the assignment and review answers as a group.

Before behavioural objectives can be developed, the content of the job must be analyzed and broken down into specific job tasks.

The training objectives stated in action terms must relate to the tasks to be demonstrated on-the-job.

Behavioural objectives allow us to plan and measure learning and to measure the success of the training program.

ASK? What was the most difficult part of this exercise?

ASK? Which parts need more practice?

ASK? What difference does good learner objectives make in designing and conducting training?

- ◆ Keeps design needs-based, relevant; keeps trainer focused; allows trainer and participants to evaluate whether training has achieved its expected results.

2-10: INSTRUCTIONAL OBJECTIVES WORKSHEET

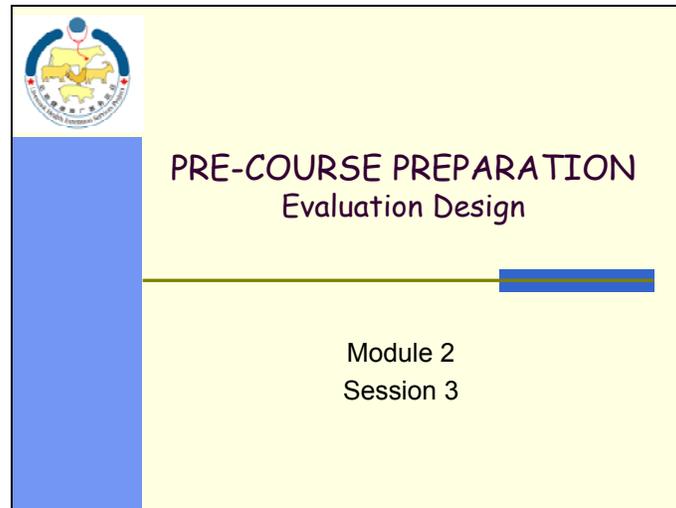
Elements present in a well-written objective:

- | | | |
|---------------------------|---|---|
| Performance demonstrating | { | <ol style="list-style-type: none"> 1. [Who] is to perform the desired behaviour. 2. The <u>observable behaviour</u> employed in mastery of the objective. 3. The <u>product</u> or <u>performance</u> to be evaluated. |
| Conditions | { | <ol style="list-style-type: none"> 4. The (conditions) under which the behaviour is to be demonstrated. |
| Criteria | { | <ol style="list-style-type: none"> 5. The qualitative or quantitative ((standard)) that will be used to evaluate the success, performance or product. |

For each of the objectives listed below, identify the components using the following coding keys:

- | | |
|--------------------------------|---------------------|
| [] = who | () = conditions |
| _____ = observable behaviour | (()) = standards |
| ===== = product or performance | |

1. Orally, given fifty words, the learner will be able to spell ninety percent of the words correctly.
2. Using the correct tools (tags, tattoo, brand, electronic device), the technician will be able to mark cattle for identification, choosing the best times and location on the animal.
3. Given a blank diagram of a cow and a bull, the technician will be able to identify the reproductive organ name (list provided) with no more than one error each.
4. Using sample materials provided, the technician will be able to stock a livestock first aid kit, within 10 minutes, describing maintenance procedures.



Introduce the Session

Many people do not like tests because of negative past experiences in school.

However, trainers do not use tests to cause stress or to maintain control - rather, evaluation is used to provide feedback on learner progress, course materials, and trainer competence (recall trainer's evaluation role - Module 1 Session 3)

Define **feedback** - information about the procedures, experiences or results so that changes can be made if necessary.

Ideally this feedback is given to the trainer.

Analogy - microphone feedback tells you there is a change necessary so you adjust the equipment.

In this session, we will discuss how to design effective evaluation as part of the overall pre-course preparation before we begin developing the course materials and content.



OBJECTIVES

- Explain the purposes of evaluation in training
- Describe methods for evaluating participant learning, the session design, and the delivery of the learning event
- Develop an overall evaluation tool for this training of trainer workshop

Animated slide - three objectives.

Recall previous experiences with evaluation:

ASK? Has anyone used or designed evaluations of training in the past?

ASK? Has your experience with evaluation been positive or negative?

ASK? How did you feel when your practice sessions were evaluated?



Animated slide - title, then swivel of feedback.

Giving feedback can be difficult - but an essential skill for trainers because it helps trainees to learn about themselves.

Without information about their performance, they are unable to change or improve performance.

Feedback works like error messages in a guided missile system, it helps people keep their behaviour on target which makes them better able to achieve their goals.

ASK? Is there a proper way to give/receive feedback?

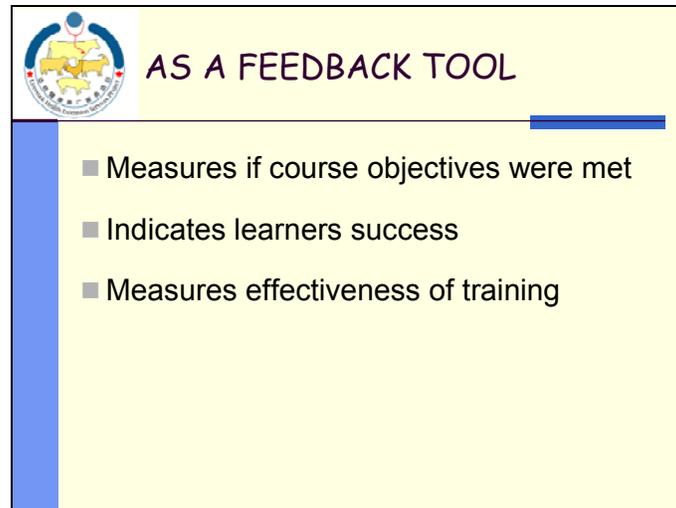
Brainstorm by writing any and all suggestions down on flip chart as quickly as possible, about 10 - 15 minutes.

Handout 2-11: Evaluation Strategy

Summarize using handout.

2-11: EVALUATION STRATEGY

EVALUATION STRATEGY				
LEVEL	WHAT	HOW	WHEN	SOURCE
Reaction	<ul style="list-style-type: none"> ▪ Did they like the course? ▪ Do they feel they learned? ▪ Did they like the instructor? ▪ What would they change? 	Questionnaire Feedback systems End of course	During and immediately following training	Learners
Learning	<ul style="list-style-type: none"> ▪ Are objectives met? ▪ Can trainees demonstrate skills and knowledge? ▪ Can trainees perform required tasks? 	Test Simulations Exercises Financial	During and immediately following training	Learners
Job Performance	<ul style="list-style-type: none"> ▪ Are skills being used? ▪ Did objectives match job? ▪ Were skills transferred to the job? ▪ Why are skills not used? 	Observation/ checklists Questionnaire on job Needs analysis	3 - 6 months following training	Learners/ Supervisors/ Customers Learners/ Supervisors Learners Learners/ Supervisors
Results	<ul style="list-style-type: none"> ▪ Was the problem solved? ▪ Were the costs accurate? ▪ Was the benefit realized? ▪ Any problems caused by training? 	Review company records Interview/ questionnaire survey Needs analysis	9 month to 1 year following training	Learners



AS A FEEDBACK TOOL

- Measures if course objectives were met
- Indicates learners success
- Measures effectiveness of training

Animated slide - 3 points.

ASK? How does evaluation work as a feedback tool?

As a feedback tool, evaluation:

- ◆ Measures how well the course objectives have been met;
- ◆ Indicates the degree to which learners have been successful; and
- ◆ Measures the effectiveness of the training.

Use previous flip chart exercise to cite examples.

For example, you may noticed that we ask many questions throughout the sessions - we are conducting a form of evaluation or assessment by asking for feedback about the training session.



AS A LEARNING DEVICE

- Learners practice, clarify, review, and discuss course content



Animated slide - picture first, then comment.

