

INSTRUCTOR'S GUIDE

204 NORTH BAY ALGONQUIN ARMY CADETS



Created 01 September 2016

Reference:

Silver Star IG A-CR-CCP-703/PF-001

Gold Star IG A-CR-CCP-704/PF-001

INSTRUCTOR'S GUIDE

INTRODUCTION

This guide has been created as an Aide Memoire for instructors to refer to when teaching classes in order to improve the quality of instruction to the Cadets. The guide will provide you with quick points on how to ask questions, use training aids, motivate Cadets as well as provide you with an example of a completed lesson plan and a template for one. This is only a guide and does not remove the need for instructors to prepare for their classes. The key to delivering an effective class is preparation, confidence and knowing the subject.

Terrific
Energetic
Able
Cheerful
Hardworking
Enthusiastic
Remarkable

PRINCIPLES OF INSTRUCTION

Remember **ICEPAC**:

Interest. Cadets are more receptive to learning when they are curious and have an emotional connection to a topic. The instructor must arouse, create and maintain the interest of the cadets. Without interest, the cadets will be less inclined to listen and will not learn.

Comprehension. Comprehension or understanding relates to the cadet's ability to understand the material taught. The cadets' readiness to learn new material is influenced by what has previously been taught; new content should not exceed the knowledge level of the cadets. If the cadets do not understand, they are unable to learn.

Emphasis. During a period of instruction, there will be some information that may be of particular importance. The instructor can emphasize this important information through the use of voice control, training aids and in-class activities.

Participation. Cadets are more likely to retain information if they are both mentally and physically involved in learning. The instructor should conduct activities that contain action, activity and excitement. Cadets learn by doing.

Accomplishment. The lesson must impart a sense of accomplishment to each cadet. The cadets should leave the class with the satisfaction that they were able to accomplish something in the lesson.

Confirmation. Confirmation is an essential part of learning and instructing. It gives both the instructor and the cadet the opportunity to see how well the information is understood.

TYPES OF LESSONS

Knowledge Lesson

A knowledge lesson gives the cadets the theoretical aspects of a subject. The instructor presents basic information about a topic, typically following the who, what, where, when and why (5 Ws) format. Delivering an effective knowledge lesson requires the instructor to:

1. select an instructional method;
2. research the lesson information thoroughly;
3. summarize the information;
4. prepare questions to encourage class participation;
5. prepare questions for confirmation; and
6. prepare training aids.

Knowledge Lessons would include things like ranks, instructional techniques, history etc.

Skill Lesson

A skill lesson demonstrates the skill to be learned in a step-by-step sequence. Conducting an effective demonstration requires the instructor to:

1. plan carefully;
2. breakdown the skill to be taught into sequential steps;
3. rehearse the sequence to ensure that it is accurate and clear;
4. prepare a written lesson plan;
5. prepare and/or obtain all material needed to demonstrate and practice the skill in advance
6. organize the class so the demonstration can be seen;
7. allow the cadets to practice the steps under supervision;
8. provide assistance or re-demonstrate as necessary; and
9. allow the cadets to continue to practice under supervision until all have achieved the skill.

Skill lessons include lighting stoves and lanterns, knots, shelters, drill, etc.

DELIVERING MATERIAL

Important things to think about when you are delivering your class is voice control. You want to make sure that everyone in your class can **hear** you, but in the same token not too loud so that you are over bearing on the class and come across as intimidating. Make sure to change your **tone** throughout the class as there is nothing worse than an instructor that keeps the same tone. Use **emphasis** in your voice, that way you can really express important points. Always watch your **speed**, some people speed up when they are nervous so speak too fast making students unable to hear main points, BUT you do not want to speak too slowly either as that will have Cadets lose interest. **Pause** periodically through the lesson so that students can absorb what has been taught, and allows them to think of questions they may have.

Physical Appearance is just as important as voice control as a lot of what students absorb is from seeing as well as listening. Here are a few points to help you out.

