GUIDEBOOK FOR NEW CANADIAN FORCES INSTRUCTORS

Produced in support of the:
Instructional Techniques Course (AHCH)

by:
The Canadian Forces Training Development Centre
CFB Borden (2011)

TABLE OF CONTENTS

INTRODUCTION 3

MODULE 1 – INSTRUCTIONAL RESPONSIBILITIES 5

THE TRAINING PLAN 7
- CFITES in Brief 7
- Evolution of the Training Plan 7
- Lesson Specifications 8
- POs, EOs and Lesson Specifications: The Big Picture 9

INSTRUCTIONAL ROLES AND FUNCTIONS 11
- Roles and Functions 11
- Characteristics of an Instructor 13
- Honesty and Positive Attitude 14

THE ADULT LEARNER 15
- Definition 15
- Characteristics of an Adult Learner 15
- Principles of Adult Learning 15

LEARNING DOMAINS 18
- The Cognitive Domain 18
- The Psychomotor Domain 20
- The Affective Domain 22
- Coaching 23

THE LEARNING ENVIRONMENT 24
- Establishing the Appropriate 24
- Difficult Participant Behaviours 25
- Learning Difficulties 27
- Counselling Learners 29
- Group Dynamics 38
- Transfer of Learning 41

Module Summary 43

MODULE 2 – PREPARING LESSON PLANS 46

THE LESSON PLAN 47
- Purpose 47
- Components of a Lesson Plan 48
- Sequencing Teaching Points 50
- Time Allocation 51
- Drafting a Lesson Plan 52
- Preparing a Lesson Plan 53
- Knowledge Lesson Plan Format 56
- Skill Lesson Plan Format 58

TRAINING AIDS ***60***
Presentation Aids **60**
Visual Aids **61**

PRINCIPLES OF INSTRUCTION ***68***
Learning Support **75**

Module Summary ***77***

MODULE 3 – PRESENTING LESSONS ***79***

QUESTIONING TECHNIQUE ***81***
Purpose **81**
Posing Questions **81**
Leading and Confirmation Questions **82**
Direct Questioning **82**
Developing Questions **83**

PHYSICAL BEHAVIOUR OF THE INSTRUCTOR ***85***
Voice **85**
Gestures **86**

CLASSROOM SET-UP ***88***

ADMINISTRATIVE DUTIES ***90***

Module Summary ***91***

REFERENCES ***92***

INTRODUCTION

If you are a new instructor, just starting out on your instructional techniques training, welcome. You are about to embark upon a most rewarding and challenging phase of your career, that of a Canadian Forces (CF) instructor. This Guidebook will equip you with the necessary theory and background for a basic understanding of the world of instruction. Additionally, and just as importantly, it will present to you the practical 'how to' for the preparation and delivery of both knowledge and skill lessons.

If you are already an experienced instructor, perhaps returning to the school environment after a period away, you will find this Guidebook a useful refresher for either the theory behind, or the practical application of your instructional duties.

To be a successful instructor it is not enough to simply stand at the front of a room and 'teach', you must understand your role in the CF training system, you must know how people learn best and how to prepare effective instruction that caters to these characteristics, and how to effectively deal with those learners who are experiencing difficulties.

To be a successful instructor, it is important that you adhere to the lesson specifications in the course training plan, understand the various visual and verbal aids that will help you communicate the lesson material to your learners and use the correct methodology (knowledge and skill lessons) to write your lesson.

To be a successful instructor, it is important that, having prepared a lesson plan is only a beginning; you must prepare the classroom, and properly deliver the lesson while interacting with the class in a manner that ensures learner success.

Using this Guidebook

The content of this guidebook is based upon CF doctrine, unless otherwise indicated. To assist your comprehension, the Guidebook is divided into three modules:

Module 1 – Instructional Responsibilities
Module 2 – Preparing Lesson Plans
Module 3 – Presenting Lessons

Each module begins with an overview of the major themes, as well as focus questions to guide your reading.

At the end of each major theme, you will find a stop sign icon with the related focus questions. This provides you a chance to confirm your understanding of the material prior to advancing to the next subject area. At the end of each module, the focus questions are answered as a final summary of the material.

Comments and suggestions for future editions of this manual are welcomed, and should be forwarded to:

Canadian Forces Training Development Centre
633 Dieppe Road, PO Box 1000, Station Main
Borden, Ontario, L0M 1C0

Attention: OPI, Instructional Techniques Course (AHCH)

MODULE 1

INSTRUCTIONAL RESPONSIBILITIES

MODULE 1
INSTRUCTIONAL RESPONSIBILITIES

"We may have all come on different ships, but we're in the same boat now."
Martin Luther King, Jr.

Overview

The Training Plan
- Components of a Training Plan
- Relationship between the PO, EO and the Lesson

Instructor Roles and Functions
- Roles and Functions
- Desirable and undesirable characteristics
- Honesty and Positive Attitude

Adult Learners
- Definition
- Characteristics
- Principles of Adult Learning

Learning Domains
- Cognitive, Affective and Psychomotor Learning Domains
- Fundamentals of Coaching

The Learning Environment
- Preparations
- Difficult Participant Behaviours
- Learning Difficulties
- Group Dynamics

By the end of this module, you should be able to answer the following questions:

- How does a Training Plan support the development of a lesson?
- What are the various roles an instructor assumes?
- What traits will adult learners exhibit?
- How do learning domains relate to lesson objectives?
- What should an instructor do to create a positive learning environment?

We begin by examining the instructional responsibilities involved in conducting a training period or session. As a CF instructor, you are expected to adhere to the fundamental principles presented here while performing your instructional duties.

THE TRAINING PLAN

CFITES in Brief

The Canadian Forces Individual Training and Education System (CFITES) is a Forces wide management framework designed to optimize the quality and quantity of individual training and education (IT&E), while minimizing the resources (personnel, equipment and finances) devoted to IT&E programmes.

Before any training can be conducted, there must be a requirement for it. The basis for this requirement is often established through the conduct of an Occupational Analysis, which determines the tasks members perform on the job and the knowledge and skills that enable that performance. This analysis is conducted by NDHQ, and the results are documented in a **specification**.

The aspects of the job that we must train people to perform are documented in a **Qualification Standard (QS)** (Note: the Navy uses a Qualification Standard and Plan). The QS contains the **Performance Objectives (POs)** that must be met before a person can become qualified to perform the job. The QS is created by the Training Authority of whatever command is responsible for carrying out the training.

Performance Objective (PO) *– includes a description, in operational terms, of what the individual must do, the conditions under which the performance must be completed, and the standard to which the performance must conform. These three elements are respectively defined as performance statement, conditions and standard.*

Enabling Objective (EO) – *is a principal unit of learning and constitutes a major step towards achieving the performance objective. Enabling objectives are sub-components or sub-objectives of the performance objectives. They represent manageable units of work; units that are coherent in terms of logic, learning of work, of suitable scope and appropriate-ate for testing for progress. Like the performance objective, the enabling objective is com-posed of three essential parts: a performance statement, conditions statement and a standard.*

Evolution of the Training Plan

Now that we have the QS to control the minimum standard, we must determine everything the students need to learn so they can achieve the POs. **What** must be taught, **how** it will be taught, and **how it will be assessed** is documented in a **Training Plan (TP).** The training establishment that conducts the training will develop this document using the QS as the foundation. It contains the Commandant's detailed information and direction that you, the instructor, require, such as how much time to spend instructing each lesson, which points to cover, and how to cover them. The TP breaks down the POs from the QS into manageable units of learning (called **Enabling Objectives, or EOs**), that help the students achieve the POs. These EOs form the basis of **Lesson Specifications** that include all of the information you require as an instructor to prepare your lessons.

Lesson Specifications

This is a typical Lesson Specification format for Chapter 4 of a Training Plan. The instructor is responsible for reviewing the lesson specifications prior to developing their lesson plan in order to ensure compliance with what is included there.

CHAPTER 4 - LESSON SPECIFICATIONS

PO 001 (Title of the Performance Check)

EO 001.01 (Title of the Enabling Check)

1. Performance. (What the student(s) must be able to do)

2. Conditions.

a. Given: (What the student(s) will be given to do the performance) (for example: equipment, references, assistance, nil)

b. Denied: (what the student(s) will be denied when doing the performance)(for example: assistance, references, nil)

c. Environment: (where, under what conditions the student(s) will do the performance) (for example: by day or by night, on winter/arctic operations, N/A)

3. Standard. (against which the student(s) performance is measured) (for example: time limits, critical errors, measurements)

4. Teaching Points. (The individual elements of the lesson, the method of delivery to the class, the time to be taken by the instructor, and the reference source.)

	DESCRIPTION	METHOD	TIME	REFERENCE
1	(of individual teaching points within the lesson)	(how the instructor will deliver the TP)	(per TP)	

5. **Time.** (the overall division of time for the EO, including Enabling Checks)

6. **Substantiation.** (of the specified methodology. How it will maximise student learning)

7. **Resources Required.** (Instructional aids used by the instructor during the lesson for example: white board, computer, projector, models, posters)

8. **Test Details.** (How the student(s)'s performance will be tested.)

9. **Remarks.** (additional points for instructor to assist instruction)

The instructors who will teach the programme are required to develop their lesson plans based on the teaching points and instructional strategy provided in the lesson specifications of the Training Plan.

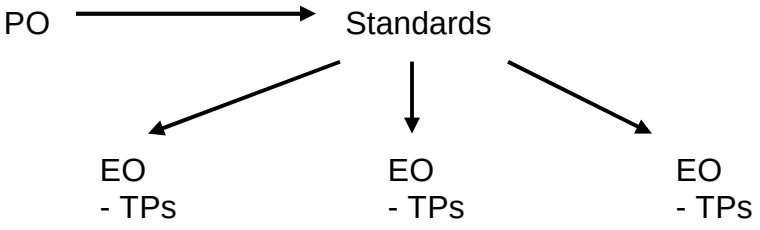
The format and style of a Lesson Plan (LP) will vary depending on the instructional strategy for the lesson. However, generally the steps outlined below will be followed to write a lesson plan:

- review the lesson specification in order to determine lesson requirements such as method, time, references and the context of each lesson;
- ensure that the teaching points are clearly defined and that the number of points to be taught is appropriate for the allotted time. If not, amendments to the training plan may be required to adjust timings;
- review references and relevant documents or master lesson plans if available;

POs, EOs and Lesson Specifications: The Big Picture

As an instructor, you must be aware that a lesson may in fact be just one part of a larger subject area. Your lesson comes from an EO within a PO, thus it must comply with the lesson specifications of the EO. Compliance is attained by ensuring you have included all of the required teaching points (TPs) in accordance with the standard.

In outline, the relationship looks like this:



For example, Performance Objective 109, Survive under CRBN conditions, of the Basic Military Qualification course training plan looks like this:

<table>
<tr><td>PO 109
Survive under CBRN conditions</td><td colspan="2">Standards:
In accordance with specified references, the NCM shall take those actions essential to their survival by:

a. recognize CF Nuclear Biological and Chemical Defence equipment and procedures.

b. perform individual Immediate Action drills.

c. operate collectively in CBRN environment IAW CF procedures.</td></tr>
<tr><td>EO 109.01
Recognize CF CBRN equipment and procedures</td><td>EO 109.02
Perform individual immediate action drills</td><td>EO 109.03
Operate collectively in a CBRN environment IAW CF procedures</td></tr>
<tr><td>TPs:
(1) recognizing an attack with CBRN munitions;
(2) recognizing CBRN alarms, signals and standard marking signs;
(3) donning mask in 9 seconds or less, adjust hood in 6 seconds or less;
(4) donning protective clothing. Relate the use of protective clothing to the graduated levels of CBRN threat (MOPP);and
(5) taking protective measures against the effects of nuclear explosion, i.e. flash, blast, and radiation;</td><td>TPs:
(1) carrying out personal decontamination dril
(2) following procedure to properly remove IPE;
(3) maintaining IPE;
(4) performing Self-Aid and Buddy Aid;
(5) performing personal hygiene, drinking and eating drills;
(6) utilizing dosimetric devices, chemical and biological detection and monitoring equipment; and
(7) conducting masking drills in the Gas Hut.</td><td>TPs:
(1) performing CBRN Sentry/Observer duties;
(2) carrying out drills and procedures to cross (with minimum personal danger) or avoid contaminated areas;
(3) carrying out decontamination site procedures;
(4) employing Collective Protection principles;
(5) performing primary military duties while wearing IPE (to include to use of personal weapons);
(5) detecting CBRN agents;
(6) performing operational decontamination</td></tr>
</table>

You can see how EO 109.01 deals with the background and individual drills relating to an initial level of CBRN competence, while EO 109.02 follows through with the immediate decontamination drills, culminating in a practical exercise in the gas hut. Lastly, EO 109.03 then moves onto collective procedures, placing the learner's individual skills and knowledge in a larger, unit environment.

It is important, therefore, for the instructor to strictly adhere to the training plan at each step of the EO in order support following training.

Check your knowledge:

- How does a Training Plan support the development of a lesson?

INSTRUCTIONAL ROLES AND FUNCTIONS

An enduring and stereotypical view of the teacher is that of the professor standing at the front of the room, lecturing at a passive class, and expecting the class to keep up as best they can.

As a CF instructor you are expected to do much more than talk at your class. You must:

- involve the learners in their own learning,
- assist and explain the course material as necessary, and
- keep the learners informed as to their progress; namely their successes, and where and how, they need to improve.

Roles and Functions

As an instructor in the CF, you will be expected to fill many roles in the line of duties. In summary, you will act as a leader, a counsellor, an evaluator, a facilitator, and a tutor. Table 1.1 further describes the aforementioned roles and functions:

Table 1.1: Roles and Functions of CF Instructors

Leader	**Responsibilities**
In the CF, leadership is defined as "directing, motivating and enabling others to accomplish the mission professionally and ethically, while developing or improving capabilities that will contribute to mission success." As every CF course has been deemed to be necessary to our overall mission of defending Canadian values, interests and sovereignty at home and abroad, ensuring success in the classroom contributes directly to mission success.	❖ Maintain high standard of professional integrity. ❖ Provide clear demonstrations of technique and equipment use.
Counsellor	**Responsibilities**
A counsellor is defined as 'an adviser', as one who may give guidance on a range of professional or personal issues. The CF instructor may be expected to:	❖ Observe student's attitudes and behaviour. ❖ Spot problems and determine causes.