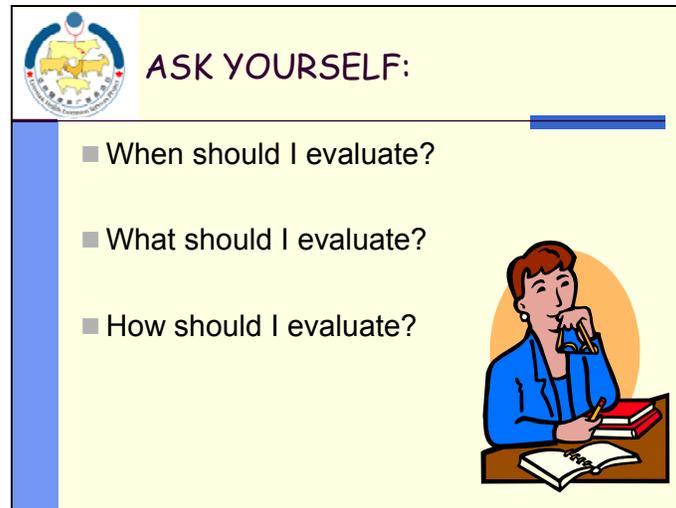
ASK? How does evaluation work as a learning device?

As a learning device, evaluation provides an opportunity for learners to:

- ◆ Practice,
- ◆ Clarify.
- ◆ Review and
- ◆ Discuss course content.

This means that one of the most critical roles of the instructor is evaluating the learning which has occurred as a result of training.

For example, we ask you to participate in small group assignments and brainstorming as a way of practicing, clarifying, reviewing and discussing the content.



The slide features a yellow background with a blue vertical bar on the left. In the top left corner is a circular logo with a map of the Middle East. The title 'ASK YOURSELF:' is in purple. Three bullet points are listed: 'When should I evaluate?', 'What should I evaluate?', and 'How should I evaluate?'. An illustration of a man in a blue suit sitting at a desk with books and a pen is on the right.

ASK YOURSELF:

- When should I evaluate?
- What should I evaluate?
- How should I evaluate?

Animated slide - picture first, then 3 points.

When planning evaluation, the job is made easier by first asking three questions - present slide.

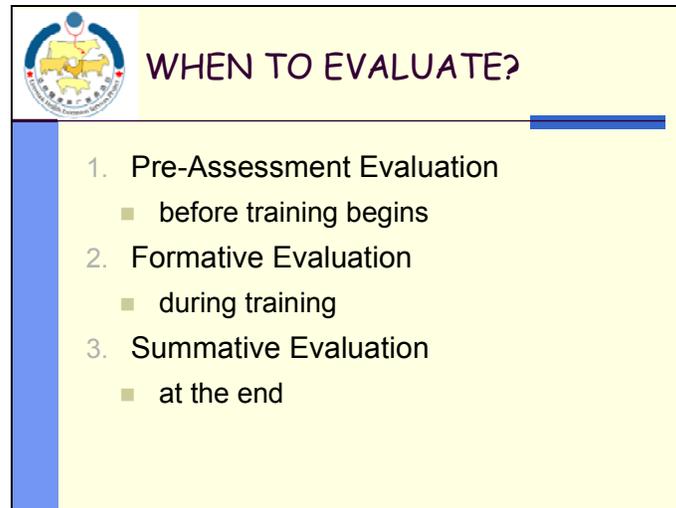
Let's look at each one more closely beginning with when should we evaluate.

ASK? When should evaluation be done?

Evaluation can be carried out several times - before, during or after training.

Continue with next slide to provide explanation and introduce following new words:

- ◆ Pre-Assessment Evaluation
- ◆ Formative Evaluation
- ◆ Summative Evaluation



WHEN TO EVALUATE?

1. Pre-Assessment Evaluation
 - before training begins
2. Formative Evaluation
 - during training
3. Summative Evaluation
 - at the end

Animated slide - presents 3 points.

1. Pre-Assessment Evaluation:

ASK? Why evaluate before the training even starts?

- ◆ To determine what learners already know about the content when they enter a course

2. Formative Evaluation:

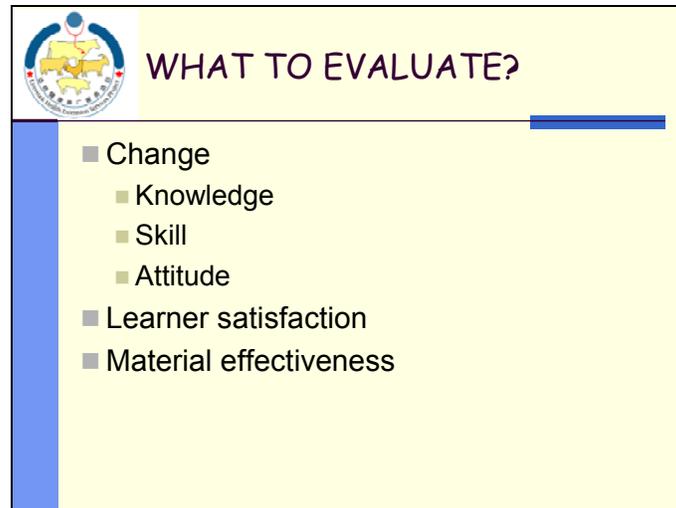
ASK? Why evaluate during the training?

- ◆ To know if the information is being learned, satisfaction, everything is okay.

3. Summative Evaluation:

ASK? Why evaluate at the end of training?

- ◆ To determine if both the instructor and the learners have met the objectives of the instruction
- ◆ To determine effectiveness and impact of training



Animated slide - 3 points.

In general, learner evaluation is done by testing knowledge and/or skill levels in relation to some criterion.

For example, the criterion might be a behavioural objective.

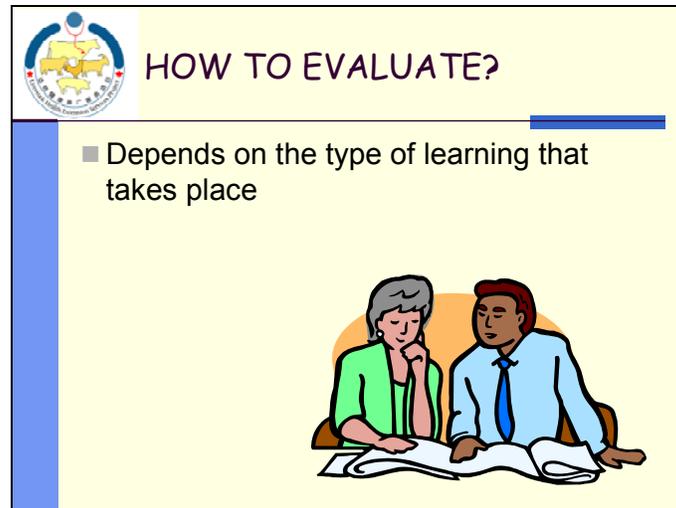
ASK? What are behavioural objectives (session 2)?

Behavioural objectives will answer 2 key questions:

- ◆ Did the trainees actually learn to do what we wanted them to?
- ◆ Was the training program successful?

Refer to example of task/skill analysis from session 3 in order to illustrate the behavioural objectives.

Other criterion include: a comparison with others in the same class, or a score achieved on a standardized test.



Animated slide - picture first, then point.

ASK? How do we evaluate learning?

Present slide - depends on type of learning that takes place.

ASK? Can you recall the 3 types of learning?

Remembering these learning types is the best aid in determining what type of evaluation should be used.

Review methodology and types of learning - Module 1 Session 2.

Small Groups - Ask participants to break into three groups and assign each group one of the types of learning.

- ◆ Ask each group to list as many evaluation instruments that may be used to evaluate knowledge, skill or attitude learning.
- ◆ Ask each group to assign one person to report back using flip chart - give them about 10 minutes.