Body Language

Body language or non-verbal communication is the process of communicating through conscious and unconscious gestures and expressions. Understanding that body language affects how a message is received and interpreted is an important tool for communicating effectively.

Facial Expressions. While 93 percent of the total meaning of a message comes from non-verbal communication, most of that meaning is communicated by the eyes, eyebrows and mouth. The movement of the eyes, eyebrows and mouth can result in an infinite variety of expressions to complement the spoken word. It is important that facial expressions match the tone of the message being sent to create emphasis and believability. A smile is the most important of all facial expressions. A smile adds sincerity to a message and will add to the likeability of the individual in front of the audience.

Eye Contact. Maintaining eye contact is an effective way of engaging an audience and building interest. Pausing two or three seconds on each member of the audience will make them feel as though they are involved in a one-on-one conversation. It is important to look at the entire room and scan from left to right, back to front.

Gestures. The combination of hand, arm and shoulder movements can make a wide variety of gestures that can help add meaning to a message. Effective communicators will let their hands and arms move naturally to help give emphasis and emotion to a message. It is important not to point directly at members of the audience or let gestures become distracting.

Movement. Being aware of movement while in front of an audience is very important to communication. Movement will keep listeners engaged and interested in what is being said. Moving around the front of the room, toward and away from an audience and from side to side can help emphasize points. Too much or frantic movement can become distracting and will affect how a message is received.

Dress and Deportment

Effective communicators are aware of their dress and deportment. Audiences will react differently to an individual who is well dressed and acts professionally, than an individual who is poorly dressed and acts unprofessionally.

Dress. Effective communicators will always appear in clean, well-pressed and appropriate attire. Dressing appropriately for the event will help create confidence and credibility.

Deportment. An audience that sees an individual as being prepared, on time, appropriately dressed and confident will be much more receptive, than to an individual who is unprepared, late, poorly dressed and nervous. The most important element of deportment is displaying an interest in the subject; this will be noticed by the audience and will generate interest in the presentation.



ASKING QUESTIONS

There are many types of questions but those most commonly recognized include:

Lead-Off. Questions, which are used to begin a lecture or start a discussion. This type of question does not necessarily require a verbal or written response and is designed to get the cadets thinking about the topic of the lesson or the issue being discussed.
Example: "What does being a good cadet mean to you?"

Follow-Up. Questions that are used to further stimulate the cadets' thinking about the topic of the lesson or point of discussion. As the name suggests they are supplementary questions related to the initial lead-off question or are questions, which are phrased on the spot to probe an answer to a previous question or extend a point of discussion.
Example: "Identify an item, just mentioned in question one, that can be considered both a good and bad cadet quality."

Overhead. Questions that are asked to the whole group without indicating who is to reply. There will be several answers to this type of question and everyone should be given a chance to respond.

Example: "Identify one factor that can determine if a cadet quality is good or bad"

Direct. Questions that are the opposite of overhead questions because someone is directed to answer. These questions can be used to draw in those who are reluctant to take part in discussions, to prompt cadets who are inattentive or to get a discussion back on track.
Example: "Cadet I.M. Reluctant, can you think of another factor which determines if a cadet quality is good or bad?"

Reverse or Relay. Questions are used to keep the discussion in the hands of the cadets. Instead of answering a question posed by a cadet the instructor can reverse the question and return it to the person who asked it or relay it to another member of the class.

Example: "Cadet C. Legs, can you answer Cadet I.M. Reluctant's question?"

Try to vary your questioning techniques throughout your lesson so then you can keep your students on their toes. Cadets are very quick to pick up on your routines, so will know what type of questions you will ask in you do not shake it up so will not really think about answers.

Remember the acronym APPLE

A – ask the question
P – pause – allow them the chance to think about response
P- pick the respondent – do not always pick the person with their hand up, make sure everyone has the chance to speak
L- Listen to the response, make sure they are really understanding the question as well as the Material
E – Evaluate – let them know if they got it right or wrong, correct them if it is wrong. Always re-motivate the Cadets with praise so then they will continue to try hard in class

PREPARING A LESSON

RESEARCHING LESSON CONTENT

To plan for a lesson, the cadets will need to research lesson content and become familiar with the conditions, standard, TPs, lesson content and the time allocated for the EO and TPs. The Canadian Forces employs an acronym that is used to provide a framework for the instructor to gather and organize the reference material into an efficient and practical lesson plan. The initialism is CCSAM.