❖ Help students make adjustments to learning environments. ❖ Advise students. ❖ Refer to appropriate agencies as necessary. ❖ Establish a relationship with each student.	❖ Offer solutions.
Evaluator	**Responsibilities**
In an educational sense, an evaluator is expected to assess or appraise student performance. The CF instructor is expected to: ❖ Determine whether students have successfully achieved the objective. ❖ Assess and inform students of their progress.	❖ Explaining test procedures so that all students understand. ❖ Encouraging and complementing students as they progress. ❖ Ensuring that all students meet the standard under the testing conditions specified.
Facilitator	**Responsibilities**
Unlike the traditional image of the teacher giving the course material to a receptive, and passive, class, the facilitator teaches by presenting the class with a common objective, and then assisting them as they plan how to best achieve that objective. The facilitator encourages an active participation by the class by: ❖ Determining learner skill, knowledge, and/or experience levels; ❖ Presenting the learners with a common learning objective; and ❖ Assisting the learners in planning for, and working towards their learning objective.	❖ Fill in any skill or knowledge gaps among the learners. ❖ Leave the learners to progress as they see fit, and resisting the urge to over direct learner's activities.
Tutor	**Responsibilities**
A tutor is one who teaches others in a one-on-one or small group setting. Unlike the teacher lecturing to a passive class, the tutor instructor is expected to: ❖ Understand differences in student	❖ Explain materials. ❖ Point out answers and corrections. ❖ Prescribe further reading or whatever additional assistance is needed.

learning abilities. ❖ Individualize attention to each student's learning. ❖ Understand each student's strengths and weaknesses. ❖ Help students understand difficult concepts and make connections between them.	

Characteristics of an Instructor

Take a moment and recall the outstanding teachers and instructors you have met throughout your life as a learner. What made them stand out in your memory? What made the less than ideal instructors stand out?

As an instructor, you will be well served by following the good examples from your past, and by treating your class as you would want to be treated.

The following are some of the positive instructional traits desired in a CF instructor:

- Have a strong understanding of the subject matter;
- Be an effective communicator;
- Understand your students' needs, their difficulties and differences;
- Be sincere in your desire to help your students learn; and
- Be enthusiastic about the material and about your role as an instructor.

Remember that a class will pay more attention to your attitude and behaviour than to the content of your lesson plan, especially if that behaviour is negative. The following negative behaviours will alienate and frustrate learners, and will discourage them from learning the material.

Avoid:

Arrogance – Acting like a 'know it all', or trying to bluff your way through a lesson in order to hide shortcomings from the class.

Ridicule – Establishing a 'me versus the class' environment by deriding the learners' participation.

Sarcasm – Using humour at the expense of your class.

Time wasting – Allowing your lesson to become more entertaining than instructive, as well as focusing on side issues or humour rather than maximizing time spent on the main teaching points and student participation.

Reading – Reading from a lesson plan with minimal interaction with the class with no notice of learners' reactions.

Honesty and Positive Attitude

As we have seen, an instructor can, through their attitude and behaviour, either reinforce or diminish the value of the material on the part of the class.

As an instructor, you must be honest with your class, to the point of admitting personal ignorance. It is not uncommon, for instance, for a learner to ask a question to which you do not have the answer. In this instance, do not bluff, or re-direct the question as the damage to your creditability, and that of the material, will be severe. Rather, admit that you do not have the answer, and promise to get back to the class with an answer at the earliest opportunity, and then do so!

Also, as the instructor, you are the personification of the CF, its leadership, and the trade or service in which the course material will be used. It is important that you project a positive attitude towards the material and its future application, as well as to the CF as a whole. Nothing will shut down a learner faster than to be told that there is no valid point to their having to learn a particular skill or piece of knowledge. You must motivate your students with the knowledge that the material they are learning is important to them and to their future service.

Check your knowledge:

- What are the various roles an instructor assumes?

THE ADULT LEARNER

All too often the word 'student' creates a picture of a child or young person sitting in a school classroom listening to and learning from a much more knowledgeable and experienced elder. While this may be the case with young children, it is important that the CF instructor treat their learners as adults, and not risk alienating them by, inadvertently, treating them like children.

Instead, the CF instructor must recognize that their learners are all adults, often with valuable prior knowledge and experience that should be shared with the class to improve learning.

Definition

One formal definition of the **adult learner** is:

> "A mature human being performing social roles typically assigned by our culture to those it considers to be adults and one who perceives him/herself to be essentially responsible for his/her own life."
> - Malcolm Knowles, 1913-1997.

Characteristics of an Adult Learner

As a CF instructor, you must keep these characteristics in mind when preparing for, and delivering instruction to adult learners. Failure to acknowledge these characteristics may result in a disgruntled and alienated class resentful of being treated like children.

Personality / Self Concept

- The adult learner may be self directing;
- People feel better and learn quicker when allowed to participate in the learning process; and
- We resent and resist situations that do not allow self direction.

Experience

- Adult learners are reservoirs of experience; and
- That experience may be used to the advantage of the class.

Readiness to Learn

- The adult learner wants to learn things they need to know in order to fulfil their role;

- The adult learner doesn't want to be taught too much, but rather they want to be shown how to do things effectively; and

- They come into the classroom ready to learn, don't let them down.

Orientation to Learning

- Adult learners are goal oriented, (you must show the participants how this class will help them attain their goals); and

- They are relevancy oriented. You must give them a reason for learning something or they may not immediately see the value in it.

Motivation to Learn

- Adult learners are more motivated to learn by internal factors, such as increased self-esteem, than by external rewards;

- They also have deep curiosity; stimulation must be obtained by telling us "What's in it for me"; and

- Your class may/will surprise you.

The methods of instruction used in the CF, including the knowledge and skill lesson which you will master as part of this course, are all designed to respect these characteristics, while still ensure sufficient class control to maintain safety and military decorum.

Principles of Adult Learning

There are a number of basic principles that apply to the adult learner, most of which can be directly tied back to the characteristics you have just learned. As an instructor you must recognise and apply these principles in order to ensure success in the class.

Adult learners have years of experience and a wealth of information.

Encourage the class to share their experiences with each other, so as to learn from each other's experiences.

Adult learners come with established values, beliefs and opinions

While you can introduce new material, you must be cautious about contradicting or challenging your learners' beliefs. To do so without justification will alienate your class.

Adult learners may experience changes to their style and pace of learning over the years and in different situations.

Changes in age and learning environments may trigger changes in learning styles. Learners may slow down or speed up, or move between verbal and visual. Be prepared to address many different learning styles throughout the course of a lesson.

Adult learners will apply new knowledge to existing knowledge.

They will learn better if they can compare the new knowledge (unknown) to existing (known).

Adult bodies are influenced by gravity.

Do not expect a class to sit patiently for hours at a time. Plan and give scheduled breaks, and remember that the brain can only absorb what the behind can endure.

Adult learners come with a sense of pride in their individual accomplishments.

Take great care not to insult or challenge the learners' accomplishments. To do so will alienate them from you.

Adult learners have a deep need to be self directing.

Do not try to lead them by the hand through the material, but rather tell them of the desired end result/goal, set out the guidelines/ parameters for them to work within, and let them get on with it.

Check your knowledge:

- What traits will adult learners typically exhibit?

LEARNING DOMAINS

What is learning?

Simply put, learning is a change in behaviour that occurs as a result of the acquisition of knowledge, skill and/or attitude.

More completely, learning is a developmental process that builds incrementally in layers as knowledge increases and skills the learner performs become more complex. For example, an electrician must first learn the theory of electricity before learning how to apply that theory to specific instruments. As learners progress they build on each level to achieve the next more complex level. As an instructor, and to assist your learners, delivery of instruction should flow from simple to complex, from known to unknown.

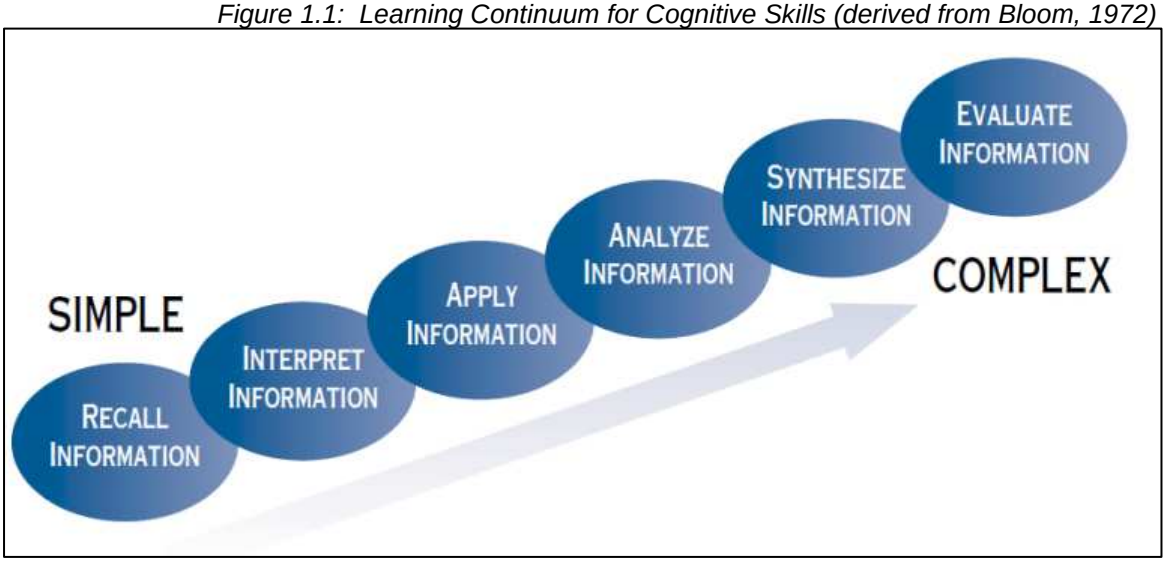
Developmental Learning: To be successful, a learning process must emphasize development by stages that are logical and follow a predictable sequence. For each of our domains, there is a specific series of developmental 'steps' that lead the learner from the simplest of tasks (watches the instructor demonstrate the skill, recall the course material as taught, and paying attention to the instructor) to the most complex of tasks (creating a new skill, independently judging the value of material, and adopting the desired personal characteristics).

Learning can be divided into one of three broad categories, or domains: the **Cognitive domain**, the **Psychomotor domain** and the **Affective domain**. Each of these learning domains will be covered in more detail.

The Cognitive Domain - Knowledge

In essence, the cognitive domain focuses on the acquisition of knowledge. Some examples subjects include military law, mathematics, history and electronic theory. As illustrated in Figure 1.1, the cognitive domain is hierarchical in nature such that each level must be mastered prior to moving on to the next.

Figure 1.1: Learning Continuum for Cognitive Skills (derived from Bloom, 1972)



Most basic training programmes will focus on three levels of learner outcomes; **recall, comprehension** and **application**.

In the initial stage learners are introduced to new concepts and ideas. This level is identified as the **recall** information level of learning, and recalling information or recognizing concepts are the types of activities an individual is expected to perform. As these concepts are developed, the learner integrates them into their existing knowledge base and begins to understand and interpret (or c**omprehend**) the information. The learner is expected to be able to explain or describe concepts. With this foundation, the learner begins to **apply** the concepts in different situations and under different conditions. Solid development of these first three cognitive skill levels generally produces competent performance and meets most Canadian Forces (CF) qualification standards (QS).

The higher levels of learner outcomes, **analysis**, **synthesis**, and **evaluation**, will be developed in advanced trades/classification, leadership and professional development training, and during collective unit training.

Sample lesson objectives for the cognitive domain:

Recall Information	▪ *Knowledge of major ideas, dates, events, places*
Interpret Information	▪ *Translate knowledge into new context* ▪ *Interpret facts, compare, contrast, predict consequences*
Apply Information	▪ *Use methods, concepts, theories in new situations* ▪ *Solve problems*

Analyze Information	▪ *Recognizing patterns* *Identifying components* ▪ *Finding hidden meanings*
Synthesize Information	▪ *Use old ideas to create new ones* ▪ *Relate knowledge from several areas* ▪ *Predict, draw conclusions*
Evaluate Information	▪ *Compare and discriminate between ideas* ▪ *Assess value of theories, presentations* ▪ *Make choices based on reasoned argument* ▪ *Verify value of evidence*

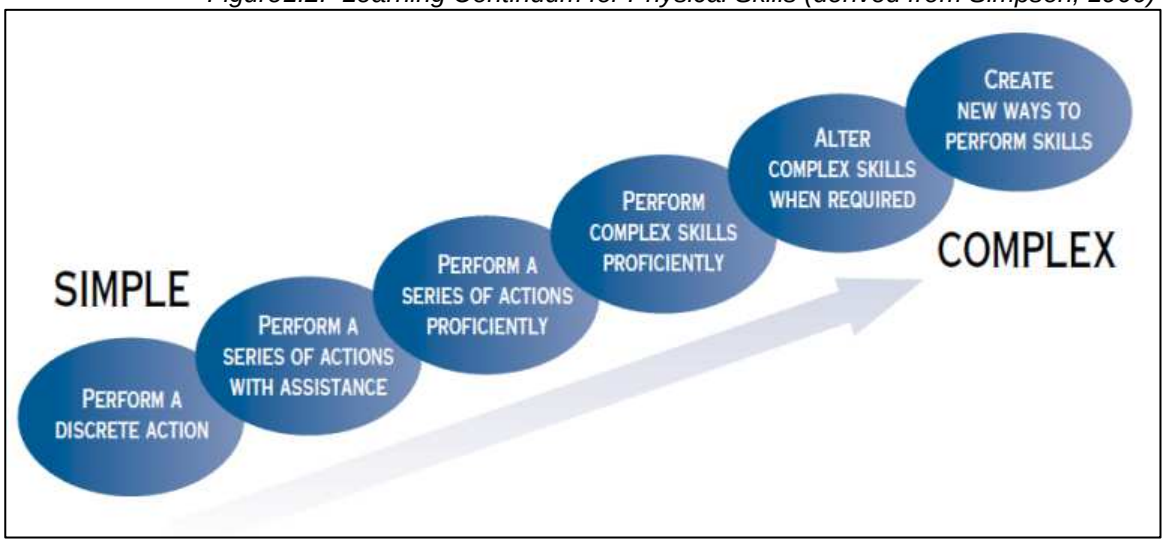
The Psychomotor Domain - Skills

The developmental process also applies to learning physical skills. As illustrated in Figure 1.2, learners begin by mastering simple discrete actions before proceeding to the next level where discrete actions are combined in a series, usually with assistance or guidance. With practice learners will eventually be able to perform a series of actions confidently and competently. As is the case for cognitive skills, the learner must master one level of learning before he or she can master the next level. Performing drill is an example of a physical skill that increases in complexity from basic foot drill through to advanced ceremonial drill.

It is important to note that many psychomotor skills require some supporting cognitive knowledge in order to be successfully learned. For example, land navigation requires a learner to have successfully learned how to read a map and calculate magnetic declination before being able to use a map and compass to navigate cross country.

Also, every CF course has an affective element, namely the acceptance of CF ethics, and the professional and individual standards expected of the learners. For an instructor, selecting a suitable instructional method is important if they are to address the specific needs of the learners. The two methodologies taught on the course, the knowledge lesson and the skill lesson, will address the needs of the basic level courses you will be required to instruct.