TYPES OF EVALUATION

- Subjective
 - Imaginary
 - Influenced by feelings
- Objective
 - Real
 - Not influenced by feelings

Animated slide - title first, then 2 types.

Subjective or objective judgment required by evaluator, depending on the topic of instruction.

New Words:

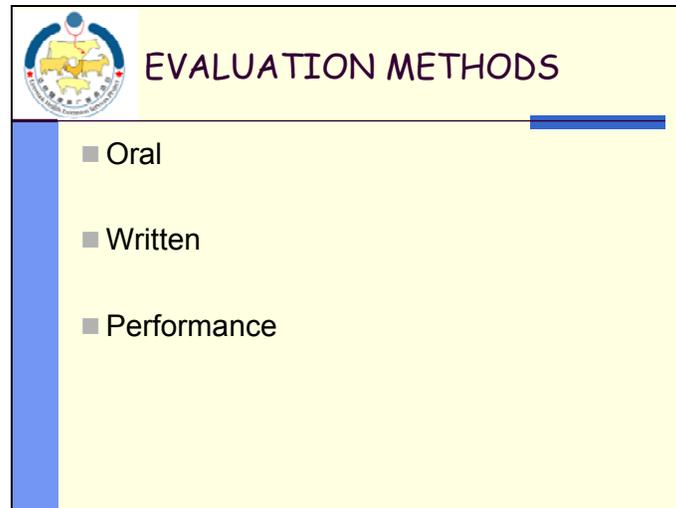
Subjective - existing only in the mind; imaginary; influenced by feelings, e.g. essay

Objective - existing outside the mind; real; not influenced by personal feeling, e.g. multiple choice

Subjective judgments best tested by constructed response tests or with rating forms (essay type for interpretation of historical facts and debate or speech delivery by weighted, multi-category rating form).

Objective judgments best tested by selected response tests (multiple choice - what is the chemical symbol for iron?)

Use previous flip chart exercise to discuss and identify subjective and objective evaluation.



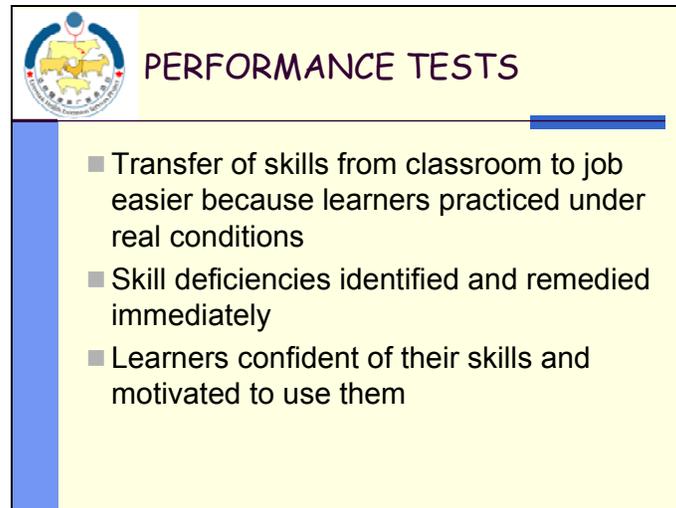
Animated slide - title, then 3 methods.

There are a number of evaluation methods available - 3 of the most common are oral, written and performance.

Small Groups: Ask participants to break into 3 groups.

- ◆ Ask each group to identify the advantages and disadvantages of performance, oral and written methods of evaluation (assign one testing method per group).
- ◆ Ask them to base these on their own experience as a learner or trainer.
- ◆ Ask each group to assign an individual to report back using a flip chart - give them about 15 minutes.
- ◆ After each group presents, ask the remaining groups to provide further suggestions.

Instructor - use table in manual to add missing items.

A presentation slide titled "PERFORMANCE TESTS" with a logo on the left. The logo features a globe and a person. The slide contains a bulleted list of three points.

PERFORMANCE TESTS

- Transfer of skills from classroom to job easier because learners practiced under real conditions
- Skill deficiencies identified and remedied immediately
- Learners confident of their skills and motivated to use them

Animated slide - 3 points.

Performance tests require trainees to physically demonstrate the knowledge and skills they have acquired under real or simulated job conditions.

Handout 2-12: Performance Checklist

(refer to guidelines for administering a performance test - see manual pg. 2-19).

This type of test can be the most effective for several reasons - present slide.

During this course, we will not administer any formal "tests" per se, but will use a type of performance testing procedure whereby we conduct practical group sessions for the very reasons presented in this slide.

ASK? Is this subjective or objective testing? Why?

We hope that by participating in these practical situations, you will be motivated to use them in your future training sessions as extension specialists.

2-12: PERFORMANCE CHECK LIST

COMPETENCY:

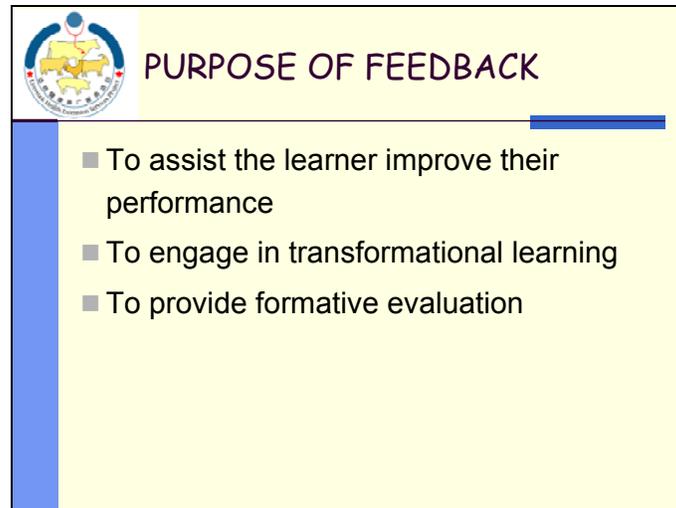
CREW:

NAME:

Performance Checklist		Yes	No
Personal Protective Equipment	Wearing correct personal protective gear?		
Safety	Working safely?		
Procedure	Following correct procedure for this task?		
Quality	Paid attention to quality issues/checks?		

	Times Performed						Comments	Trainee Sign-Off	Team Sign-Off
	1	2	3	4	5				
						1			
A						2			
B						3			
Date						4			
Time						5			

LEGEND: A = Trainee performed competency unassisted as per procedure
 B = Trainee required assistance (give details in comments above)



PURPOSE OF FEEDBACK

- To assist the learner improve their performance
- To engage in transformational learning
- To provide formative evaluation

Animated slide - 3 points.

Read 3 points as summary slide.

ASK? What are some important points to remember when you ask for feedback?

- ◆ Be specific; state your request using behavioural objectives; expect constructive criticism; focus on your goals during your work; and actively reflect on your work when receiving feedback.

ASK? What are some important points to remember when you give feedback?

- ◆ Be specific; give concrete examples; scrutinize the behaviour, not the person; identify successes as well as weaknesses; and encourage critical reflection.

Remember!

- ◆ To give feedback when it has been solicited; and
- ◆ To receive feedback as constructive criticism.



SMALL GROUP ASSIGNMENT

- Design an overall evaluation form for this Training of Trainers Workshop
- Share your design with the other groups for feedback and additional ideas
- Reach consensus on one final design

You will use this as your final evaluation for this workshop.