Collect. During this step, the instructor researches the material to be covered in the period of instruction using course documents such as the lesson specification, IG and listed references. In situations where no course documents exist, the instructor will research the material to be taught using whatever references exist.

Consider. During this step, the instructor sifts through all of the material found in the collection step and determines what is relevant and current.

Select. During this step, instructor selects the material that is appropriate for the lesson. The instructor also selects the method of instruction to be used.

Arrange. During this step, the instructor arranges the material into stages that allow for the information to be presented in a logical sequence.

Master. During this step, the instructor writes the lesson plan.

See Annex A for an example of a completed Lesson Plan

See Annex B for a template of a Lesson Plan

MAKING A LESSON PLAN

INSTRUCTIONAL GUIDE

The IG is used in conjunction with the QSP and other resources to conduct training. IGs should be reviewed in conjunction with lesson specifications so that the instructor can adequately plan and prepare their lesson. **IGs do not replace lesson plans** but offer written content, supporting figures and suggestions on how to instruct a lesson. The following are the six sections of an IG:

1. preparation,
2. introduction,
3. body,
4. conclusion,
5. references, and
6. annexes.

Preparation

The preparation section provides information about where to find the lesson specification and any instructions to the instructor such as reviewing lesson content, photocopying handouts, pre-lesson assignments and the approach and substantiation as to why certain teaching methods were recommended for each TP.

Introduction

The introduction section provides information to the instructor about review that may be necessary, what the cadet will be expected to do by the end of the lesson and why the knowledge/skills are important.

The Body

The body of the IG contains all of the TPs and content listed in Paragraph 4. of the lesson specification in greater detail. The body provides suggested teaching methods, note boxes with special instructions or information (as illustrated in Figure 9-6-6), lesson content, figures, activities and confirmation questions

The Conclusion

The conclusion section states any homework/reading/practice that may be required of the cadet and the method of evaluation as stated in the lesson specification. The conclusion section also provides a closing statement to be spoken aloud to the cadets and any additional instructor notes/remarks.

References

The reference section lists the references used to create the lesson specification and instructional guide. In some cases, an IG may direct the instructor to a specific reference to be used during a lesson. In most cases this section is only used to identify where the content of the lesson has been drawn from.

Annexes

The annex section contains information that may range from pre-made training aids, learning aids such as handouts and additional information for activities.

LESSON PLAN

Introduction

The introduction is the instructor's first verbal interaction with the cadets. It should capture the cadets' interest. The following should be included in the introduction of a lesson plan:

What. A description of what the cadets will be expected to accomplish at the end of the lesson.

Where. A description of how and where the lesson fits into the Cadet Program.

Why. A description of why it is important for the cadets to achieve the objectives.

Body

The body of the lesson plan is where the content is presented, explained and supported. Each TP directs the instructor and the cadets.

Each TP in the lesson includes:

Introduction. Briefly introduce the content to be taught during the TP.

Teaching Method. Identify which teaching method has been chosen for the TP.

Lesson Content. Present the content of the TP in a clear and logical order, from easy to difficult, known to unknown and simple to complex.

Confirmation. May be oral questions, games, role play, in-class activities or practical activities. IGs offer suggestions for how to confirm TPs. Instructors may choose to use those confirmation suggestions or develop their own.

End of Lesson Confirmation

The lesson plan should outline procedures to be used to confirm the learning of the TP. End of lesson confirmations are carried out to ensure that the cadets understood the whole lesson and that any weaknesses in performance are identified so they can be corrected.

Confirmation activities are based on the lesson objectives. The end of lesson confirmation may be oral questions, games, role play, in-class activities or practical activities. IGs offer suggestions for how to conduct end of lesson confirmations. Instructors may choose to use those confirmation suggestions or develop their own.