Figure1.2: Learning Continuum for Physical Skills (derived from Simpson, 1966)



Your main objective when teaching a skill is to ensure that the learners have successfully absorbed the skill to the point that they no longer require direct and constant supervision in order to meet the course standard (obviously, there are some exceptions based on trade employment standards). Skilful performance and the ability to both modify existing skills to meet a new problem, and to create new skills, will come with advanced training and experience.

You will be responsible for ensuring that the learners pay attention to your explanations and demonstrations, that they are ready to imitate you (that they have no questions or reservations), that they imitate you correctly (providing feedback on their performance), and that the learners have adequate opportunity to practise.

Sample lesson objectives for the psychomotor domain**:**

Perform a discrete action

- *The learner observes the instructor's demonstration.*

Perform a series of actions with assistance

- *The learner understands what is expected of them.*

Perform a series of actions proficiently

- *The learner imitates the instructor's demonstration.*
- *The learner practices the skill over time, until they have achieved the standard.*

Perform complex skills proficiently

- *The learner can perform the skill without supervision and error.*

Alter complex skills when required

- *The learner can modify or*

combine skills to successfully adapt to new circumstances.

Create new ways to perform skills

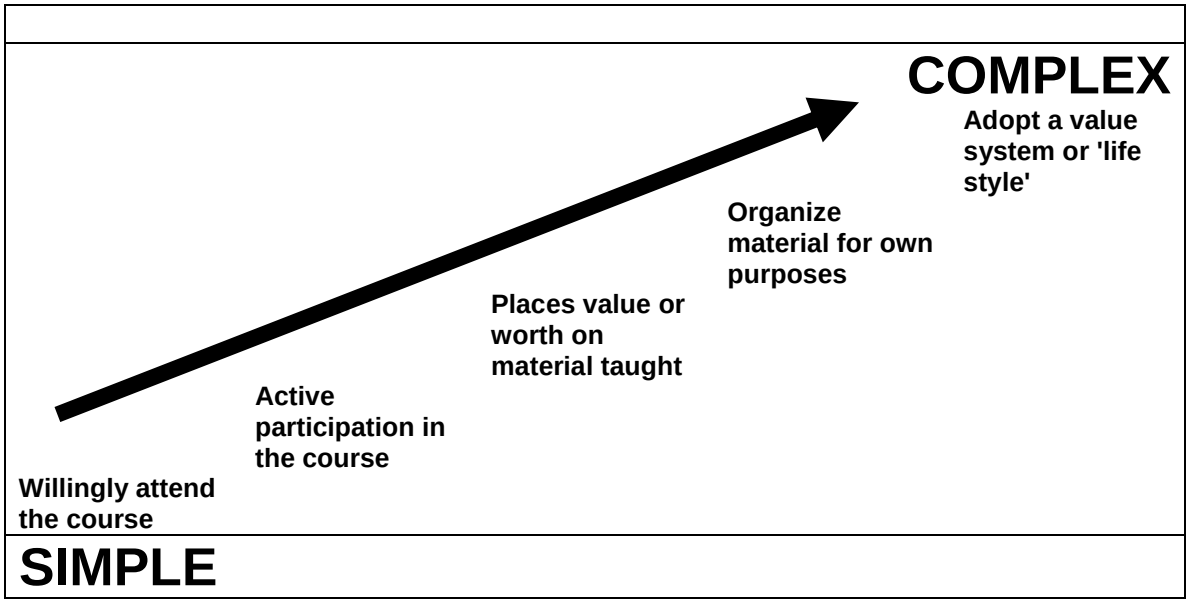
- *The learner can create new skills to address new equipment, situations or environments.*

The Affective Domain - Attitude

The affective domain is about much more than knowledge or skill, it is about the attitude expected of the learner; of the learner's attitude towards the material itself. As figure 1.3 illustrates, the developmental process in acquiring values and attitudes within the affective domain is less hierarchical in nature. Where learners begin and end on the continuum may be situational. Consequently, changes are difficult to observe at the higher levels of the affective domain. the case of the CF, it is expected that all our learners deport themselves to a standard that will bring credit to themselves and to the CF.

Figure 1.3: The Affective Domain (derived from Krathwohl, 1964).

.



As an instructor, you will set the cognitive, skill and professional standard which you expect your learners to achieve, and you will **demand their compliance**. You will be the role model, both within the class and outside, against whom the learners will judge their own performance. In the interest of good conduct and discipline, you must set the highest standard, and encourage your learners to adopt the CF ethos of service: Duty, Loyalty, Integrity and Courage.

Coaching

Coaching consists of aspects of the performance and demonstration method of instruction but is more learner-centred and developmental (that is, it proceeds in steps as the learner masters material and learns additional or advanced material). It is also much less directive, allowing a learner to proceed at their own pace (within the dictates of the course training plan) and to actively participate in the process with the instructor/coach, through feedback and discussion.

The instructor's role as a coach is to draw the learner's attention to critical elements of their performance. This is especially important when learners lose their train of thought or focus. The instructor must assist the learner to get back on track and continue with the task. Questions to the learner to assess his or her thinking and situational awareness under these conditions should be clear, concise and require short responses so that the flow of the task or operation is not disrupted. Instructors must be constantly monitoring the learners' performance to determine what they are doing correctly, as well as areas requiring improvement and how to correct them. The coaching sessions require a thorough debrief to complete the experiential learning cycle.

When coaching learners the instructor should:

- guide the learner as to what to think about and look for;
- make the practice as realistic as possible while explaining the differences between training performance and operational performance;
- focus the learner's attention on cues and actions and add supplementary feedback, as required, to develop the learner's performance;
- appraise the learner's performance by identifying the significant tasks required and by recognizing the standard of performance achieved by the learner; and
- keep a record of significant points in the learner's performance for the subsequent debriefing.

***Check your* knowledge:**

- What are the three learning domains and how do they relate to lesson objectives?

THE LEARNING ENVIRONMENT

Establishing the Appropriate Learning Environment

The instructor must ensure that the learning environment (classroom, workshop, training area, etc) is well suited to the lesson being delivered in order to minimise or eliminate distractions, maximise the training being delivered, and encourage learner participation.

Before training begins the instructor needs to:

- verify time and location of class;
- research topic to stay current on subject;
- check for correct class roster;
- prepare visitor's area and visitor's folder;
- prepare classroom or training area for training conditions;
- review and rehearse lesson;
- check training aids to ensure they are functional; and
- review security, inclement weather, and fire procedures.

During the class the instructor needs to:

- begin and end class on time;
- give scheduled breaks;
- maintain control of the classroom;
- spot-check safety equipment; and
- complete attendance reports, if necessary.

After training is over the instructor needs to:

- secure classified materials;

- secure equipment;
- evaluate training;
- rearrange classroom/training area;
- maintain training records; and
- perform (maintenance) if applicable.

Control Statements

The military instructor is personally responsible for the safe conduct of their class. This responsibility includes the personal security and safety of all students, visitors and other instructors in the lesson, as well as the care and security of equipment, including weapons and classified materials.

In order to ensure good order and discipline during a class, the instructor will make a Control Statement during the introduction. The control statement will clearly lay out the instructor's expectations for student participation and conduct. It is important that the instructor ensure obedience without unduly restricting student participation and questioning of the material.

Typical lesson control statements:

Skill - "If you have any questions, raise your hand; no group answers when I ask a question. Pay attention to my demonstrations and instructions, and do not get ahead of me."

Lesson - "If you have any questions, raise your hand. When I ask a question wait for me to call on you. There will be no class answers."

Difficult Participant Behaviours

A simple definition of a difficult participant could be *“Anyone whose attitude or behaviour prevents that person, or others, from meeting the lesson objective”.*

As an instructor, you will find that for the most part, your learners will be eager to succeed and will be motivated to participate in meaningful ways in the course. However, there will be occasions when you will be confronted with behaviours that will risk or even prevent learner success or interfere with the rest of the class.

When confronted with these difficult learner behaviours, your main concern as an instructor is to eliminate the behaviour thus reducing the damage to the individual learner and the rest of the class. The specific strategy required depends on the situation and the personality of the difficult participant.

There are two equally important goals when dealing with difficult participant behaviours:

- To get the learner 'back on board' and recommitted to the course; and
- To minimize their impact on others.

You must understand that more often than not, the learner displaying the difficult behaviour will still be committed to learning, but that some factor is interfering with their efforts. Often that factor will be beyond their ability to deal with on their own.

As such, you need to avoid the temptation to automatically invoke disciplinary or administrative measures until you have determined whether or not the difficult participant, in fact, deserves such a response. You can always ratchet up your response afterwards as necessary if the behaviour is in fact a result of a breach of service discipline, but it is very difficult to step back from an undeservedly harsh initial response.

While each difficult participant will be as unique, there are a number of broad categories into which most behaviours may be divided. Table 1.2 summarizes the behavioural categories and suggested solutions.

Table 1.2: Learner Behaviour and Solutions (CFITES Vol 6)

LEARNER BEHAVIOUR	SOLUTIONS
QUICK LEARNER The learner who consistently grasps concepts quickly and finishes work first could become disruptive if he or she begins to feel bored and unchallenged.	Provide this learner with more advanced work. Ask this learner to help others who require help.
QUIET LEARNER The learner who rarely participates due to shyness, fear, self-consciousness or an introverted nature should be gradually included in the lesson.	Begin by asking the learner a few questions that require short answers. Occasionally ask more detailed questions. Determine the learner's interests and encourage him or her to speak.
HELPFUL LEARNER This learner is eager to help and agrees with everything the instructor says.	If the learner is truly a generous person, explain in private that his or her behaviour is appreciated, but could be misinterpreted by classmates.

LEARNER BEHAVIOUR	SOLUTIONS
	If it is possible that the learner is trying to extract the favour of the instructor, advise the class (don't single anyone out) that only merit will determine success.
MONOPOLIZER This learner is always ready to express their views and can end up monopolizing the lesson.	Pose questions to this learner that require only brief yes or no answers.
CRITICAL LEARNER The learner who consistently finds fault with the content or method of instruction can be challenging.	Listen to the learner's problems and satisfy them if possible. If not possible, admit there are areas to be improved and ask for suggestions and solutions. Advise the learner that you would be happy to discuss these issues outside of scheduled class time.
KNOW IT ALL The learner who considers himself or herself an authority on any topic being discussed and disrupts the class.	Determine if the learner is knowledgeable or simply vying for attention. Allow the learner to answer some questions. Appeal to his or her sense of fair play to let other learners respond.
DISTRACTER The learner who attempts to get the group off topic. The learner may do this to avoid revealing that he or she has not completed an assignment or to avoid a difficult subject.	Recognize the type of questions that appear to relate to the lesson but will actually veer off topic. Acknowledge that the question does not relate to the topic but offer to discuss after the lesson.

Learning Difficulties

A **learning disability** is one or more of a group of disorders that affect a broad range of academic and functional skills including the ability to speak, listen, read, write, spell, reason and organize information.

It is important that the CF instructor recognize that learning disabilities are not a sign of low intelligence or low motivation. Repetitive remedial instruction or disciplinary action will have no bearing on the learner's performance. Learners have difficulty achieving the learning objective because of a deficit in one or more of the ways the brain processes information, a condition over which they have no control. Thus, learning disabilities are consistent and persistent, and not a 'one of' or an exception that will disappear over time.

While there are many ways to identify a learning disability (poor vocabulary, spelling, handwriting, organizational skills, or verbal self-expression) a specific and valid diagnosis and individual learning plan requires specialised testing and

assessment. The instructor who suspects a learning disability in a learner must inform the chain of command and advocate for testing and evaluation.

While the most extreme forms of learning disabilities will be screened out during the CF recruiting process, it is possible that some successful candidates have learned to mask or compensate for their learning disabilities.

In those cases the learner will progress alongside their peers until reaching the limits of their ability to compensate. The resulting poor performance will contrast with the learner's previous performance and signal the possibility of a learning disability.

In addition, the instructor should suspect a learning disability when a learner performs poorly in one or more types of assessment strategies, while still succeeding in others. For example, the student who can verbally explain a concept is unable to explain it on a written test.

In many cases, an accommodation may be made in which the learner is assessed in a different, though still valid, assessment strategy; for instance, a verbal rather than written test. A decision about alternate testing strategies will be made by the course chain of command, in consultation with training development experts.

It should also be emphasized that many learning disabilities are adequately addressed through the kind of performance based evaluation that is standard in the CF. That is, rather than have the learner write out, or verbally explain a concept, evaluate their understanding of the concept during a performance conducted in accordance with the standard in the training plan.

Training Strategies for Adults with Learning Disabilities

As learning disabilities often affect only a specific area of learning, a wide range of differing training and evaluation strategies will assist the learner in compensating for their individual disabilities. The CF training system already incorporates a great many strategies in course and lesson design as part of its overall training philosophy, and you will encounter them when you learn the lesson formats later in the course.

Examples of training strategies include:

Provide adequate opportunities for questions, including review sessions;

Encourage student participation;

Provide handouts;

Use concrete presentations (real life examples);

Start each lecture with an outline of what will be covered;

End each lecture by summarizing key points;

Provide alternate explanations of concepts;

Announce tests and assignments well in advance;

Use examples to explain concepts;

Create problem solving models; and

Provide information is multiple formats, i.e. written, electronic, auditory, or video.

Counselling Learners

As an instructor, you will encounter situations when a learner requires your assistance to deal with difficult situations. The two most common categories are learning difficulties and personal problems.

Effective counselling can help learners to solve a particular problem and develop the ability to solve personal problems themselves in the future. It is important to find the cause of the inappropriate behaviour and solve the underlying problem.

Some of the underlying problems that may be encountered during counselling include:

- problems pertaining to rank, promotion, job assignment, etc;
- personal problems such as attitude, attendance, alcohol or drug abuse;
- family or personal relationships (financial difficulties, personal conflict, moral dilemmas);
- personality conflict or harassment issues;
- peer, supervisor or instructor problems;

- learning difficulties; and
- excessive stress.

Limitations. An inexperienced instructor must take great care when dealing with learner difficulties. While you may feel confident in your ability to counsel your learners on difficulties they may have with their progress, motivation, study habits and discipline, it may well come out that there is a far more serious underlying problem that will be beyond your ability to address. Examples of such problems include alcohol or drug abuse, family, financial, physical or mental health or aptitude problems. In these cases, the learner will require assistance from a specialist in the appropriate area. Bring the issue to your chain of command, and advocate for appropriate assistance on your learner's behalf. Unit, base, formation or command resources are available for a wide range of issues effecting CF members.

PLEASE NOTE: the dilemma facing a novice instructor is that counselling skills require practice before they can become effective, and yet the risk of compounding a learner's difficulties through inexperience is a very serious one. So, take care when discussing a learner's difficulties and be prepared to seek out more experienced assistance the moment that you feel that the discussion has reached a point beyond your ability to provide meaningful assistance.

The material included in this section is intended to guide the novice instructor through the counselling process, but it is not intended that you should undertake any sort of counselling without first having discussed the issue with a more experienced instructor or your course chain of command.