Small Group Work Assignment

Ask participants to form small groups

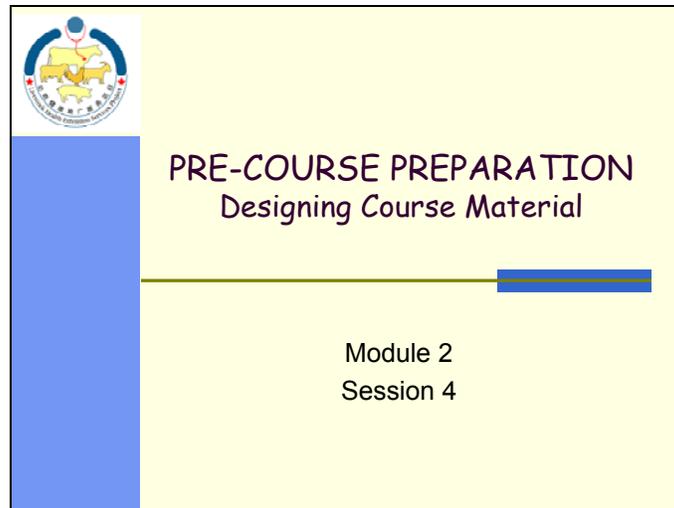
Present slide - read instructions

Ask the following questions about the experience of designing the form itself:

- ◆ What did you find difficult about the task?
- ◆ What would have made it easier?

Initiate a discussion about the form itself by asking, for each question on the form:

- ◆ Why are you asking this question?
- ◆ What new information do you hope to get from this question?
- ◆ How will you use this information?



This session examines the basic components of course materials:

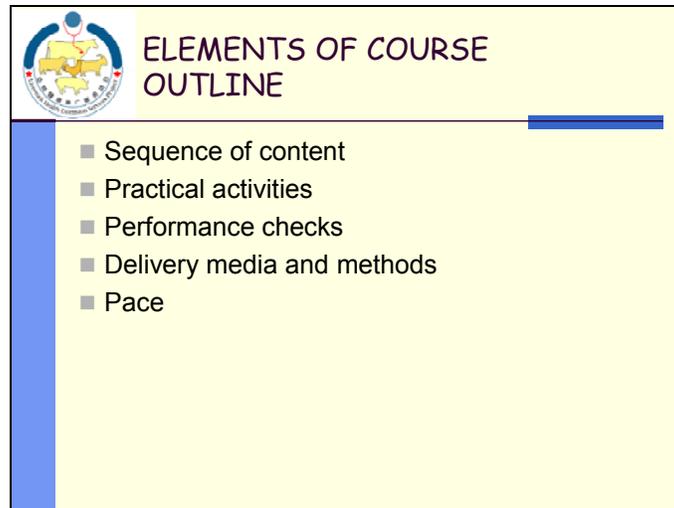
- ◆ The course outline;
- ◆ The trainer manual; and
- ◆ The participant manual or course book.

The course outline provides the roadmap for course delivery.

The trainer manual provides an instructional strategy for the trainer to follow and to add to as required -it may also contain "masters" of overhead transparencies and student handouts, etc.

The participant manual contains the content information to be covered in the course - it may also contain exercises and tests.

Course outlines are derived from the original competency analysis and the task analysis described in Sessions 1, 2, and 3 - let's look at an example.



Animated slide - 5 elements of course outline

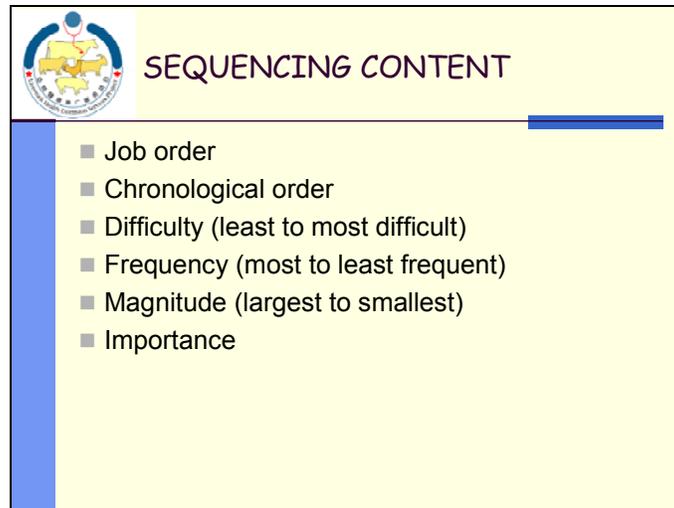
Before you can develop instructor lesson plans or participant reference materials, you must have an overall picture of the training course which includes content and delivery methods.

This means reviewing the information that has been collected about the trainees and the tasks to be learned; considering the most appropriate delivery media and methods for various parts of the course; and applying your knowledge of adult learning principles.

The output from this step is a course outline which communicates the decisions you have made.

ASK? What should a course outline look like?

There is no standard because the needs of the course development projects vary - should show how the 5 elements listed will be handled in the course.



SEQUENCING CONTENT

- Job order
- Chronological order
- Difficulty (least to most difficult)
- Frequency (most to least frequent)
- Magnitude (largest to smallest)
- Importance

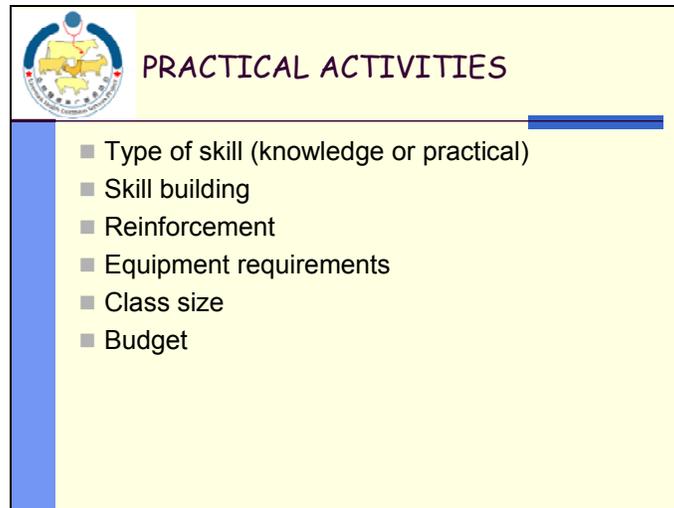
Animated slide - 6 examples of sequencing

The course content should be organized in a way that will enable participants to integrate new knowledge and skills with previous ones.

These should be a recognizable pattern to it because the pattern will help trainees to retain the content and use it on the job.

ASK? Can you list some patterns for organizing content?

- ◆ Brainstorm by writing any and all suggestions down on a flip chart, as quickly as possible, about 10 minutes.
- ◆ Present the 6 examples and link to those on the flip chart by using colored marking pens to tick each on off.
- ◆ Prompt for examples of the patterns - i.e. job order for agriculture cropping (field preparation, weeding, harvesting, storage).



Animated slide - 6 factors to consider

It is suggested that practical activities frequently require more development effort than the content.

Planning them well can reduce your development time and result in more effective training.

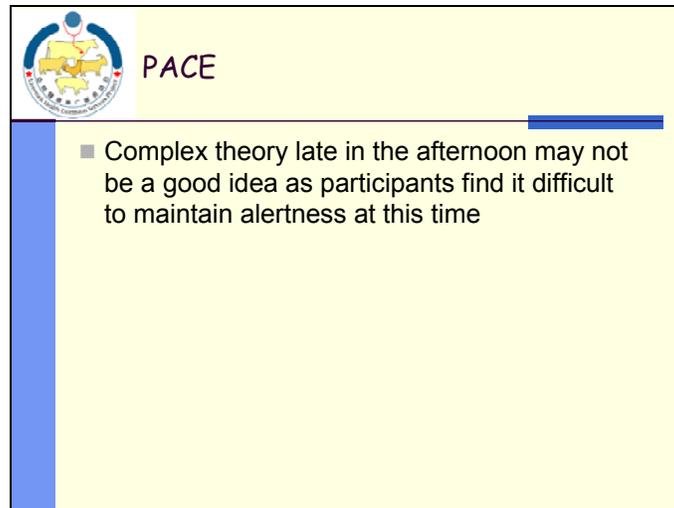
ASK? What are some factors to consider in when developing practical activities?