Conclusion

The conclusion of a lesson summarizes the key points and links them to the coming lessons and their practical use.

A Summary of Important Points and Weak Areas. The summary reviews the main TPs. The depth of the summary will be determined by the lesson objectives and the results of the cadets' end of lesson confirmation. If the cadets achieved the objectives successfully, the summary may be brief. If they experienced some difficulties, the instructor should identify them here and indicate how the issue will be addressed.

Re-Motivation Statement. The re-motivation statement restates the importance of the lesson (the "why") and re-motivates the cadets. The instructor should also take this time to address any precautions the cadets should be aware of when applying the knowledge in a practical setting and give an overview of the next lesson.

SETTING UP A CLASS

Setting Up the Location

After selecting a lesson location, the instructor must take steps to ensure the location is clean and arranged properly for an optimal training environment.

Cleanliness. A clean training area will prevent distractions and will positively affect motivation. Cadets will notice a messy, disorganized area immediately and will be distracted before the class begins. The room must be clean and well-organized with the boards wiped clean, debris picked up, garbage cans empty, etc.

Seating Arrangements. Cadets must be able to see the instructor, the visual aids and each other to achieve maximum participation. Some arrangements will not be possible given the allotted space.

Adequate lighting. The connection between light and our emotions has long been recognized. Studies have also shown that learners perform better in brightly-lit learning environments than dimly-lit ones. It has also been shown that a learning environment with lots of natural light is more conducive to learning.

Good ventilation. It is important to be conscious of the temperature and air quality in a room because people are especially sensitive to these two elements. Cooler temperatures promote relaxation and receptivity while warmer temperatures promote acting out. If possible, open a window, turn on a fan or open a door to control temperature and air quality.

A colourful atmosphere. There is a connection between colour and moods and emotions. Warm colours (eg, red, orange, yellow) are exciting and may lead to acting out while cool colours (eg, blue, green, purple) are more relaxing. Researchers in brain-based learning suggest that the best colours for elements of the physical environment are yellow, light orange, beige or off-white. The cadets may react differently to the same colour depending on their emotional state. If cadets are feeling stressed, the colour red, for example, may bring out aggressive feelings but if they are relaxed, red can attract their attention.

Movement. Cadets learn better if there is movement during a period of instruction. The brain needs glucose, oxygen and water to function properly. Even if the air quality is good, the cadets may still be oxygen deprived because of improper breathing patterns caused by stress and anxiety. Lack of oxygen to the brain negatively impacts its ability to process information; increasing the flow of oxygen to the brain can improve its ability to process information. Physical activity is an excellent way to increase oxygen flow to the brain. Instructors can accomplish this by beginning their classes with 30–60 seconds of stretching or deep breathing and by taking breathing breaks during longer lessons or when they notice that the cadets' attention is lagging.

Water is also important for good brain functioning. Instructors should encourage the cadets to drink beverages, preferably water or fruit juices during lessons.

EMOTIONAL ENVIRONMENT

Lead with a positive attitude. The cadets may have plenty of complications and negativity in their daily lives and will appreciate a positive environment with a positive and enthusiastic instructor. When instructors show interest in what they are teaching, the cadets will become interested as well.

Establish a friendly learning environment. The instructor should make it safe to learn by treating all cadets equally and respectfully and insisting that cadets treat one another in the same way. The

instructor can build trust by keeping their word and by keeping information confidential if asked to do so. They should encourage the sharing of ideas, experiences and information and value the contribution of each learner. One simple thing that instructors can do is to be sensitive to the cadets' average attention span.

Make learning fun. The instructor should challenge the cadets with interesting activities that are not too easy or too difficult. They should try to challenge the cadets just beyond their present level of ability. If they are challenged too far beyond their level of ability, the cadets will give up but if they are challenged too little, they will become bored. Encourage the cadets to take risks and reward effort and energy as well as correctness. The instructor should listen empathetically by acknowledging nervousness, showing patience and being nonjudgmental of the cadets' responses. In addition, the instructor should never single out cadets and always be attentive to those who seem isolated from the group. They should never use put-downs or sarcasm.