Best Practises

In general, the counsellor must adhere to the following practices if they are to adequately deal with the learner's needs:

- **Preparation** prior to the interview enhances the session’s overall success. Review all information about the situation and prepare a counselling approach and plan. The counsellor should bring notes or an interview guide into the session to assist them through the counselling process;
- Display **patience** and genuine interest reassures the learner that the counsellor wants to help them;

- **Communicate** skilfully by encouraging learners to speak openly and listening carefully to understand what they are trying to say;

- Show respect for **confidentiality**. The counsellor should only discuss the issues raised in the counselling session with those who have an absolute need to know; and

- Share **responsibility**. The idea is for the counsellor to assist the learner to take responsibility for solving the problem. If the learner is involved in developing the solutions he or she will be more motivated to follow through and succeed.

The purpose of any counselling interview is to solve a problem. The objective of the interview is to obtain facts, information, and feelings to help a learner to identify and solve problems that are affecting their progress. Table 1.3 details the steps to be followed in a typical counselling interview.

Table 1.3: Counselling Interview

STAGE	GUIDELINE
PREPARATION	**Prepare the plan.** Gather information about the learner by reviewing the course file. Clarify the situation to determine the learner's problem and what steps have been taken. **Prepare the setting.** Select a location that is private and conducive to communication. Arrange furniture and schedule time to ensure there won't be interruptions. **Establish a comfortable atmosphere.** Welcome the learner and put him or her at ease by using a pleasant tone and offering them a seat. State the purpose of the interview. If the learner initiated the interview they should explain why they have asked for the counselling session. The environment should be conducive to trust and two-way communication.
EXPLORATION	**Encourage communication.** Listen to the learner and encourage him or her to express their ideas, concerns and feelings by asking open-ended questions. Keep the discussions going by summarizing what has been said and listen attentively in order to understand the learner's view of their problem and possible solutions.
INTEGRATION	**Provide more information.** The counsellor provides information from the learner's file, and encourages them to explore the problem further. **Identify learner misperceptions.** Through discussion ensure that the learner sees all sides of the problem without providing him or her with judgements or solutions. Explore alternatives. Integrate the information and suggestions provided by the counsellor with learner views. Encourage the learner to use new insights

	to clarify the situation and evaluate alternatives when solving the problem.
ACTION	**Summarize Outcomes.** The counsellor summarizes the agreed upon course of action and what the learner and counsellor are responsible to do. The learner summarizes the course of action to which he or she has committed. **Close the interview.** Ease the learner out of the session by stating you will follow-up when appropriate. Encourage the learner to approach you in the future to communicate concerns and initiate small talk to signal that the counselling session is over. **Follow-up.** Update the learner's file with the agreed course of action. Schedule a follow-up interview.

Employing effective interviewing techniques can help to identify the issues affecting the learner and effectively conduct the counselling session. These techniques include:

Attentiveness. Demonstrating attentiveness to the learner indicates that you are genuinely interested in helping them to solve their problem. Verbal encouragement and body language such as sitting with arms by your side versus crossed, making eye contact versus gazing around the room are important cues to the learner that you are open and focused on them;

Questioning Technique. Using open questions such as "What did you do to prepare for this exam?" provides the learner with the opportunity to respond with a wide range of responses versus closed questions such as "Did you study for the exam?" which result in a single yes or no response. Probing questions such as "Do you think the extra work assigned was fair?" allows learners to express their thoughts and feelings about a situation;

> **Note:** Leading questions which force the learner into a no-win situation such as "when are you going to start taking this course seriously?" **should not** be used during the counselling session because they put the individual on the defensive, which defeats the purpose of the interview.

Minimal Encouragers. Verbal words such as "yes, or go on" or nodding gestures encourage learners to continue with what they are saying. Remaining silent and listening carefully will help draw out the learner's perspective on their problems;

Paraphrasing. This involves interpreting and summarizing the learner's statement, and clarifying what they have said. For example, when the learner states "I was up until midnight working on my assignment and fell asleep" the interviewer might respond with "so, you did not have enough time to complete the

assignment?" to confirm what the learner means. This method can also be used to reflect the learner's feelings;

Summarizing. Summarizing what has been discussed at certain points during the interview can be helpful to refocus and clarify the situation. It reviews the issues discussed and ensures that there is agreement on the issues.

Three Counselling Approaches

There are three basic approaches to counselling: **directive**, **non-directive** and **participative**. Although they are very rarely used in pure form, you should be familiar with each approach so you can employ whatever mix is required to fit the situation.

The participative approach is a structured combination of the directive and non-directive methods. It provides greater flexibility as both the learner and counsellor work together to identify and solve problems.

In the non-directive approach, the counsellor encourages the learner to express feelings, concerns and problems. The counsellor clarifies and summarizes the situation in a non-judgmental manner encouraging the learner to come up with his or her own solution. This method may require additional time for the learner to determine their problem and a solution because the counsellor provides minimal assistance and direction. The intent is to have the learner realize the problem and propose solutions.

In the directive approach, the counsellor describes the problem and suggests a solution to the learner. The counsellor determines a solution based on his or her experience and knowledge of the learner's behaviour and training records. The counsellor encourages the learner to accept the solution to the problem. This approach may be used in the case of safety violations or disciplinary problems.

You should avoid using exactly the same counselling approach with every learner because they will not react the same way in similar circumstances. Therefore, every counselling situation should be tailored to meet the learner's specific needs. When determining which approach to use consider the:

- nature of the problem;
- personality of the learner;
- environment; and

- situation at the training establishment or unit.

Participative Approach

The participative approach is most often employed as it allows both the counsellor and the learner to fully participate in the process. Although the counsellor takes the lead, the learner is actively involved in determining any corrective actions and is therefore more committed to the solution.

The participative counselling approach is highly structured. It requires the counsellor and learner to engage in a six-step process aimed at helping the learner to resolve problems and correct his or her shortcomings. Each step and the associated procedures of the participatory counselling session are described in Table 1.4.

Table 1.4: Participative Counselling Approach

STEPS	PROCEDURES
Communicate shortcomings	Document and advise the learner of his or her shortcomings. Advise the learner of the requirement to address shortcomings and, if necessary, explain the possible consequences of not doing so.
Explore possible corrective	Invite the learner to provide reasons, if aware, for his or her actions shortcomings and to describe all corrective actions already taken to deal with them. Ask the learner to identify other possible actions to address their shortcomings. Provide the learner with suggestions of other corrective actions and discuss the pros and cons of each possible remedial action together.
Obtain learner commitment to the remedial action plan (RAP)	Ask the learner to propose the best course of actions to correct shortcomings from those discussed. Constructively review the proposal and offer advice as necessary. Ask the learner to provide a realistic due date for completion of the RAP and for his or her commitment to completing the RAP as per the proposed timeline.
Oversee progress on RAP	Ensure necessary assistance or resources are available to the learner. Regularly review the learner's progress toward goals and provide encouragement and praise. Help the learner to make mid-course corrections to RAP where needed.
Communicate success or failure of the RAP	Assess whether the learner is achieving RAP goals. Document the success or failure and advise the learner.
Recommendations	Recommend follow-up action such as continuing training with or without further counselling or cease training.

Non-Directive Approach

In non-directive counselling, learners are encouraged to freely express positive and negative feelings in an attempt to explore and understand themselves and their problems and concerns. The counsellor creates a non-judgemental atmosphere by summarizing what the learner says but avoiding offering any praise or blame.

This approach might be best employed when a learner is dealing with personal issues that he or she needs to talk out such as peer or family conflict, harassment, death, marital break up etc. in order to ensure these issues do not affect his or her performance. The non-directive counselling approach consists of six steps as outlined in Table 1.5.

Table 1.5: Non-Directive Counselling Approach

STEPS	PROCEDURES
Explain the approach	Explain to the learner that he or she will be helped in working out problems but will not be provided with the answers.
Encourage free expression	Encourage the learner to express their feelings about the problem such as guilt, fear, anger, indecision and concerns. Do not advise or persuade the learner that they are right or wrong.
Clarify and accept negative feelings	Respond to the learner's feelings instead of the facts or content of the discussion. Re-state and clarify the learner's feelings without expressing judgement. Accept the feelings expressed without commenting on whether the learner is right or wrong.
Recognize and accept positive feelings	After negative feelings have been expressed, allow the learners to build on tentative, more positive reactions. Do not provide approval or blame. This stage of the session should be used to gain insight into the learner's personality and the source of the problem.
Clarify choices	Ask the learner to clearly identify all possible courses of action while refraining from recommending a particular course of action to them.
Allow the learner to develop an action plan	Encourage the learner to weigh each possible solution. Allow the learner to work towards developing his or her own solution to the problem.

Directive Counselling

The directive counselling approach is the opposite of the non-directive approach. In a directive counselling session, the counsellor takes the lead role and provides advice, direction and suggestions to the learner.

This approach is appropriate when learners are less mature and require assistance and direction. It may also be used to deal with disciplinary problems.

The four steps and procedures of the directive counselling approach are outlined in Table 1.6.

Table 1.6: Directive Counselling Approach

STEPS	PROCEDURES
Define the problem	Identify and analyze the problem and its source. Pose questions to the learner to clarify the problem.
Explore possible solutions	Ask the learner to describe how he or she has or is currently coping with the problem. Suggest a number of possible solutions. In a disciplinary problem, the solution is not discussed, rather it is directed.
Guide the learner and direct the best solution	If a non-disciplinary issue, ask the learner to choose the solution that appeals most to him or her and guide the learner to the solution and future plan of action.
Follow up the plan of action.	Seek the learner's commitment to the plan. Provide support to the learner as he or she carries out the plan.
Note: *Counselling sessions involving discipline may involve mainly one-way discussion from counsellor to learner and the atmosphere may be quite tense. Nevertheless, the focus should be on problem solving.*	

Progress Reviews

In the event that your counselling has not been successful, a progress review is required in order to deal with the learner's issue. As an instructor, you will be briefed on the specific progress review procedures in place at your school, but in the main, the following options will be in place. The decision as to which option will be used will be made by the chain of command once you have raised your concerns.

Progress Review (PR). The PR is an informal review process that is initiated when counselling has not been successful in resolving problems. During a progress review the learner meets with his or her instructors and a supervisor to examine performance deficiencies. The deficiency is discussed with the learner to determine if remedial training can solve the problem. If it is determined that some form of remedial training cannot address the problem and cease training action is considered, the learner should be referred to a formal training review board to determine the most appropriate course of action.

Independent Review Board (IRB). The IRB involves a staff level review of the learner's file and progress to date. The purpose of the IRB is to ensure that the learner has received fair treatment. Any extenuating circumstances or training deficiencies/inconsistencies are immediately resolved. The board may still recommend remedial training or counselling or other corrective action. When the IRB concludes it does not have the authority to address a problem such as a voluntary withdrawal or severe substandard performance, then a PRB will be conducted.

Progress Review Board (PRB). The PRB also referred to as a Training Review Board (TRB) is held when there are significant decisions to make regarding a learner's future development. The outcome of a PRB may be: continuation with remedial training, recourse or cease training. The PRB is a formal and intensive process during which board members will review all pertinent information and interview staff and learners, as required. If there are significant problems, such as demonstration of unsuitability, unsafe attitudes, or cheating, staff may go directly to PRB without going through IRB. Wherever the possibility of cease training is considered, a PRB is required.

Group Dynamics

Developmental Stages of Groups / Teams

When people work in groups or teams, they have almost continuously changing relationships with one another. Changes occur as they attempt to solve problems and satisfy the needs of the group. A fundamental concept associated with group dynamics is the developmental process that all groups go through.

Group dynamics underlies all group behaviour. As such, a basic understanding of it will help reduce tension and reduce or get rid of conflict, thereby increasing the effectiveness of the learning experience.

A simple and effective group development process is the following five stage model:

Forming - as the group first comes together and gets to know each other;

Storming - as first impressions are challenged and alliances shift back and forth;

Norming - the group has settled into a comfortable working relationship;

Performing - the group is now capable of focusing on the task at hand, and performing as a cohesive team; and

Adjourning - relationships within the group change as members leave, new members enter or the task changes or is completed.

Some groups go through these stages very quickly, while others progress more slowly. Some may move through certain stages very quickly and slower through others. Some may even return to a stage before completing the cycle.

Although a CF course may well naturally lend itself to high inter-learner cooperation, there will be instances during a course when group dynamics will kick in and may seem to de-rail or sidetrack learners who had been working well together until that point. Such shifts in dynamics are natural and will be progressive in nature.

Stages of Group Development

Forming - during this stage, as group members first come together and get to know each other:

- They attempt to “feel out” other group members.
- There are feelings of anticipation.
- People are hesitant. No one steps forward initially to take charge.
- Individuals gather information about each other and about the scope of the task.
- The group depends on the leader.

Storming - during this stage, as first impressions are challenged and alliances shift back and forth:

- Minor confrontations begin that are either quickly dealt with or glossed over.
- Conflict increases. There is both open and underlying conflict.
- Some or all members feel frustration.
- Alliances (cliques) form within the group.

Norming - during this stage, as the group settles into a comfortable working relationship:

- Resistance is overcome.
- In-group feeling and cohesiveness develop.
- New standards and roles evolve.
- Opinions are freely expressed and received.
- Everyone works toward a common aim.

Performing - during this stage, the group’s identity and morale are high and everyone is equally task-oriented and people-oriented:

- Roles and responsibilities change seamlessly according to need.
- Trust is high.
- Group energy is focused on the task.
- The group performs at a very high level.

Adjourning: During this stage, relationships within the group change as members leave, new members enter or the task changes or is completed. This stage occurs when:

- A new member joins the group or someone leaves the group.
- The task changes or a dramatic workplace event occurs (e.g., change of command).
- No desire to change or contemplate a future different than the present.
- Outsiders may be viewed with hostility.

Table 1.7 Group Dynamics - Team Focus / Behaviours & Facilitator Focus / Behaviours

	Forming	**Storming**	**Norming**	**Performing**
Team Focus	Inclusion "Why are we here?"	Control "I want to have my say."	Openness "Let's do it."	Success "Wow, we're great!"
Typical Team Behaviours	• Dependent on leader/facilitator • Uneven/tentative participation • Quiet defiance • Polite conservation	• Conflict • Question leadership, authority, rules • Verbal/nonverbal resistance • Dysfunctional behaviour • Frustration	• Give/receive feedback • Encourage others • Active listening • Recognize and discuss differences • Trust and comfort	• Task appears to be effortless • Interdependence develops • Balanced, supportive participation • Differences are valued and discussed candidly
Instructor Goals	• To model openness, disclosure, and active listening • To provide structure and clear goals	To help the team recognize group dynamics and address conflict positively	To advocate feedback and encourage self-critique.	To praise accomplishments.
Instructor Behaviours	• Listen, especially to what is *not* said. • Be attuned to nonverbal cues that signal apprehension. • Intervene. • Demonstrate disclosure by	• Pay particular attention to group dynamics. • Be specific when describing behaviours. • Encourage team members to discuss their	• Highlight conformance to ground rules. • Encourage self-critique. • Encourage the full exploration of ideas. • Explore	• Plan brief sessions for the team to recognize progress. • Provide challenging opportunities, especially leadership roles.

	expressing your feelings. • Ensure objective, goals and agenda are clear. • Use icebreakers to encourage disclosure. • Ask team members to clarify their assignments at close of meeting.	feelings. • Encourage team members to discuss their interests versus their positions.	inferences. • Encourage reinforcing and redirecting feedback.	