- ◆ Brainstorm by writing any and all suggestions down on a flip chart, as quickly as possible, about 10 minutes.
- ◆ Present the 6 factors and link to those on the flip chart by using colored marking pens to tick each on off.
- ◆ Prompt discussion by asking for stories regarding the preparation of practical activities.



PERFORMANCE CHECKS

- Should be designed to measure the participants' competence in performing tasks which include knowledge and practical skills



The slide features a yellow background with a blue vertical bar on the left and a blue horizontal bar at the top. In the top left corner, there is a circular logo with a globe and a person. To the right of the logo, the word "PACE" is written in a bold, black, sans-serif font. Below the title, a single bullet point is listed.

PACE

- Complex theory late in the afternoon may not be a good idea as participants find it difficult to maintain alertness at this time

ASK? Why is it important to consider the pace of the course, especially with regards to the organization or sequencing of the content?

The pace of the course is important and should be considered as you develop the course outline.

For instance, when you sequence the content for an instructor-led course, you may find that a complex chunk of theory may occur late in the afternoon if you use job order as an organizing principle.

However, participants will probably find it difficult to maintain alertness if the topic is delivered at this time.

So you must consider how it could be better sequenced to facilitate learning.

ASK? How could you sequence the content in this case to facilitate learning?

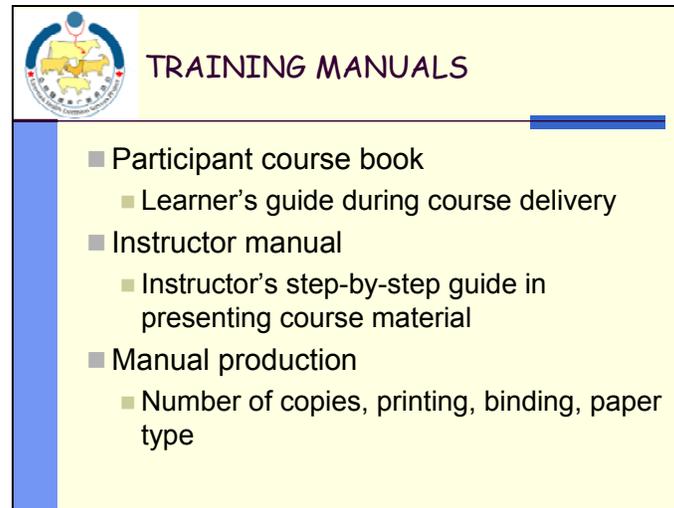
- ◆ A number of activities could be scheduled to make the participants more active or energized.

No.	Session Title	Content	Assignment
1	Introduction to Training of Trainer (45 min)	<ul style="list-style-type: none"> ■ Training terminology ■ Preparing behavioural objectives ■ Main roles of an instructor 	Complete behavioural objectives exercise sheet
2	Preparing One-on-One Lessons (Coaching) (60 min)	<ul style="list-style-type: none"> ■ Writing skill analyses ■ Preparing skill demonstrations ■ Training session ■ The 4 P's of skill demonstrations ■ Demonstrations ■ Presenting skill demonstration 	Prepare a skill demonstration lesson for presentation to the class
3	Giving One-on-One Lessons	<ul style="list-style-type: none"> ■ Present sample 1 on 1 lessons ■ Relationship between senses and learning 	Presentation
<i>END FIRST SESSION</i>			

Example - Extension Trainer: Training of Trainer

When preparing a course outline, follow these steps:

- ◆ Enter the number and title of the first proposed lesson (usually "Introduction to...").
- ◆ List the lesson content in brief form until sufficient points are included to make up a reasonable lesson length.
- ◆ Reconsider the order of the lesson content. Is it complete? Logical? If not, modify as necessary.
- ◆ Enter the next lesson title, its content and so on. Continue until all course material identified by the competency and task analyses is covered and logically sequenced.
- ◆ Possible assignments for each lesson should be entered now and adjusted later, if necessary, after the individual lesson plans are complete.



Animated slide - 3 points

ASK? What are some suggestions for preparing the participant's course book?

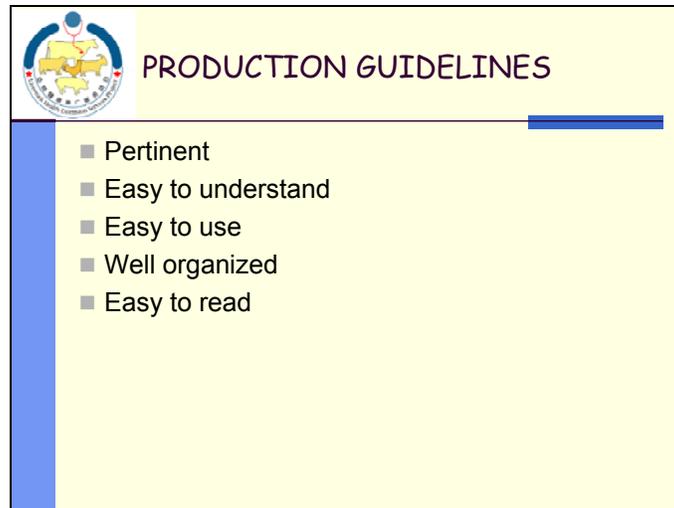
- ◆ Brainstorm by writing any and all suggestions down on a flip chart, as quickly as possible, about 10 minutes.
- ◆ Present slide - compare suggestions to their manuals.

ASK? What are some suggestions for preparing an instructor manual?

- ◆ Brainstorm by writing any and all suggestions down on a flip chart, as quickly as possible, about 10 minutes.
- ◆ Present slide - show trainer's manual to class from this course and illustrate how it is used in teaching.

ASK? What production factors should be considered?

- ◆ Brainstorm by writing any and all suggestions down on a flip chart, as quickly as possible, about 10 minutes.
- ◆ Present slide - comment on experience from producing materials for this course (time, organization, costs, etc).



Animated slide - 5 suggestions for manual production

Training manuals are generally produced as references for people going back to their job (i.e., veterinarian, farmer, extension worker)

Whether they are designed for veterinarians or farmers, all good manuals have certain basic characteristics in common.

ASK? Can you suggest some characteristics of a good manual?

Handout 2-13: Guidelines for Producing Training Manuals

Discuss training manuals produced for the course to illustrate these suggestions and how they make the manuals useful and readable.

2-13 GUIDELINES FOR PRODUCING TRAINING MANUALS

Here are some suggestions for producing a top quality, useful and readable manual.

- **Pertinent**

A good training manual provides pertinent information that answers common questions for the user, not the subject matter expert. For example, a computer operator who is required to use a particular software program does not need to know the internal configuration of the hardware that runs it.

- **Easy to understand**

Present information in a way that enhances comprehension by:

- using language that is familiar to the user
- avoiding jargon
- using action verbs to begin sentences
- using short, concise sentences
- never *talk above* the users

- **Easy to use**

A manual is easy to use if it:

- contains a complete table of contents
- includes an index, if appropriate
- gives an overview of each chapter
- includes a glossary, depending on the type of manual or the user's familiarity with technical terms
- uses a two or three point system of page numbering that continually re-orientes the user to the chapter, section and/or page.