Encourage supportiveness. The instructor should be supportive of the cadets and encourage them to be supportive of one another. Instructors can create a supportive environment by leading applause, thanking cadets for their input and rewarding effort.

Appeal to a variety of senses. The instructor should stimulate the cadets' senses in a variety of ways which will help them feel positive about the learning experience. As well, the instructor should be aware that the cadets will have different learning styles that should be catered to by using many different learning activities.

Provide feedback. The instructor's feedback should be specific and help the cadets compare their current progress to past performance rather than compare it to the performance of others. They should always be accurate and consistent and when they assign specific tasks to be done, they should tell the cadets that they will be coming back to check on their progress.

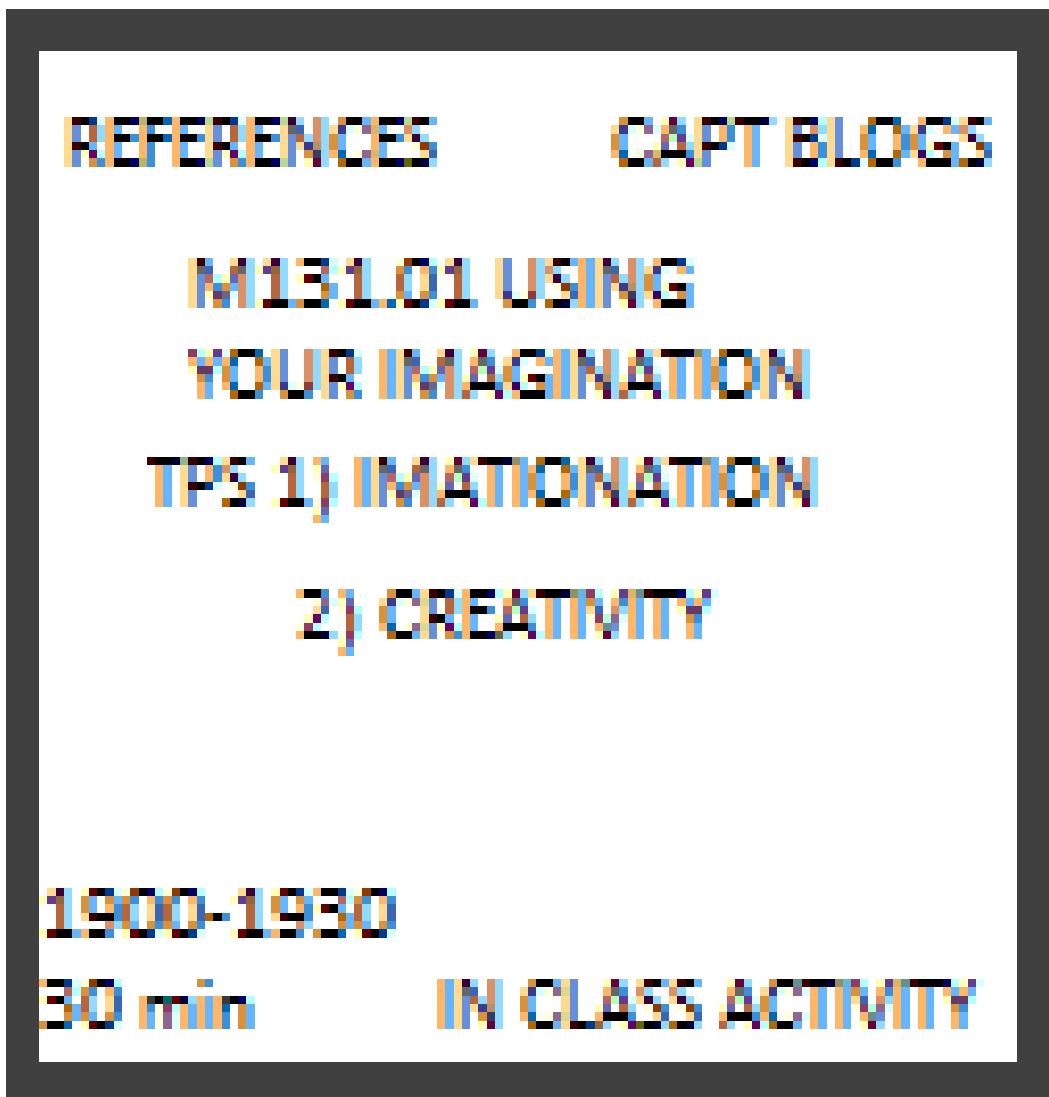
Use encouragement. The instructor should use encouragement to boost the cadets' enthusiasm and selfesteem but must be careful not to confuse encouragement with reinforcement. Encouragement will make the cadets feel better but it will not improve their learning in the same way as providing specific feedback regarding a specific task. Instructors should be selective and provide encouragement when it is due to keep the cadets on track.