Transfer of Learning

As an instructor you must recognize that the knowledge and skills related to one topic, or previous learning, can help or hinder the student's learning in another topic.

When learning from one situation assists learning in another, this is referred to as **positive transfer**. This positive transfer is most likely to occur when the learner

- recognizes common features among concepts, principles, or skills;
- consciously links the information in memory; and
- sees the value of using what was learned in one situation in another.

For example, an instructor on a QL4 course can refer to the knowledge and skills their students would have learned during their earlier QL3 course to assist their understanding of new knowledge and skills.

However, **negative transfer** may occur when one set of learning from one situation interferes with learning in another situation.

For example, the experiences learnt as a private or corporal (follower) may cause problems for the PLQ student who inappropriately applies that experience to their leadership tasks.

Positive transfer is a very important part of learning. In addition to helping learners acquire specific information more easily, positive transfer helps learners function effectively in situations for which they have no previously acquired information. It enables learners to solve problems they have never seen before.

This aspect of positive transfer will be discussed in the next chapter. A major goal of education is to facilitate positive transfer and to minimize negative transfer.

The following practises encourage positive transfer:

Place the subject matter in a meaningful context, and do not rely upon rote memory. Information that does not have meaning for the students will not be retained.

Employ informed instruction. Ensure that your students know where, when and why they will employ the material taught.

Teach and practise the subject matter in a realistic environment that is as close as possible to the actual operating environment. For example, field-craft lessons must be taught in the field and not in the classroom, mechanics on a shop floor, and medical lessons in a clinical setting. In this way the learner can use environmental cues from the environment to aid retention and application of the appropriate skills and knowledge.

Display a positive attitude towards the material. This will encourage the students to engage in the material, and not avoid it. Retention is improved when students have positive feelings about learning in general and the material in particular.

Check your knowledge:

- What should an instructor do to develop a positive learning environment?

_____

Module Summary

1. How does a Training Plan support the development of a lesson?

The Training Plan details the Enabling Objectives (EOs) and lesson specifications,which are chunks of learning derived from the Performance Objectives (POs) contained in the Qualification Standard. The EOs outline the standard for performance, and the lesson specification outlines specific teaching points, instructional methods and instructional timings for lesson development purposes.

2. What are the various roles an instructor assumes?

In general, an instructor must involve the learners in their own learning, assist and explain the course material, and provide timely feedback. In performing these duties, they must fill the role of leader, counsellor, evaluator, facilitator, and tutor, as the need arises.

3. What traits will adult learners typically exhibit?

Adult learners typically need to know why they should learn something. The may be self-directed in certain circumstances. They vary in their quantity and quality of experience. Adult are usually ready to learn and have a task-centred (job performance) orientation to learning. Adults are typically influenced by both internal (pride, curiosity) and external (career, economics, family) motivators.

4. What are the three learning domains and how do they relate to lesson objectives?

The three learning domains are cognitive, psychomotor and affective. The performance objective specified within the EO or PO will determine which of the three domains the lesson falls into, and to what level the outcome should achieve. For example, a performance objective of “Calculate leave entitlements” falls within the cognitive domain at the application level. This information provides guidance as to how the lesson should be taught.

5. What should an instructor do to develop a positive learning environment?

The learning environment should be well-suited to the type of lesson. Necessary preparations associated with before, during and after the lesson should always be carried out. Difficult participant behaviour should be dealt with swiftly but tactfully. Instruction should be active in nature and employ strategies that benefit

all learners, regardless of ability. Instructors must be cognisant of the delicate nature of counselling learners.

MODULE 2

PREPARING LESSON PLANS

MODULE 2
PREPARING LESSON PLANS

"I hear, and I forget. I see, and I remember. I do, and I understand."
Chinese Proverb

Overview

The Lesson Plan
- Purpose
- Components of a Lesson Plan
- Sequencing Teaching Points
- Time Allocation
- Drafting a Lesson Plan
- Preparing Knowledge Lessons
- Preparing Skill Lessons

Training Aids
- Presentation Aids
- Types of Presentation Aids
- Visual Aids
- Types of Visual Aids
- Choosing Visual Aids
- Orientation Board

Princples of Instruction
- ICEPAC
- Learning Support (CREST)

By the end of this module, you should be able to answer the following questions:

- What is the purpose of a lesson plan?
- Describe the differences between knowledge and skill lessons?
- How should an instructor choose presentation aids?
- What does ICEPAC stand for and how should it be integrated into each lesson?
- What does CREST stand for and how does it support learning?

As an instructor you must remember that by itself, *information is not instruction*. That is, to ensure understanding on the part of the learners, and retention of the material, the instructor must do more than just present the material. Each period of instruction should comprise a logical instructional sequence, participation and practice, feedback, and an effective presentation. This module will provide the tools required to achieve the aforementioned components of instruction.

THE LESSON PLAN

Purpose

The main purpose of a **lesson plan** is to help the instructor think through the lesson as it will be taught and assist in the organization of tools and materials needed to carry out the plan. As well, the lesson plan guides and directs the instructor through the actual presentation of the lesson, ensuring that all teaching points are addressed, that timings are met, and a consistency of delivery and learning outcomes every time the lesson is delivered. Lastly, a thorough and legible lesson plan is necessary for those unavoidable occasions when a last minute substitution of instructors is required.

Lesson Plan – a guide used by instructors to ensure that instruction follows a specific, goal-oriented plan. An instructor lesson plan is developed, based on a lesson specification, by the instructor who will teach the lesson.

A lesson plan:

- Provides needed motivation for instructor and learners: If the instructor shows up appearing well motivated and confident because they know they have a good sound Lesson Plan, their motivation in turn acts as a motivator for the learners.

- Emphasizes various parts of the lesson: The Lesson Plan will ensure that the instructor remains aware of and properly emphasizes the key points, and also reminds them when to ask questions or conduct certain learner activity.

- Ensures essential information is included: By having a Lesson Plan, instructors can ensure that they are covering all the required teaching points.

- Provides for the use of instructional aids: A Lesson Plan guides the instructor as to which instructional aids are required (visual aids, etc.) and when to present them throughout the lesson.

- Allows the instructor to insert questions at the proper time: Timing is very important for effective questions. If the instructor plans the use of their questions, it will reinforce learning, understanding, stimulate mental activity and capture interest.

- Allows the instructor to remain on schedule: By occasionally glancing at the time column the instructor will be more capable of staying closer to the

planned time of the lesson. By utilizing good clock management in conjunction with the Lesson Plan, the instructor will be able to speed up or slow down when necessary for a smoother delivery.

The amount of detail included in a lesson plan can vary from a very detailed 'script' to sparse bullet points. The novice instructor is strongly advised to prepare fully detailed lesson plans in order to ensure complete lesson delivery.

Components of a Lesson Plan

Cover Sheet

By completing the lesson plan cover sheet, the instructor will ensure that the expected learner outcomes are met by familiarising themselves with the details of the lesson as laid out in the relevant course Training Plan.

The lesson plan cover sheet answers those questions that an instructor will ask themselves when first called upon to instruct.

The Lesson Objective. *What am I teaching?*

The Performance Statement. *What must the class be able to do at the end of the lesson?*

The Conditions. *Where, when, and in what conditions will the class perform the skill, or use the material?*

The Standards. *What standard must the class achieve?*

The Teaching Points. *What am I expected to cover?*

These details are found in Chapter Four of the relevant course Training Plan.

Lesson Plans

The development and use of a lesson plan assists the instructor to provide an effective learning experience. The lesson plan consists of an introduction, body and conclusion. In public speaking, this approach is often described as, "Tell them what you are going to tell them. Tell them what you have to tell them. Then tell them what you just told them."

This process frames the lesson in a logical and easy to follow format, and ensures that there is no doubt in the learners' minds as to the topic and purpose of the lesson.

Introduction: The purpose of the introduction is to motivate learners and stimulate their interest. The introduction can take up to ten percent of the total lesson time. There will be differences in the contents of the introduction depending on the media and the instructional method used. The introduction for a typical knowledge or skill lesson includes:

- Review – If appropriate, a short review of previously learned material;
- Objectives – A description of *what* the learners will be able to do at the end of the lesson;
- Importance – An explanation of *why* learners need to achieve the lesson objective(s);
- Fit – A description of how and *where* this lesson fits in the course or on the job; and
- Approach – An overview of how the lesson will be conducted.

Body: The body of a lesson presents the material to be learned. Teaching points will be introduced and developed through learner support and/or well written pre-planned questions. In typical knowledge and skill lesson plans, teaching points are grouped and presented in stages to facilitate learning. The main content for each stage includes:

- Introduction – An overview of the stage and lead in to teaching points;
- Teaching points – Each teaching point must be accurate and clearly presented using the most appropriate instructional method and training aids;
- Learner participation – In a knowledge/theory lesson, learners participate by interacting with the class or instructor, considering questions and discussing lesson content. In a skill lesson, learners will spend most of their time practicing and performing a skill; and
- Confirmation – In a knowledge lesson, the instructor confirms learning by posing questions to the class. In a skill lesson, learning is confirmed by providing practice and watching learners perform a skill.

Conclusion: During the conclusion of a lesson key points are summarized and linked to future lessons and the job. The conclusion can take up to five percent of total lesson time and includes:

- Summary – During the summary teaching points are reviewed and difficult points are re-emphasized;
- Closing statement – The closing statement is used to link the content of the completed lesson to future lessons; and
- Re-motivating statement – This statement re-emphasizes the importance of the lesson.

Lesson Specifications

The instructor must develop their lesson plans strictly in accordance with the teaching points and instructional strategy provided in the lesson specifications of the training plan. This ensures a consistent level of instruction across the CF, and especially a consistent performance standard. Instructors must not amend standards based on particular 'regimental' or 'school' standards.

Sequencing Teaching Points

Sequencing

The teaching points contained in the training plan are not necessarily listed in a logical order. Once the instructor has selected their teaching points, they must sequence them, that is, to place them in a logical order to present to the trainees.

By sequencing the teaching points, the instructor will make instruction more logical for the learners, enabling them to learn or grasp the material easier. In addition, sequencing will help the instructor present a better-structured lesson.

Some examples of ways to sequence teaching points are:

- Easy to Difficult;
- Simple to Complex;
- Known to Unknown;
- Performance Sequence; and

- Chronological.

Grouping

The primary reason for dividing a lesson into stages is to allow for the fact that most people can only concentrate effectively for an average of 8-14 minutes at one time on the same topic. Grouping permits the instructor to present material stage by stage with a short confirmation after each one. This helps ensure that trainees can digest material and they are then more receptive to the next stage.

Normally teaching points are grouped no less than 3 and no more than 7 per stage. The number of stages will depend on the number of teaching points and the time allotted to the instructor. Most lessons have a minimum of two stages.

There are primarily three recommended methods to group teaching points:

- Similarities or Differences;
- Related Items; and
- Mental and Physical Performance.

Time Allocation

In order to respect course timings, the instructor must ensure that a lesson's timings are properly allocated and noted in the lesson plan.

In general, the following guidelines apply to both all lessons:

Introduction	10% of total lesson timing
Conclusion	5% of total lesson timing
Body	85% of total lesson timing (including confirmation / total practice)

As a minimum, in the lesson plan include the timings at the end of:

- the introduction;
- each stage confirmation;
- the end of lesson confirmation; and

- the end of the lesson.

Drafting a Lesson Plan

The instructor must initially examine the lesson specification in order to group teaching points and determine the number of lessons that will be needed to teach all points. The total time allocated for instruction in the specification must be considered here as well as the instructional strategy for each lesson. For example, the number of instructors available for a given skill lesson may affect whether the individuals practice a task consecutively or concurrently.

The format and style of a lesson plan will vary depending on the instructional strategy for the lesson. However, generally the steps outlined below will be followed to write a lesson plan:

1. Review the lesson specification in order to determine lesson requirements such as method, time, references and the context of each lesson;

2. Ensure that the teaching points are clearly defined and that the number of points to be taught is appropriate for the allotted time. If not, amendments to the training plan may be required to adjust timings;

3. Review references and relevant documents or master lesson plans if available;

4. Write lesson objectives for each lesson;

5. Draft end of lesson tests;

6. Outline and sequence the teaching points that are to be conveyed for the lesson

7. Develop teaching points as per the instructional strategy specified in lesson specification. This will entail the review of references and existing materials as well as the development of learning support (comparisons, reasons, examples, statistics and testimony);

8. Describe/identify learning aids such as visuals (pictures, graphics, diagrams, video sequences), models, audio recordings, simulations;

9. Define learner interactions: describe what the learners must do (read, listen, discuss, answer questions, perform procedure etc.). Incorporate questions, group work or individual activities to develop and assess learners abilities as needed; and

10. Write the lesson in full to include an introduction, body, and conclusion.

Preparing a Lesson Plan

Once the instructor has satisfied themselves as to the lesson specifications, has grouped the teaching points, and has reviewed the source material, it is time to prepare the lesson plan.

The knowledge and skill lesson plan formats presented below are the CF standard, and are to be adhered to by the instructor to avoid errors or omissions that may detract from learner success. The Cover Sheet and Classroom Preparation Sheet are common to both types of lesson plans and are illustrated first.

Cover Sheet

Rank / Name	Course	Room	Time	Date

Performance Objective:

Enabling Objective:

1. Performance:

2. Condition(s): Items you give or deny the trainee at the time they complete the performance.

Given

a.
b.
c.

Denied

a.
b.
c.

3. Standard This describes the minimum level the trainee shall achieve. This must be a measurable standard. A key characteristic of a standard is that it provides the basis for measuring the performance to determine if the trainee has met the objective.

a.
b.
c.

Teaching Points	
Stage 1	Stage 2
1.	5.
2.	6.
3.	7.
4.	8.

Reference: Type of Test:

Class Level: Instructional Aids:

Classroom Preparation Sheet

Orientation Board

This must be displayed to your learners at all times.
It should be posted on the door to your classroom.