- **Well organized**

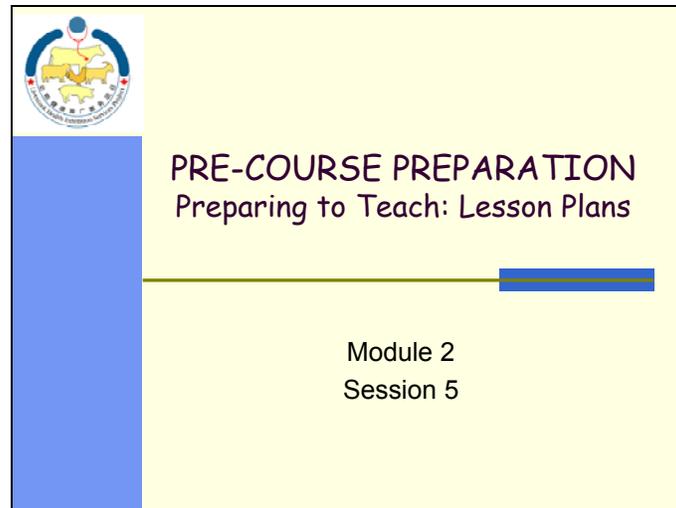
A well-organized manual should:

- make it clear to the reader where they are, where they have just been and where they must go next
- put corresponding graphics and text on facing pages
- arrange information and illustrations so that page flipping is minimized.

- **Easy to read**

A manual that is easy to read should:

- use correct size type
- use small groups of text with lots of white space
- add visual interest with graphics
- use headers and footers to delineate pages.



Whether the training is classroom instruction or an on-the-job (farm) skill demonstration, the trainer needs a plan.

Planned and prepared sessions are fundamental to good training.

This may seem obvious, yet lesson planning often receives limited attention.

The lesson plan is a personalized roadmap for the trainer, more detailed than the course outline and designed by the trainer to suit his/her own needs.

With the course material ready, the trainer must now prepare to teach.

The first step is to prepare lesson plans for every session.

The lesson plan is the key to effective preparation and instruction.



WHY LESSON PLAN?

Guide the instructor *before* the lesson by:

- Defining training objectives
- Selecting teaching methods
- Preparing teaching aids
- Listing teaching aids and classroom arrangements

Animated slide - 4 ways before the lesson.

Purposes of a Lesson Plan (slide 1 of 2)

ASK? How do lesson plans guide the trainer before the lesson?

- ◆ Brainstorm by writing any and all suggestions down on flip chart as quickly as possible, about 10 minutes.
- ◆ Present 4 ways in which lesson plans guide the trainer before the lesson and link to those on the flip chart by using different coloured marking pens to tick each one off.
- ◆ Ask for clarification if suggestions from participants do not fit in one of the four ways.



WHY LESSON PLAN?

Guide the instructor *during* the lesson by:

- Motivating the class
- Sticking to the topic
- Presenting the topic in proper order
- As a reminder of key points, statistics
- As a reminder of class assignments
- As a reminder of lesson content

Animated slide - 6 ways during the lesson.

Purposes of a Lesson Plan (slide 2 of 2)

ASK? How do lesson plans guide the trainer during the lesson?

- ◆ Brainstorm by writing any and all suggestions down on flip chart as quickly as possible, about 10 minutes.
- ◆ Present 6 ways in which lesson plans guide the trainer during the lesson and link to those on the flip chart by using different coloured marking pens to tick each one off.
- ◆ Ask for clarification if suggestions from participants do not fit in one of the four ways.

Handout 2-14: Lesson Plan

2-14 LESSON PLAN OUTLINE

① Lesson Title:	② Handbook page(s):
③ Lesson Concepts & Goals:	
<div style="display: flex; justify-content: space-between;"> Goals: <ol style="list-style-type: none"> 1. 2. 3. 4. 5. </div>	
④ Teaching Aids & Materials:	
To be supplied by instructor:	
With course:	
⑤ New Words: (review with class at end of lesson)	
⑥ Sample Questions:	
<ol style="list-style-type: none"> 1. 2. 3. 	
⑦ Analogies / Examples:	
⑧ Possible Assignments / Activities:	

⑨ OBJECTIVES	TEACHING POINTS/METHODS ⑩
<p>The student will be able to:</p> <p>1.</p> <p>OHT # (minutes)</p>	<p>1.</p> <p>2.</p> <p>3.</p>
<p>2.</p> <p>OHT # (minutes)</p>	<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>
<p>3.</p> <p>OHT # (minutes)</p>	<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>
<p>4.</p> <p>5.</p> <p>OHT # (minutes)</p>	<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p>
<p>6.</p> <p>OHT # (minutes)</p> <p>Length in Minutes:</p>	<p>1.</p> <p>2.</p> <p>BRIEFLY REVIEW 'NEW WORDS' WITH CLASS</p>

1. Lesson Title

What is the lesson topic? Choose a title.

2. Handbook Page(s)

Is the material covered in the lesson found in a manual? On which page? If not, where?

3. Lesson Concepts and Goals

What concepts are presented in this lesson? What are the goals of the lesson? Note that just above *Lesson Concepts and Goals*, there is an unlabelled area where the overall purposes of the lesson are recorded. Ask the questions:

- In general, what is this lesson trying to achieve?
- What is being covered/discussed/demonstrated in this lesson?

4. Teaching Aids and Materials

This section should list all materials, training aids and equipment you require for the lesson - handout sheets, charts, transparencies, etc. Also list all items such as tools, chemicals, samples and so on needed for delivery.

5. New Words

Are there any new terms that are given in this lesson? If so, list them and ensure you define them with the learners.

6. Sample Questions

In this space, write out sample questions that the class could be asked. These will introduce or guide development of the teaching points.

7. Analogies/Examples/Anecdotes

Is there anything from ordinary life to which you can refer that would make it easier for learners to understand?

8. Possible Assignments/Activities

What assignment can you give the learners so that you can gauge whether they have learned the lesson's objectives. (An unlabelled picture on which parts must be named, true or false questions, multiple-choice questions, fill-in-the-blank questions, a sample demonstration, questions requiring answers, hands-on practice, etc.)

9. Objectives

What should the learners be able to do at the end of the less? (Generally, for every lesson there should be no more than four or five objectives - fewer, if possible.)

10. Teaching Points

The following items should be taken into consideration:

- In what order should the material covered by this lesson be presented?
- What teaching methods should be used (lecture, demonstration, questioning, discussion, etc.)?
- What teaching aids would help (transparencies, film, models, etc.)?
- How can the class participate best (group assignment, case study, team competitions, etc.)?
- Is there something that the student learned in a previous lesson or elsewhere that could be recalled or reviewed here to make this lesson more understandable?
- Is there something that the student learned in a previous lesson or elsewhere that could be recalled or reviewed here to make this lesson more understandable?



SKILLS TRAINING USUALLY:

- Is one-on-one or in a small group
- Is done on the job or farm
- Involves hands-on demonstration
- Is given in short segments, followed by practice

Animated slide - 4 points.

A proficient trainer must be an expert at demonstrating new activities to a learner.

This is called skills demonstration or coaching.

Analogy - recent Olympic games, sports teams and players have coaches to help them become better at their skill.

Skills training usually:

- ◆ Is one-on-one; i.e. one instructor and one learner or conducted in a small group setting;
- ◆ Is done at the skill use area (on-the-job or farm);
- ◆ Involves a direct hands-on demonstration and is skill rather than theory-oriented; and
- ◆ Is given in short sessions and is followed by practice

Because of these differences from classroom teaching, a different preparation and teaching technique based on a **Task/Skill Analysis** is used.

Refer to Session 3 of Module 2 for an explanation of how to perform a task/skill analysis.

Use example that was previously discussed or developed to illustrate how the task/skill analysis is used to develop a skills demonstration lesson plan throughout the following lesson points and at the end with the 4 Ps.



The slide features a logo in the top left corner, a title '4 MAJOR STEPS', a list of four steps, and an illustration of a chemistry experiment. The illustration shows two hands pouring a green liquid from a flask into a beaker, with a stirrer in the beaker.