Communicate clear expectations and routines. A sense of safety comes from consistent and predictable behaviours on the part of the instructor. Instructors should not be too rigid but should develop consistent procedures for beginning lessons, getting the cadets' attention and handling disruptions and distractions. They should start every lesson by telling the cadets specifically what they will know or be able to do by the end of the lesson. They should conclude each lesson by reminding the cadets what they have learned or are able to do.

Provide processing time. Instructors should ensure that the cadets have enough time to process the information that they have just received. They should stop periodically during a lesson and allow the cadets to interact over new material which will help them store it in long-term memory for later recall. Instructors can use a variety of group or paired activities to enable the cadets to interact with one another. They can, for example, ask each cadet in a small group to successively respond to a question or comment on an idea. A variation of this type of interaction would be pairing cadets and having them respond alternately by listing one item of a series, by identifying a specific cause or effect of something or by providing a specific reason. The key is for the instructor to stop talking, ask a question, set a time limit and have the cadets interact in groups or pairs to process the information just presented.

INSTRUCTOR BOARD

An important item an instructor must make sure is completed is the Instructor Board. This is a brief outline that the Cadets can see so they know what they will be learning. It can be done on a white board, chalk board, flip chart or as the first slide of a power point. It allows the Cadet to prepare themselves mentally for what will be taught and what to expect. Below is an example of a Board set up that should be used and referred to at the beginning of lessons.



LEARNER STYLES

Everyone learns in a different way. Remembering this and incorporating this into your lessons will ensure that everyone's needs are met. There are three different main learning styles – Auditory, Visual and Tactile (kinesthetic). In order to best meet the needs of all learners it is important that a lesson has aspects for each style, so having visual aids, letting them use hands on for skill lessons and change up voice control.

Visual Learners: are described as readers and observers
learn through seeing; think in pictures
benefit from and enjoy visual aids
are better at reading than listening.

Auditory Learners: are described as listeners and talkers
process information through their ears
are good working in louder environments
are great socialisers
need to ask questions to confirm learning.

Kinaesthetic Learners: are described as doers
learn through moving, touching and doing
process information through their muscles
learn best when combining muscles with reading or talking.

Learning Styles

Visual  * You prefer using pictures, images, and spatial understanding.	Musical/Auditory  * You prefer using sound and music.	Verbal  * You prefer using words, both in speech and writing.	Physical/Kinesthetic  * You prefer using your body, hands and sense of touch.
Logical/Mathematical  * You prefer using logic, reasoning and systems.	Social  * You prefer to learn in groups or with other people.	Solitary  * You prefer to work alone and use self-study.	What is your learning style?