Course Instr

Performance

Timings References

Classroom Arrangement

Horseshoe
Hollow Square
Auditorium Seating
No desks
Angled Seating
Staggered

Materials needed for this Class: (presentation aids, and learner aids)

Knowledge Lesson Plan Format

Timings		Actions
	INTRODUCTION 1. Review appropriate lesson, as necessary. 2. What : topic covered during the lesson. "In this lesson you are going to learn..." 3. Why : importance of the lesson, utility of the new knowledge. 4. Where : situation of the lesson in the training plan, where the new knowledge will be useful in the trade. 5. Approach : how many stages, and short description of each. 6. Control statement : a. ''If you have questions, raise your hand.'' b. ''When I ask a question, no class answers, I will designate someone to answer…'' 7. Test Statement: a. type of test , oral or written b. type and number of questions. c. minimum standard to achieve. d. time allowed.	
	BODY 1ST Stage 1. Stage Introduction, by : a. short presentation of the topic, or b. thought provoking question, or c. transitory statement or comment (next stages). 2. Teaching point #1 : what must be taught, including the following : a. developing question - to provoke interest or determine class knowledge b. visual aid(s) - one for each TP c. learning support (CREST) - one for each TP 3. Teaching point #2 : as per TP 1 4. Teaching Point #3: as per TP 1 5. Stage 1 Confirmation a. Review : "During this stage, we have covered…" b. "Do you have any questions?" c. "Turn over your notes." d. Questions to class : a. at least one per TP b. must be prepared in advance c. include the answers in the lesson plan	

	2nd Stage (and following) As per Stage 1	
	Final Summary Of The Lesson. 1. "During this lesson, we have covered…" 2. "Review your notes." 3. "Do you have any questions before we proceed with the confirmation?"	
	CONFIRMATION - ORAL QUESTIONING 1. "Turn over your notes." 2. Questions to class. a. at least one per TP b. must be prepared in advance c. include the answers in the lesson plan	
	CONFIRMATION - WRITTEN TEST Preparation 1. "Turn over your notes." 2. Repeat test specifications (see introduction). 3. Silence during the test. 4. Directions at the end of test. 5. Questions? Test. (correction). ''Finished''. 1. Get the learners to exchange papers with each other, or 2. Each learner corrects his own copy. 3. Get the answers from class and confirm. 4. Ask for results. ''How many got 5/5 ? 4/5 ? …'' 5. Collect tests for formal verification.	
	CONCLUSION 1. Review weak areas. If required. 2. What : "During this lesson you have learned…" 3. Cover important points. 4. Why "You will use that new knowledge…" 5. Final re-motivation. "This lesson went very well, you have been a good class." 6. Last minute questions. 7. Next lesson. According to the time table. Where, when, who, what.	

Skill Lesson Plan Format

Timings		Actions
	1. **Safety** - Maintain control of equipment from the very beginning. *"Don't touch anything…"* 2. **Supervised safety precautions** at the very beginning. Consider all hazards: *"Remove jewellery, Surrender lighter and matches, Tighten laces, Clear weapons, etc…"* 3. **Review** appropriate lesson, as necessary. 4. **What**: "In this lesson you are going to learn..." 5. **Silent demo or final product**. *"Pay attention to my demonstration."* Or use a final product only if demo is too time intensive. 6. **Why**: importance of the lesson, utility of the new skills. 7. **Where**: situation of the lesson in the training plan, where in the trade the new skills will be useful. 8. **Approach**: how many stages and a short description of each. 9. **Control statement**: *a. "If you have questions, raise your hand."* *b. "Observe very closely my demonstrations."* *c. "Don't touch or do anything until I tell you to do so."* 10. **Safety**: *"Be careful when you..."* Consider all risks, even though it looks easy and simple. 11. **Test**: practical, standard to achieve and time allowed.	
	BODY 1ST STAGE 1. **Introduction**. A question or a comment. 2. **Demonstration** of step #1. "Pay attention to my demo." **3. Explanation** of step #1. 4. **Invite** questions from class. **5. Imitation** of step #1. Have class imitate step 1. "Do it now." **6. Supervision** of step #1. Inspect each learner, praising and correcting as required. 7. Following steps (2,3, 4…). Repeat procedure 2 to 6. 5. **Practice** under supervision of all steps from 1st stage. Minimum of one practice. 6. All steps together without interruption or prompting. This is the confirmation of the stage.	

	2nd STAGE (and following) As per Stage 1	
	TOTAL PRACTICE OF THE LESSON ''During this lesson, we have covered…'' 1. **Practices**. All stages together, minimum once, under direction and supervision. 2. At least one **total practice under test conditions**. 3. ''Do you have any questions before we proceed with the test?''	
	TEST (Preparation). 1. "Turn over notes and references". If any. State eqpt required for the test. 2. Repeat test specifications. See the introduction. 3. Silence during the test. According to the situation. 4. Directions at the end of the test. 5. Questions? "Go!, Begin now!, etc…" End of Lesson Test. (End). *"Stop" All activities.* *"Go back to your places". Quickly.* *"Place your equipment down in good order". Quickly.*	
	CONCLUSION 1. Come back on areas requiring improvement. If required. 2. What : "During this lesson, you have learned…'' 3. Cover important points. "Remember that…" 4. Why : "You will use that new knowledge…" 5. Final remotivation. "This lesson went well, you have been…" 6. Last minute questions. 7. Next lesson. According to the timetable. Where, when, who, what.	

***Check your* knowledge:**

- What is the purpose of a lesson plan?
- Describe the differences between knowledge and skill lessons?

TRAINING AIDS

Presentation Aids

A presentation aid is any device or tool that you may use to assist you in the delivery of your lesson. Examples include:

- computers
- DVD/video players;
- projectors for PowerPoint® and other software applications;
- overhead projectors;
- simulators; and
- dummy or drill equipment.

When using a presentation aid, you must consider the advantages and disadvantages of the particular presentation aid, whether or not the equipment is available, your own competency with the equipment, and how much time is needed in advance to prepare the aid for presentation.

Types of Presentation Aids

There are many types of presentation aids and your selection of which to use will be based upon what is available in your training establishment, what the lesson calls for and whether the aid in question is advantageous or not. Table 2.x highlights the types of presentation aids and their advantages and disadvantages.

Table 2.x Types of Presentation Aids

Type	Advantages	Disadvantages
Whiteboard Chalkboard	- Highly flexible - Can be prepared beforehand - Relatively inexpensive - Easy to Use	Two Dimensional Limited Use Time Consuming. Old material has to erased Instructor must turn his back when using board Requires good writing skills
Video	- Centre of learners' attention - Realistic scenarios can be shown - Easy to store - Ease of use for new instructors - Picture is worth a thousand words	Portions of Lesson conducted in darkness Requires planned or fixed sequence Replaces the instructor
Flip Charts	Portable Cheap Flexible Easy to store Easily seen	Requires neat writing skills Instructor sometimes has back to class when writing Tendency to become messy Tendency to blow away

Type	Advantages	Disadvantages
Models	Three dimensional representation Learners could manipulate parts and pieces without consequences of costly errors Ease of Use Creates interest Provides realism	Large groups will have difficulty getting hands on Cost prohibitive Storage problems
Cutaways	Shows the insides of kit/machines Which may be life-sized, scaled up or scaled down with excellent detail Very god representation of type of activity that happens with particular kit	Might require much verbal interaction between learner and instructor
Mock Ups Simulators	Able to highlight or emphasize certain elements or components by removing some aspects of reality, i.e., movement, smell, weather	May require lots of Instructor verbal help and instruction
Video Camera Closed Circuit TV	Able to present “live” as it occurs Complements other media Can be saved for later use and learning Learners can do self-analysis	Time required to review Learners are either super critical of their performance or will not watch it unless forced to.
PowerPoint presentation	Slides are neat, clear and accurate Computer and projector can be placed anywhere in the classroom They are not an obstacle between the learners and the screen The instructor can face the class at all times The slide show helps the instructor to follow his plan Slides can be re-arranged quickly	Expertise and practice are essential Equipment costly When broken, not easily replaced Requires power When selecting colors, quality of the screen and lighting in the classroom are critical factors Overuse can be distracting

Visual Aids

Visual aids are powerful tools when used properly. In fact 75% of all the sensory information received by our brains is through the sense of sight. Hearing, touch and smell combined, only account for the remaining 25% of what we perceive around us. Clearly then, there are important reasons why we as instructors must carefully design and use visual aids every time we are in the classroom.

We use visual aids to:

Attract and Maintain Attention

The first reason is to attract and maintain trainee attention. Providing the trainee with visual stimulation is an effective way to help keep their attention focused during your lesson presentation. By creatively using overhead transparencies, slides, videotapes or other types of visual aids, an instructor can first attract and then maintain the attention and interest of the learner throughout his/her entire lesson.

Reinforce Main Ideas

Another reason we use visuals is to reinforce main ideas. The natural reaction of most learners is to try and copy down everything that they see, yet how often do we listen to the spoken words of an instructor so carefully that we write down everything that is said. It would be impossible as we often tend to supplement our verbal support to. By using visuals to project the must knows you are indirectly telling the learners that this info is important, thereby reinforcing the main ideas.

Illustrate and Support the Spoken Word

We have all heard of the proverb that "a picture is worth a thousand words". The truth of this proverb can be found in many of the lessons that we are called upon to teach in the military. Recognition lectures first aid lessons, basic electronics training all heavily rely upon the use of visuals to illustrate what is being said.

Minimize Misunderstanding

Instructors can use visual aids to give meaning to objects or concepts which otherwise would not be clearly understood. As an example, think for a moment about the last time you asked someone for directions. Obviously, it is far easier to locate yourself and your intended location when you can see both on a map. No amount of verbal information could provide you with a clearer mental picture of how to get where you want to be.

Increase Retention

The Chinese philosopher Confucius once wrote "What I hear, I forget, what I see, I remember, what I do I understand". The majority of people recall past events as mental pictures, even if these events were read in magazines or heard over the radio. As instructors, it is important for us to ensure that the mental pictures being

created in the minds of our learners are the ones most likely to reinforce the concepts we are teaching and thereby increase retention.

Types of Visual Aids

Visuals support verbal presentations and enhance learning considerably as individuals learn and retain over 50 percent of what they both see and hear. Some types of visuals and their associated development considerations include:

Realistic Images and Objects. The real object is often the most effective visual aid because it replicates the job. To effectively use the real object it should be safe, big enough for everyone to see or small enough and available so that each person can have one. Realistic images refer to quality photographs of real objects. Realistic objects and images are most effective when they are used after a new idea or concept has been introduced.

Graphics. Graphics include charts, graphs and maps. These types of graphics can effectively illustrate relationships between points or concepts. Diagrams, illustrations, drawings, cartoons and other pictorial material are also graphics. They can convey a concept and catch a person's attention to stimulate thinking and learning. Some points to consider when developing a graphic include:

1. Present one idea or concept;
2. Avoid excessive details;
3. Highlight important elements with brightest and lightest colours; and
4. Ensure lettering and elements contrast with background.

Projected Visuals. Overhead transparencies or slides can be easily developed by hand or by using computer software. Guidelines for developing projected visuals include:

1. Illustrate key points;
2. Use key words, as headers, to facilitate retention of each point;
3. Include a maximum of six words per line and six lines on each slide; and
4. Lettering should be large enough to be clearly read from the back of the classroom.

Choosing Visual Aids

Note that while a presentation aid is the tool you use, the visual aid is what the learners see. Thus a visual aid can be a poster, a photograph, a graph, a video clip, anything that the learners will watch in the course of the lesson.

You need to keep three criteria in mind when selecting or producing visual aids. They are simplicity, visibility and sequencing.

> **Simplicity** - Keep visual aids as simple as possible in order to highlight the specific teaching point while avoiding clutter that may confuse the learners. For instance, rather than one chart that covers an engine's hydraulics, coolant and electrical circuits use three separate charts.
>
> **Visibility** - Ensure that all visual aids are clearly visible by all learners and that all elements of the visual aid are distinct and separate (use high contrast colours, for instance).
>
> **Sequencing** - As with your teaching points, ensure that your visual aids are presented in a logical and easy to follow sequence that matches the lesson plan.

What Makes a Good Visual Aid?

Clear Meaning

Is it clear to everyone in the class what the visual aid is attempting to communicate? Remember that one of the reasons for using visuals is to minimize misunderstanding. If each of your learners is likely to interpret the meaning of your visual aid in a different way, is it unlikely that they will be able to clearly understand your teaching points.

Is It Readable?

A fault common to most inexperienced instructors is to include far too much secondary information on their visuals. Visual aids are most effective when they are used to highlight the key points only (i.e. teaching points). By including nonessential information, the printing on your visual will quickly become too small for your audience to read.

Does the Visual Communicate A Single Idea?

The more information that is included on the visual, the less your learners will understand. A quality of good visuals is that they allow the learners to focus on teaching points one at a time, so present your ideas one at a time.

Is It Relevant?

Remember that one of the purposes of visuals is to reinforce main ideas. Therefore, every visual that you select must directly support the teaching points of your lesson. Do not be caught like some instructors who include cartoons or other visuals which have absolutely no relationship to the subject matter of the lesson. If the visual does not support your teaching point, get rid of it and replace it with something that does.

Is It Interesting?

While visual aids can help to attract and maintain learner attention, they by no means guarantee it. The visuals that you select in support of your lesson must be interesting vice distracting. Remember, you want to focus your learner's attention on your teaching points.

Is It Simple?

The KISS principle also applies to the design of visual aids. Excessive detail on a visual will often confuse or distract, rather than clarify a point. Visuals work best when the message being sent is simple and to the point. You are not expected to be graphic artists, but you will be expected to produce graphics which are neat and easily read by everyone in the class.

Is It Accurate?

Visual aids help to illustrate and support the spoken word. Therefore, whenever we decide to include a visual we must ensure that the message it sends corresponds with our verbal support. Since a picture is worth a thousand words, an instructor cannot afford to include visuals which may mislead or confuse the trainees.

PowerPoint® as a Visual Aid

PowerPoint®, along with other similar software applications, is an excellent platform for visual aids, *if it is not abused*. A wide variety of visual elements may be embedded into PowerPoint®, such as images, graphs, tables, video and other animations. One drawback however, is that the novice instructor is often tempted to include too much in their PowerPoint® presentation and, as a result, overwhelm their class.

Most CF schools have a standard 'look and feel' for their instructional PowerPoint® files, and will expect you to conform to it in your lessons. Check with your instructor supervisor or school standards for the exact format. If you are creating your own PowerPoint® file, the following rules will help you avoid 'death by PowerPoint®'.

First, give serious thought to whether or not a PowerPoint® presentation is needed for your particular lesson. As a rule, PowerPoint® will not be used for skill lessons, rather you will demonstrate the skill yourself, or through a demonstrator. Many knowledge lessons are served just as well with a few notes on a white board or flip chart, and with the added bonus that you are not reliant upon equipment availability or compatibility issues.

Don’t copy exactly what you plan on saying onto your slides. Rather use a bare outline, and develop the point further verbally.

Projected images need to be seen clearly from a distance. This means the text must be large and the amount of data limited. No more than six lines per frame, not more than six words per line. This is often called the **6 x 6 rule**.

Avoid using all caps for large blocks of type --- they’re harder to read.