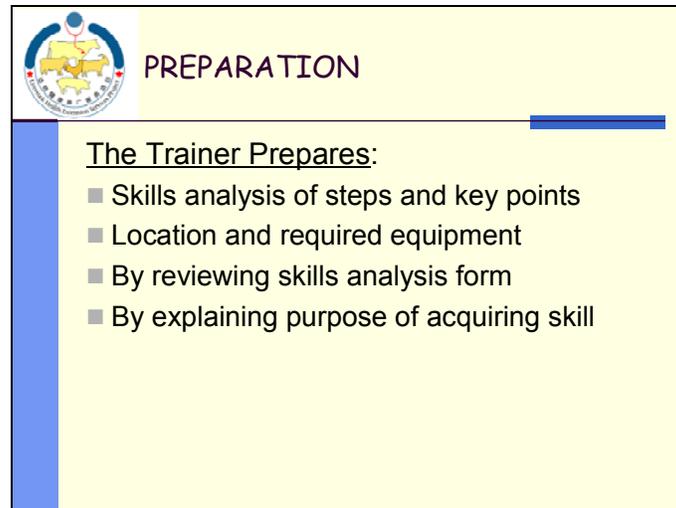
4 MAJOR STEPS

- Preparation
- Presentation
- Practice
- Pursue

Animated slide - picture first, 4 steps.

Giving a task/skill demonstration lesson involves four major steps - present slide.

Let's look at each step more closely and see who is responsible for doing what.



PREPARATION

The Trainer Prepares:

- Skills analysis of steps and key points
- Location and required equipment
- By reviewing skills analysis form
- By explaining purpose of acquiring skill

Animated slide - 4 points of preparation.

Using the example, remind participants how the task/skill analysis is an important training tool because it:

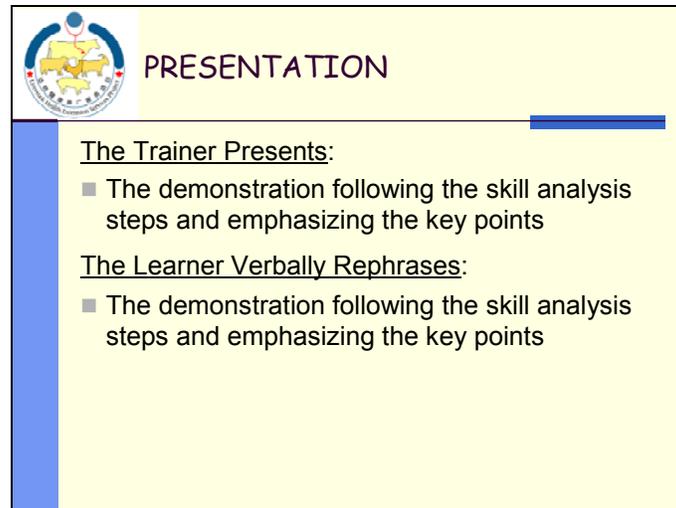
- ◆ Clarifies what information should be included in the training session or course;
- ◆ Indicates how a task should be taught; and
- ◆ Sets the standard for evaluation of the task.

Using the task/skills analysis example, point out how it can be used by the trainer to prepare:

- ◆ Training location, required equipment and materials
- ◆ Him/herself (reading the skills analysis form)
- ◆ Learner by reviewing purpose of skill

A good motivation technique is to ask the learner how he/she will directly benefit from learning this skill (i.e. relationship of skill to farmer improvement).

Remember the learning characteristics of adults?



 **PRESENTATION**

The Trainer Presents:

- The demonstration following the skill analysis steps and emphasizing the key points

The Learner Verbally Rephrases:

- The demonstration following the skill analysis steps and emphasizing the key points

Animated slide - trainer presents, learner presents

You, the trainer, present the demonstration following the skill analysis steps and emphasizing the key points.

The learner should be frequently questioned to determine his/her level of understanding.

After presentation, **before** allowing the learner to perform the skill, the learner **must** orally explain the steps in the correct sequence, and the key points **back to you**.

You must correct any errors and be fully satisfied with the verbal explanation.

Only then should you proceed to step 3.

This is a critical part of the demonstration.

It ensures the learner understood and absorbed what was said.

 **PRACTICE**

The Learner Practices:

- Under the supervision of the trainer
- And corrects any errors
- And performs to a set standard



Animated slide - picture first, 3 points.

Now have the learner practice the skill while you watch.

Praise suitable behaviour.

Any errors should be corrected immediately.

Once the learner's performance is satisfactory, set a reasonable amount of practice repetitions to develop proficiency.



PURSUE

The Trainer Pursues:

- A follow-up on the learner's performance
- Retraining where necessary
- A second evaluation



Animated slide - picture first, 3 points.

Return at the end of the agreed time to follow up on the learner's performance.

Any errors being made should be corrected.

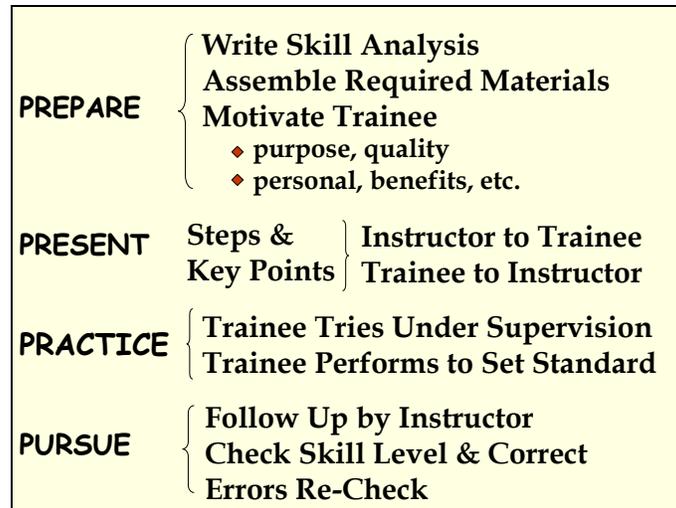
Then recheck the learner's performance at intervals until completely satisfied that the skill has been mastered.

ASK? Are any people here involved in the "green certificate" training program?

If there are some, ask if they use such an evaluation method or follow up program. Explain to class.

ASK? How might they "follow up" on farmer training?

◆ Discussion on whether the training evaluation is effective or not - how do they know that farmers are using the new skill?



Completely animated slide - use HO as reference.

These four steps - prepare, present, practice and pursue - are called the 4 Ps (present slide and HO 4 Ps).

Using the 4 Ps will ensure that every skill demonstration lesson you give is effective in meeting its objective.

The handout summarizes the procedures just described.

You may find it convenient to refer to this handout before giving skill training.

Some instructors also find it useful to prepare a good copy of the skill demonstration lesson plan so that it can be handed out to the learner - it reinforces the learning.

The plan can also be used to develop an operational procedure or a standard procedure for the skill.

Skill delivery lesson planning is required when one person or a small group is to be shown a skill - use the 4 Ps outlined to develop your lesson plan.



ASSIGNMENT

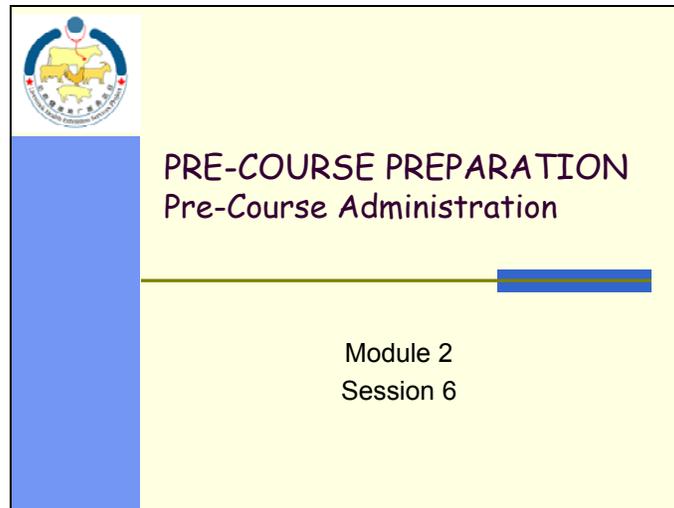
- Develop a six minute presentation that will teach your colleagues in this class how to perform a task
- Design a written lesson plan
- Use materials, props or training aids that help to teach the topic

Using lesson plan hand-out, summarize the previous 2 sessions.

Assignment - ask each participant to write a lesson plan and give a presentation.

Examples may include but are not limited to:

- How to make tea
- Tie a knot
- Remove and replace a battery
- Change a baby's diaper
- Perform a card trick
- How to clean a window
- How to clean a fish
- How to use a special function on a calculator
- Fold a paper airplane
- Transplant a plant
- Make a decoration
- Follow a recipe
- Write a memo
- How to use a compass
- How to set a table



ASK? From Module 1 of this course, what were the 4 main roles of a trainer? (review using flip chart)

ASK? What did 'course preparation' take into consideration? (review using flip chart)

In summary, we have examined how the course content and materials may be determined through job competency analysis and training needs analysis.

We looked at the determination of training objectives and the breakdown of tasks/skills into manageable steps.

This leads directly to an examination of evaluation methods.

With all of these content matters established, the course materials can be developed and an instructional strategy devised.

The trainer is then in a position to prepare lesson plans and practice course delivery.



Animated slide - title, picture and 5 points

Next is the preparation of training facilities and learners, as well as the distribution of course materials.

This is called 'pre-course administration' and includes 5 aspects (present slide).

ASK? Is this part of the trainer's responsibility in your experience? If not, who usually does this work? Can you see the advantages/disadvantages if the trainer is involved in this aspect of the pre-course preparation?

Let's take a closer look at what these 5 aspects include.



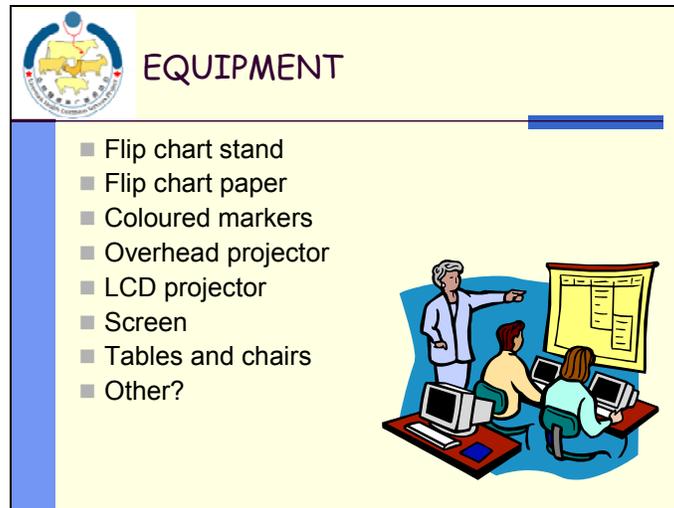
Animated slide - 6 points.

Training location involves scheduling and locating the course, arranging equipment and furniture and distributing course materials.

Scheduling may seem straightforward, but it requires attention or the training event may never happen.

ASK? Are there times (during the week, year) when it is not a good time to have a training course? for farmers?

Encourage participants to tell of experiences when training courses were successful or unsuccessful due to location or scheduling factors.



Animated slide - equipment list.

ASK? How do you decide what equipment is necessary?

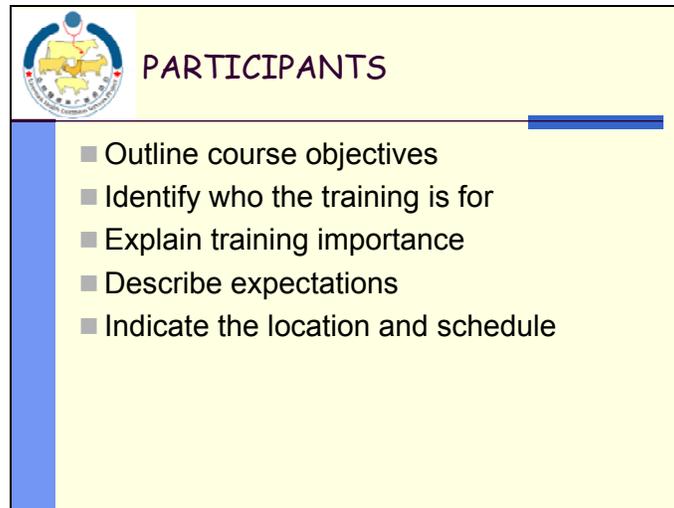
Consult your lesson plan to determine what equipment should be available.

If the equipment is not available, changes in your plan may need to be made.

Always be sure to specify that the equipment should be in working order - tell of training stories in China.

Smaller items that may be included in your "training kit" may include chalk, chalk erasers, tape for putting up flip chart sheets, straight pins, extension cords, extra bulbs for projectors, extra pens, etc).

Don't forget the energy sources such as chocolate bars!



PARTICIPANTS

- Outline course objectives
- Identify who the training is for
- Explain training importance
- Describe expectations
- Indicate the location and schedule

Animated slide - 5 points.

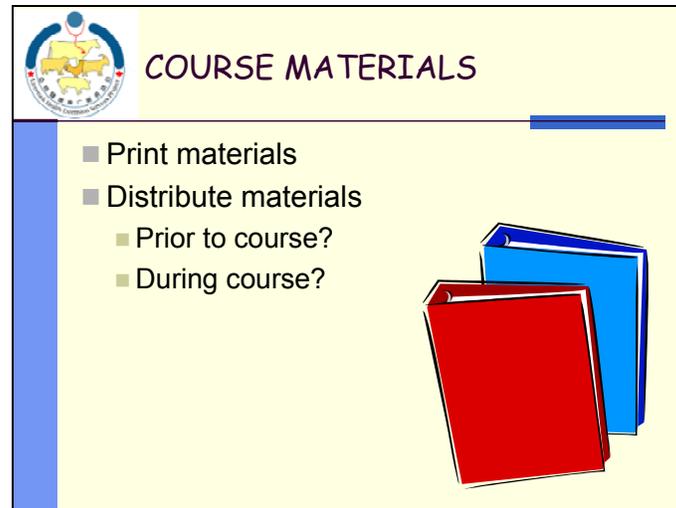
ASK? What information about the training course should be given to the participants? Why?

- ◆ Brainstorm by writing any and all suggestions down on a flip chart, as quickly as possible, about 10 minutes.
- ◆ Present slide and link to those on flip chart.

To maximize the learning experience, course participants need specific information before the course begins.

Small Group Assignment - flip chart of training notices

- ◆ Ask the participants to break into groups of 4 or 5.
- ◆ Ask each small group to critique the examples of training notices given on flip chart paper.
- ◆ Ask each group to assign one person to report back using flip chart hand out - give them about 10 minutes.
- ◆ Comment that these are actual notices used by various bureaus and ministries.



Animated slide - picture, then 2 points.

ASK? What are some factors to consider in printing?

Review the aspects in developing materials (Session 5).

ASK? When is it important to distribute materials prior to the course? During the course?

Depending on the course content - the more technical or complicated the course content, the better to give participants an opportunity to familiarize themselves with the subject matter before the course begins.

Summary: You may wonder what all these administrative details have to do with learning - it is really very simple.

There will be no learning if there is no learning site, or the participants do not know when and where the course will be - and if the course takes place without training materials, the learning process will be impeded.