Use simple block, *sans serif* typefaces. Some fonts, such as **Times New Roman**, have small flares added to the lines of each letter. These flares are called *serifs*. Block fonts, such as **Tahoma** and **Arial**, are *sans serif*, meaning there are no flares.

Avoid superimposing words over graphics. It’s much harder to read.

Use boldface type instead of underlining to emphasize a point.

Use colour sparingly. Limit colours to two or three on a contrasting background.

Start and end your presentation with a black frame/slide.

Check your room prior to the presentation to confirm your slide show can be seen easily by the class. Try various light conditions, i.e., blinds open, lights on, to ensure people can see.

Lastly, when in doubt, don’t use it. This applies to anything you think might not be well received by the audience. Some cartoons, pictures, insulting language in your presentation or other items you feel are borderline, probably should not be used. Certainly, if they may be considered as unwelcome by anyone, don’t use it.

When using PowerPoint®, or any other visual aid, give the class a chance to read it themselves before you begin to speak. Most people will not be able to listen and read at the same time, and so will ignore, or tune out, one or the other.

Orientation Boards

The orientation board is intended to set the stage for upcoming lesson for both the learners and for any visitors who may arrive during the lesson. The orientation board will include the:

- Lesson title
- Instructor's rank and name
- Lesson timings
- Applicable references

The orientation board should be visible throughout the lesson, and so should be written out on a white board or flip chart independent of the lesson visual aids. For this reason, using the first PowerPoint slide as your orientation board should be discouraged.

A copy should also be posted outside the classroom door.

***Check your* knowledge:**

- What factors should an instructor consider when choosing presentation aids?

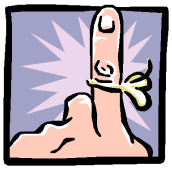
PRINCIPLES OF INSTRUCTION

In order to foster an environment that promotes participation and learning the instructional staff must understand and apply the **Principles of Instruction**. The six mutually supportive concepts are the heart of learning and instruction. Instructional staff should strive to apply these concepts in all lessons involving theory in the classroom or in practical situations.

As an instructor, you are responsible to make learning as effective as possible. By knowing how to apply the Principles of Instruction (which are the key to good presentation) when preparing lessons, you will ensure maximum learning from your students.

The Principles of Instruction are:

Interest
Comprehension
Emphasis
Participation
Accomplishment
Confirmation



Remember:
ICEPAC

Interest

Imagine an instructor who would be unable to hold the attention of the learners during a lesson. The learners would ultimately not learn effectively and classroom discipline and/or safety could be compromised. So in order to get their attention an instructor must first capture the learner's interest.

People learn best when interested in the material or skills to be learned. If you capture the interest of the learners, you will have taken an important step in developing effective instruction. Importantly, if you fail to develop interest even the best explanations will fall on deaf ears.

There are many ways of creating interest. Such as:

Motivation - At the start of the lesson, tell them why it is important to learn what is going to be covered during the presentation. (You are motivating

them to learn the material by telling them how important it is to know) All learners come to class or a presentation curious, it is our makeup as human beings. They want to know what is being taught, where this will be useful for them, why this information is important to them. In doing so, you are answering the learner's first question, "What's in it for me?""

Enthusiasm - If you display enthusiasm in front of the learners this creates interest. It spreads through your words, movement, gestures and presence. It has a positive effect and most times will incite the learners to pay attention to what you are saying.

Variety - Using more than one training aid and a variety of visual aids will create interest within the learners.

Realism - Reproduce the on-job conditions as much as possible, especially for skill lessons.

Participation - The key to success is to involve the learners by asking questions during knowledge lessons and have them practice early and often during a skill lesson. These are a few ideas to create interest; the instructor must be innovative in their thinking and want to inspire the learners.

Comprehension

If the instructor starts their lesson with material that is too complex for the learners then they will become confused, frustrated and would lose interest. People learn best when the instruction starts at the level of their understanding and proceeds at the rate of their understanding.

There are several techniques that you can use to help learners comprehend the material being taught.

Research and Plan - Organize the lesson content from the known to unknown, simple to complex, or most appropriate sequence so as to teach in attainable steps.

Review - Conduct a threshold knowledge test (TKT) or ask questions to determine previous/prerequisite knowledge or experience level.

Ask Questions - Throughout a knowledge lesson ask questions to ensure the learners understand what is being said and encourage questions from the class if they encounter difficulties at any point.

Observation - Observe the learners' reaction and behaviour. Look for body language indicating difficulty or confusion. Look to see that the learners are practicing a skill correctly.

Handouts/Assignments - Give handouts for review or further reference and offer remedial assistance if required. Review end of class assignments prior to start of the next class. The instructor should think of how they can prepare and present the material to the learners, Before, During and After a session.

Emphasis

It is a fact that people learn more effectively when instruction emphasizes and supports the teaching points. If a lesson is merely an "info-dump" of everything they need to know about the topic, the learners will be confused as to what exactly they must remember.

Some of the things you can do to lend emphasis to your teaching points are:

Oral Emphasis - Let the learners know the importance of the teaching point through either vocal variation or a straight statement such as "Remember this…"

Video / sound clip - illustrating a teaching point.

Repetition - Repeat the teaching points during the lesson.

Reinforce - Ask questions on teaching points during a knowledge lesson, and practice often during a skill lesson.

Time Allocation - Ensure enough time is allotted to cover all the teaching points thoroughly. Instruct and confirm in stages.

Handouts - Give the learners handouts for review and reinforcement after class, outlining the teaching points or important areas covered during the session.

Participation

The next concept is one of learner involvement during the lesson. We call this participation. If a learner is involved in what is happening during instruction, then their attention is focused on what is being taught.

It was stated earlier that one way to hold a person's attention is to get them to participate in the lesson.

It has been proven that people learn best when they have an opportunity to participate actively in the learning process.

Effective instruction provides for a variety of ways to ensure meaningful learner participation. In the lessons taught within the military environment the simplest methods to promote participation are:

Knowledge - Questions, Questions, Questions! Questions to develop the teaching points during the lesson. Allow the learners to do the work while you (the instructor) control or facilitate what is taking place. Questions to confirm stage understanding, and finally questions to confirm lesson understanding.

Skill - Practice, Practice, Practice! As the old adage says "Practice makes perfect." This sage advice is recommended as a way of soliciting participation in a skill or practical lesson. One of the worst faults an instructor can make during the presentation of a skill lesson is to have more verbal than actual hands-on time.

Accomplishment

Imagine the learners' motivation factor if they felt that they were not achieving the lesson objective. Their motivation would fade. They would end up wanting to be somewhere else and not thinking about what is being taught. They could in fact give up.

People learn more effectively when their performance results in a sense of accomplishment. Effective instruction provides opportunities for the learner to feel a sense of accomplishment regarding their performance.

Learners should know:

- What they are expected to achieve;

• Be informed of their progress as soon as possible; and

• Be helped to achieve that sense of accomplishment.

• Learners must be told how they are doing, what they are doing well and what they are doing not so well, or wrong. The object is to reinforce desired performance and extinguish undesired performance. So, give praise, advise of progress, and give test results.

• For a skill lesson, praise good results during practice, correct poor performance immediately.

• For a knowledge lesson, recognize good input and correct answers from the learners. Short quizzes or progress checks; help the learners feel a sense of accomplishment.

Confirmation

We find out through observation and testing if the learners are learning what is being taught. Learning is most complete and enduring when instruction provides for confirmation that learning has occurred and has been retained.

Confirmation ensures the learners' job performance will be competent. There are many ways to confirm learning, such as:

Questions - Listen carefully to the learners' answers to ensure that they in fact did give the correct answers.

Practice - Check to ensure that the learners are performing the skills correctly.

Exercises - For group exercises and guided discussions, look to see that the key points are being picked up.

Test - Conduct periodic progress checks.

Assignments - Review assignments completed outside class to determine how well the learners have learned.

Remember that effective instruction is only possible when you make use of these six concepts of instruction.

You can incorporate them into your lessons through things like having a lot of practice during a skill lesson, and asking a lot of questions during a knowledge lesson, and giving clear explanations and demonstrations.

To help you remember the six concepts, think of the mnemonic **ICEPAC**.

By applying these concepts you will ensure maximum learning from your learners.

PRINCIPLES OF INSTRUCTION

This chart lists elements of the knowledge and skill lesson formats under the applicable principles of instruction.

INTEREST
What, Where and Why
Silent Demo or Finished Product
Advantages/Disadvantages
Variety of Aids
Enthusiasm
Variety of instructors
Realism as much as possible
Competitions
Discuss dangers, consequences

COMPREHENSION
Before The Class
Do your Research and Lesson Plan
Do your Classroom Preparations
During The Class
Threshold Knowledge Test
Instruct to the Majority
Teach attainable steps
Observe class reactions to material
Ask for questions
Use Verbal and Visual Aids
Employ a logical sequence
After After the Class
Handouts/Give assignments
Brief oncoming instructor
Offer remedial Help

EMPHASIS
Have relevant objectives
Clear Control Statement
Teach and Confirm by Stages/Steps
Use Key Words, Acronyms, Mnemonics
Use a variety of Trg Aids
Oral Emphasis of TPs, give real life situations

PARTICIPATION
Encourage trainees to develop Teaching Points
Use Verbal Aids
Encourage Student expression of ideas
Work early and often in Skill Lessons
Have enough equipment for all students
Collective Demonstrations
Use Small Group Activities

ACCOMPLISHMENT
Let students know what is expected of them
Announce any test in your Introduction
Give a logical, sequential presentation
Teach Step by Step / Stage by Stage
Use praise wisely (Not for everything)
Review any weak areas
Advise on their progress
Give Test Results ASAP
Total Practice Under Test Conditions (TPUTC)

CONFIRMATION
Use Review Questions
Confirm each stage
Summarize the Lesson
Do a Total Practice
Test all Teaching Points
Give Test Results
Give assignments (not as punishment)
Give proper Debriefs
Conduct PCs/ECs correctly

***Check your* knowledge:**

- What does ICEPAC stand for and how should it be interested into each lesson?

Learning Support

Like a good sales pitch, instruction must be convincing to be successful. Teaching points are more readily accepted and understood when the instructor illustrates statements using learning support techniques. Effective learning support also promotes learner involvement, ultimately enhancing learner retention.

The five main types of learning support are Comparisons, Reasons, Examples, Statistics and Testimonies. They can be remembered via the mnemonic **CREST**.

Comparisons are used to bridge the gap between concepts learners have already mastered to the new knowledge that is being presented. The make up of the learner group must be considered when developing comparisons to ensure that they will be meaningful.

Comparisons of the last rifle, vehicle, or aircraft used to the new model in terms of the similarities and differences can help learners to retain the new information. Word picture comparisons, such as light as a feather, reinforce and clarify the teaching point as well as add interest.

Reasons assist learners to understand why something is carried out in a certain way. When dealing with controversial topics, reasons can help learners to accept teaching points. For safety concerns, *Reasons* provide an emphasis for precautions.

Examples can be used to clarify a concept or reinforce a point. Providing an example of how a table or chart should be used will make it easier for the learner to understand the steps involved. An example of how failure to observe safety precautions resulted in an accident can reinforce teaching points.

Statistics can lend support to teaching points and provide emphasis. Statistics such as “50% of information technology projects succeed” can emphasize the importance of using project management techniques.

Testimony or quotes relevant to the teaching point can be used to add credibility to teaching points. Testimony should be from an appropriate expert that the learners can relate to. Testimony on the capabilities of new systems or equipment introduced to the CF, from someone who has been using it, can add credibility to teaching points.

***Check your* knowledge:**

- What does CREST stand for and how does it support learning?

Module Summary

1. What is the purpose of a lesson plan?

The main purpose of a lesson plan is to help the instructor think through the lesson as it will be taught and assist in the organization of tools and materials needed to carry out the plan. It provides motivation for both the instructor and the learners. It ensures essential information is included, while emphasizing various parts of the lesson. It provides for the use of instructional aids and effective questioning. Finally, it allows for adherence to schedules and timings. The amount of detail can vary from completely scripted to brief bullet points.

2. Describe the similarities and differences between knowledge and skill lessons?

Both knowledge and skill lessons consist of introductions where the learning outcomes are introduced and importance is emphasized. Both lessons also contain a body by stages where the material is broken down into reasonable chunks of learning and then confirmed. Both lessons also have conclusions where the learning outcomes are reviewed and a final confirmation is given. Distinct from knowledge lessons, the introduction of a skill lesson contains relevant safety information in addition to identifying what is being taught and why. Distinct from skill lessons, knowledge lessons assess learning by asking confirmation questions or giving the learners a written test. In a skill lesson learning is assessed by having students perform the expected skill within the timings identified and standard identified.

3. What factors should an instructor consider when choosing presentation aids?

When choosing a presentation aid, an instructor must consider the advantages and disadvantages of the aid, whether or not the equipment is available, whether or not the instructor is competent with the equipment, and how much time is needed in advance to prepare the aid for presentation.

4. What does ICEPAC stand for and how should it be integrated into each lesson?

ICEPAC stands for Interest, Comprehension, Emphasis, Participation, Accomplishment and Confirmation. Apart from specific items associated with each of the six concepts, instructors can incorporate them into lessons through

practice during a skill lesson, asking a lot of questions during a knowledge lesson, and giving clear explanations and demonstrations.

5. What does CREST stand for and how does it support learning?

CREST stands for Comparisons, Reasons, Examples, Statistics and Testimonies. Teaching points are more readily accepted and understood when the instructor illustrates statements using learning support techniques. Effective learning support also promotes learner involvement, ultimately enhancing learner retention.

MODULE 3

PRESENTING LESSONS

MODULE 3
PRESENTING LESSONS

"Every student can learn, just not on the same day, or the same way."
George Evans

Overview

Questioning Technique
- Purpose
- Posing
- Leading and Confirmation Questions
- Direct Questioning
- Developing Questions

Physical Behaviour of Instructors
- Voice
- Gestures

Classroom Set-Up

Administrative Duties

By the end of this module, you should be able to answer the following questions:

- What is the purpose of questioning?
- Which criteria should be considered when developing questions?
- How do an instructor's physical behaviours affect instruction?
- What elements must an instructor consider when setting-up a classroom?

The delivery of instruction refers not only to the implementation of the lesson guidance and instructional materials produced in the Development phase, but also to the active participation of each learner. This section provides guidance on the effective use of various instructional strategies and methods.

In order to foster an environment that promotes participation and learning the instructional staff must understand and apply the principles of instruction.

QUESTIONING TECHNIQUE

Purpose

Questions that are carefully developed and incorporated into the lesson plan can significantly enhance learning. Lead off questions can be used to introduce a topic or discussion. Follow-up questions on the topic being taught can keep learners focused on a concept. Questions can be posed, to the class or to specific learners, throughout lessons to:

1. Stimulate thinking and interest on salient points by provoking curiosity and challenging learners;

2. Assess learner comprehension by posing questions on the material taught;

3. Develop problem-solving skills by posing problem questions on relevant activities for learners to solve; and

4. Guide the learning process by posing questions that guide learners thinking through the logical development of the lesson.

The instructional activity, learner characteristics and purpose of a question will affect how it is written. Criteria for developing well-written questions are provided in the following chart.

Posing Questions

To ensure that learners have a clear understanding of questions, and the answers given, you should follow a deliberate procedure and exercise care when asking and responding to questions.

Tips:

1. Ensure that you have full attention and ask the question.

2. Allow course members time to form an answer.

3. Select the leaner who will answer.

4. Listen carefully to the answer, allowing the learner time to answer fully.

5. Confirm the correct answer and explain why it is correct.

The mnemonic **"APPLE"** can be applied to questioning technique.

Ask the question;
Pause to let the class consider the answer;
Pick the learner to answer the question;
Listen to the answer, and do not interrupt; and
Evaluate the answer.

Always pose a question to the class as a whole, even if you wish to hear a specific learner's answer. In this way, all students will have to consider the question and prepare an answer.

Leading and Confirmation Questions

Leading Questions - to 'lead' the class towards a specific teaching point, topic, or response. In this way, the instructor maintains control over the course of the lesson, and maximises participation. Leading questions are most often posed at the start of a lesson, or to introduce a teaching point.

Confirmation Questions - to 'confirm' student comprehension of the material. Confirmation questions are most often asked in the stage confirmation and final confirmation portions of a lesson.

NOTE: The instructor must never 'question a skill'. That is, do not have a student talk their way through the steps of a skill, but rather have them perform the skill under supervision and with feedback on their performance.

Direct Questioning

A direct question is one that is intended for a specific individual in the class.

It is a useful tactic to encourage participation by otherwise quiet students, it is useful for 'jolting' the inattentive learners, and helps redirect a student back on to the topic during discussion.

When the instructor intends to direct a question to a specific learner, they should still follow the proper questioning technique of asking the class as a whole, and then calling upon the intended learner. Otherwise, those students not called upon will have little reason to consider the question themselves.

Developing Questions

Questions that are carefully developed and incorporated into the lesson plan significantly enhance learning. Lead off questions may be used to introduce a topic or discussion. Follow-up questions on the subject topic help to keep learners focused on a concept.

The instructional activity, learner characteristics, and purpose of a question will affect how it is written. Criteria for developing well-written questions are provided in table 3.1.

Table 3.1 Criteria for Developing Questions (CFITES Vol 5)

Element	Criteria
Comprehension	Questions should be brief, yet complete to ensure learners understand their meaning.
Language level	Questions should be written using common words and as clearly as possible. For example, a first aid question such as “What is the first thing you do if someone has a myocardial infarction” should be “What is the first thing you do if someone has a heart attack”.
Difficulty level	Questions should: 1. challenge course members to apply their knowledge; 2. not be so easy that the answer is obvious; and 3. not be so difficult that only a few learners can answer. For example with the question, “Is the naval rank equivalent of Master Warrant Officer, Chief Petty Officer, second class”, the learner has a 50/50 chance of guessing the correct answer. Asking instead “Name the naval rank equivalent of Master Warrant Officer” requires the learner to think more.
Relevant	Questions should be developed to reinforce and support the main teaching points of the lesson. For example, if teaching about survival in a nuclear war, learner interest can be promoted with a question such as “What would you do to protect yourself if you were told there will be a nuclear explosion in twenty minutes”. This question is relevant to the topic. Then questions specific to various teaching points can be developed.

***Check your* knowledge:**

- What is the purpose of questioning?
- Which criteria should be considered when developing questions?

PHYSICAL BEHAVIOUR OF THE INSTRUCTOR

Physical behaviour of the instructor comprises the body movements, hand gestures, facial expressions, and posture that support the delivery of the teaching point. Used correctly, to emphasise an important point for example, appropriate physical behaviours can turn a dull and uninspired lesson into an effective and memorable one. However, care must be taken to avoid distracting mannerisms that may hinder learning.

Some examples of physical behaviours to **avoid** are:

- Word whiskers, such as 'uh', 'um';
- Playing, or juggling with change, keys, pointers, or remotes; and
- Hands in pockets.

How you behave in front of your class will profoundly affect how they perceive both you and the subject material you are passing on. In addition to presenting a professional and authoritative image, it is important that you use your voice, gestures, mannerisms, and eye contact with the class to engage your class.

Voice

As an instructor, your voice is a powerful tool. When considering how your voice affects instruction, we must look at the four qualities of the voice: rate, tone, pitch and volume.

Rate. This is the measure of how fast you deliver your words. Most people can speak comfortably at about 150 words per minute, which is also a good speed for learner comprehension. Speak too fast and you risk confusing your class, especially by mis-speaking (especially in highly technical or detailed lessons). As we tend to speak faster when nervous, the novice instructor is well advised to rehearse their lesson at a slightly slower, more deliberate rate than normal.

Tone. Tone conveys emotions. The wrong tone may insult the learners, such as a tone that suggests condescension or anger. As well, the wrong tone may contradict the subject material, for example a light and breezy tone for a serious and important teaching point. Keep your tone of voice calm and professional throughout the lesson. It is important that you keep any frustration with the class or individual learners out of your voice.

Pitch. Pitch is the measure of variance in your voice between the high and low notes as you speak. Keep it natural, too little pitch is monotonous and will put your class to sleep, while too much pitch sounds artificial and ridiculous, distracting the class from the material itself.

Volume. If your class cannot hear you, they can not learn from you. On the other hand, too much volume will soon alienate them as no one likes being yelled at, never mind the strain it will place on your vocal cords. Ensure that everyone can hear you by asking if you should speak up. Also watch the body language of the learners at the back for signs that they can not hear you, and may be too shy to speak up.

Gestures

Your gestures need to be natural, spontaneous and non-threatening. They need to support the teaching points, and not become distracting or entertaining in their own right.

Nervous instructors will often display little or no body movements, hand gestures and facial expressions, and their posture will be stiff and machine-like, again distracting from the material. The more confident you are as an instructor the more natural and relaxed will be you gestures. Confidence can be improved through a thorough mastery of the material, a rehearsal of the delivery, and experience, leading to a natural and expressive delivery.

Mannerisms

We have all sat through periods of instruction mesmerised by an instructor's mannerisms. Mannerisms that were so distracting that we ended up paying more attention to them, perhaps by counting them, that we lost interest in the material being presented. As with gestures, you need to rein in the distracting mannerisms through practise and rehearsals. Some common mannerisms to watch for and avoid are:

- Word whiskers, "um", "uh"
- Key or change jiggling
- Hands in pockets
- Juggling chalk or markers

Practise your lessons in front of an audience or a mirror, or, even better, videotape yourself delivering a lesson to identify and eliminate distracting mannerisms. One trick is to play the tape on 'fast forward'. This makes it especially easy to spot such mannerisms.

Eye Contact

Eye contact is human contact. By looking at the learners in your class, you are making a very basic human connection with them. They will know that you consider them as individual learners and not as just part of a larger class. You will be able to identify the confident learners, the ones who are having difficulty, and the ones who are not paying attention.

Let your gaze wander from student to student around the class, making eye contact with each. Do this randomly as your attention is drawn around the room, and do not proceed systematically from learner to learner and row to row, as the effect is disturbingly machine-like. Also, look directly at a student when listening and talking to them.

***Check your* knowledge:**

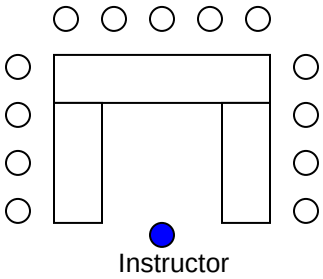
- How do an instructor's physical behaviours affect instruction?

CLASSROOM SET-UP

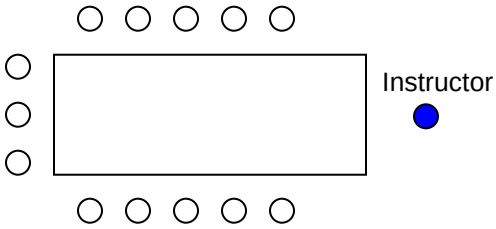
Preparation of a lesson will go a long way to ensure a successful lesson, but without proper preparation of the classroom and required materials even the best lesson plan will not be enough to ensure success.

Orientation board - As covered in Module 2, an orientation board must be prepared (to include, performance, course, instructor name and rank, timings, and references). It must be clearly visible throughout the lesson to both the learners and any visitors. It is also a useful visual aid to redirect those learners who are wandering off topic back onto the lesson itself.

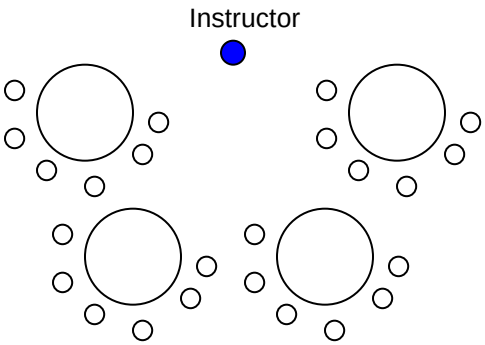
Arrangement plan - Depending upon the size of the class, the size and shape of the classroom and the nature of the furnishings, you may choose to utilize one of the following configurations (derived from Sandwith & DeCoo, 2008):



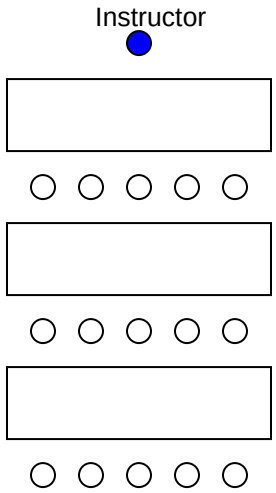
Horseshoe – This configuration has many advantages as it enables the learners to see and hear well while being able to interact with each other. The instructor can easily observe the learners and move around within the horseshoe providing feedback. Not effective for groups larger than 25.



Boardroom – This configuration works well for up to 12 to 15 learners. If using a meeting room, there must be ample room for the instructor to move around the table



Clusters – This configuration encourages small group discussion and maintains good sight and sound lines. An instructor can move around and focus on each cluster easily, but there should be no more than 5 or 6 clusters. A disadvantage is the requirement for a large room and possible isolation of learners on the extreme ends of the most distant cluster. Some find it distracting to turn around in their seats to listen to someone or watch visuals.



Rows – This configuration is modeled after the traditional classroom layout. Rows of chairs and tables allow for maximum number of learners in the room and usually good sight and sound lines, unless group is very large. While ideal for the presentation of information, rows work less well for instruction that requires participants to interact with each other. May encourage side conversations and allow people to “hide out” or avoid active participation.

Some lessons, such as specific skill lessons, are far more dependent upon the nature of the lesson. For instance, weapons lessons are best arranged with the learners along a forty five degree angle to the instructor, who can then stay off to one side and still observe all members of the class. When the skill lesson takes place in a shop, lab, clinical, or other specialised setting, the instructor will have to ensure sufficient room for the class to gather round for demonstrations.

Whatever the arrangement, the instructor must familiarise themselves with the specific classroom, ensuring all learners can see and understand visual aids, demonstrations, and that the instructor can maintain adequate control over the class.

Materials list - All teaching aids (visual aids, equipment, training aids) must be identified ahead of time on the Classroom Preparation sheet, and collected, tested and inspected for function and / or safety before the lesson timings.

In this way the instructor will present a professional, polished presentation of a complete and up to date lesson plan.

***Check your* knowledge:**

- What elements must an instructor consider when setting-up a classroom?

ADMINISTRATIVE DUTIES

The instructor's duties are not finished when the class leaves the room. There is still the requirement for the instructor to update student files and amend the lesson plan as required. The specific procedures will vary from one training establishment to another, and will be discussed and explained as part of the instructor indoctrination process for that establishment.

The instructor is responsible for maintaining the individual performance objective record (IPOR) for each student. This will record the learner's progress through the course, and ensure that those who either failed to achieve the performance standard, or were not in attendance, are brought up to the standard before progressing on to the next lesson in that performance objective.

It will be necessary from time to time for the instructor to amend their lesson plan. Changes to the Training Plan and the lesson specifications will necessitate changes to the lesson plan, and for this reason, the instructor must be familiar with the latest version of the TP and review it periodically. The instructor may also find it necessary to amend or replace verbal support, confirmation questions, and visual aids in order to stay relevant. References to replaced equipment, old peacekeeping operations from decades ago, and other out of date references should be replaced with newer examples, more relevant to today's learners.

Module Summary

1. What is the purpose of questioning?

Questioning provides a powerful instructional tool to stimulate thinking and interest on significant teaching points. As well, questioning assesses learner comprehension of material and aids in the development of problem-solving skills. Questioning provides a means for guiding the learning process by posing questions that progress learners through the logical development of the learners.

2. Which criteria should be considered when developing questions?

When developing questions, an instructor must consider whether or not the question will be comprehended, that it meets the requisite language level, that the difficulty level is appropriate for the audience, and that the question is relevant to the expected learning.

3. How do an instructor's physical behaviours affect instruction?

Used correctly, to emphasise an important point for example, appropriate physical behaviours can turn a dull and uninspired lesson into an effective and memorable one. An instructor's voice, for example, is a powerful tool. The rate, tone, pitch and volume may aid in imparting the importance of the material. However, care must be taken to avoid distracting mannerisms that may hinder learning. Mannerisms, such as excessive fidgeting and word whiskers, may detract from the lesson content.

4. What elements must an instructor consider when setting-up a classroom?

An instructor must consider where to place an orientation board and what to include on it. As well, what level of interactivity is required among learners and how should the classroom be arranged to achieve it. An instructor must consider what materials and teaching aids are required and make sure that they are ready and available for the lesson.

REFERENCES

The appropriate elements of the following references have been incorporated in this manual. This list is included as a guide to further reading beyond the requirements of the course.

- A-P9-000-001/PT-000, Manual of Individual Training and Education, Volume 1, Introduction & Description

- A-P9-050-000/PT-Z01, Canadian Forces Individual Training and Education System (CFITES), Manual of Individual Training and Education, Volume 1 (1), Glossary

- A-P9-050-000/PT-005, CFITES, Manual of Individual Training and Education, Volume 5, Development of Instructional Programmes

- A-P9-050-000/PT-006, CFITES, Manual of Individual Training and Education, Volume 6, Conduct of Instruction

- A-P9-050-000/PT-007, CFITES, Manual of Individual Training and Education, Volume 7, Evaluation of Learners

- A-PD-050-000/PT-013, CFITES, Manual of Individual Training and Education, Volume 13, Administration of IT & E, Establishments & Programmes

Knowles, M.S. (1984). *Andragogy in Action: Applying modern principles of adult learning.* Jossey-Bass Inc.

Sandwith, P. & DeCoo, A. (2008). *A Handbook of Instructor Skills for Occasional Instructors.* Great Lakes Learning systems: Waterloo, ON.