TRAINING AIDS

Visual/Training Aids will make or break your lesson. The usual problem with instructors is they do not use enough visual or training aids, seldom do they every use too much. Training Aids are used to enhance the lesson so Cadets can see what you are talking about. They can include things like:

Flip chart – can be prepared ahead of time with short, important headlines about the class

- Used for brainstorming activities to keep track of what had been said
- Used in guided discussions similar to brainstorming
- Used for diagrams of items for example rifle, biv sites etc
- Used for group activities where groups are assigned an item that they will present in front of the larger group
- Can be used in games for keeping score

Down fall to using flip chart is if you are writing on them during the class your back is to the class

- Can be time consuming when drawing or writing on the paper
- Can be overwhelming if too much information is put on the pages

White Board/Chalk board Used for brainstorming activities to keep track of what had been said

- Can write key points out
- Used in guided discussions similar to brainstorming
- Used for diagrams of items for example rifle, biv sites etc
- Used for group activities where groups are assigned an item that they will present in front of the larger group
- Can be used in games for keeping score

Down fall to using white boards/chalk boards is if you are writing on them during the class your back is to the class

- Can be time consuming when drawing or writing on the board, plus having to erase to make more space
- Can be overwhelming if too much information is put up

Power Point – can be used to highlight key information

- Can have varying visual and auditory grabbers such as videos, sounds and pictures
- Can be used effectively in lecture type classes such as history of CF, Unit etc since you are able to get pictures
- Requires preparation usually causing the instructor to be well prepared for the class

Downfalls – requires knowledge on creating the power point as well as using the projector

- Higher risk of equipment malfunction so must be prepared in case this occurs
- Can become overwhelming if too much information is put on each page

- Can be distracting if too many moving images on the screen
- Important to use right colors so Students can read it

Actual Lesson Items – this includes things like rifle, compass, clothing for expeditions, stoves etc. If you are teaching a class about an object, have the object there so the Cadets can see it and touch it. Make sure that you have enough that all Cadets have the chance to experience the item. This is the best training aid as the Cadets will be able to truly understand what you are talking about.

Downfall to Actual Items – it can be distracting for the Cadet as they may focus on the item rather than what is being said. The best way to combat this would be to only bring out the items when you are talking about them, have them out of site until then. Once done teaching that point, put away the items so they will be able to listen to the next point.

Handouts – gives the Cadets something to look at or bring home to review at a later date. This would also assist those Cadets that are visual learners. It does take work and preparation, but again this will aid in your confidence on the class. You can use them to highlight important points. Can also use them in games, or activities to enhance learning.

Downfall to handouts is Cadets may leave them laying around so have a mess to clean up. Also, handouts can be overwhelming if too much information is put on them. Finally, if the instructor has not prepared well enough in advance, may not have the ability to make copies for the class once they arrive to teach.

Using Visual Aids/Training Aids can make some of the most boring classes fun. Not using them can cause a fun class to become very boring. Remember to always use them, but switch it up as well. If you use the same Visual Aids, it can become boring. For example, an instructor that only uses power point becomes too predictable and the students start to get bored of the power points, no matter how interesting they may be.

Other training aids can include:

ALTERNATIVE METHODS OF INSTRUCTION

In order to keep the interest of Cadets it is important to vary lesson delivery. Cadets are in school all day having lectures so really do not want to come to Cadets to sit through another three periods of lectures. By using different methods to deliver the material, you will have much more success in retaining Cadets as well as having Cadets learn the material. Cadets is supposed to be an enjoyable time for our youth, and instructors have a large part in this. There will be some lessons that will be hard to shape into a fun class, but with imagination and flexibility in the instructor any lesson can be made interesting. The following is a list of various alternative methods of instruction that can be used depending on the class being taught.

In-class activity. Lessons that lend themselves easily to using brainstorming, worksheets and group work. This type of lesson is used to reinforce instructional topics such as instructional technique and environmental stewardship, Canadian Symbols etc

Practical activity. Map and compass, knots, fieldcraft such as shelters, and cool-down and warm-up activities for sports.

Game. Lessons that include labelling or defining terms and performance-based lessons. Example of a game would be Jeopardy to test knowledge.

Field trip. Visit an elemental museum, visit an airport or ship, and visit a college to view possible careers. Visiting the affiliated unit.

Group discussion. This can include lessons on the Benefits of healthy living, qualities of a good leader and environmental issues relevant to Canada.

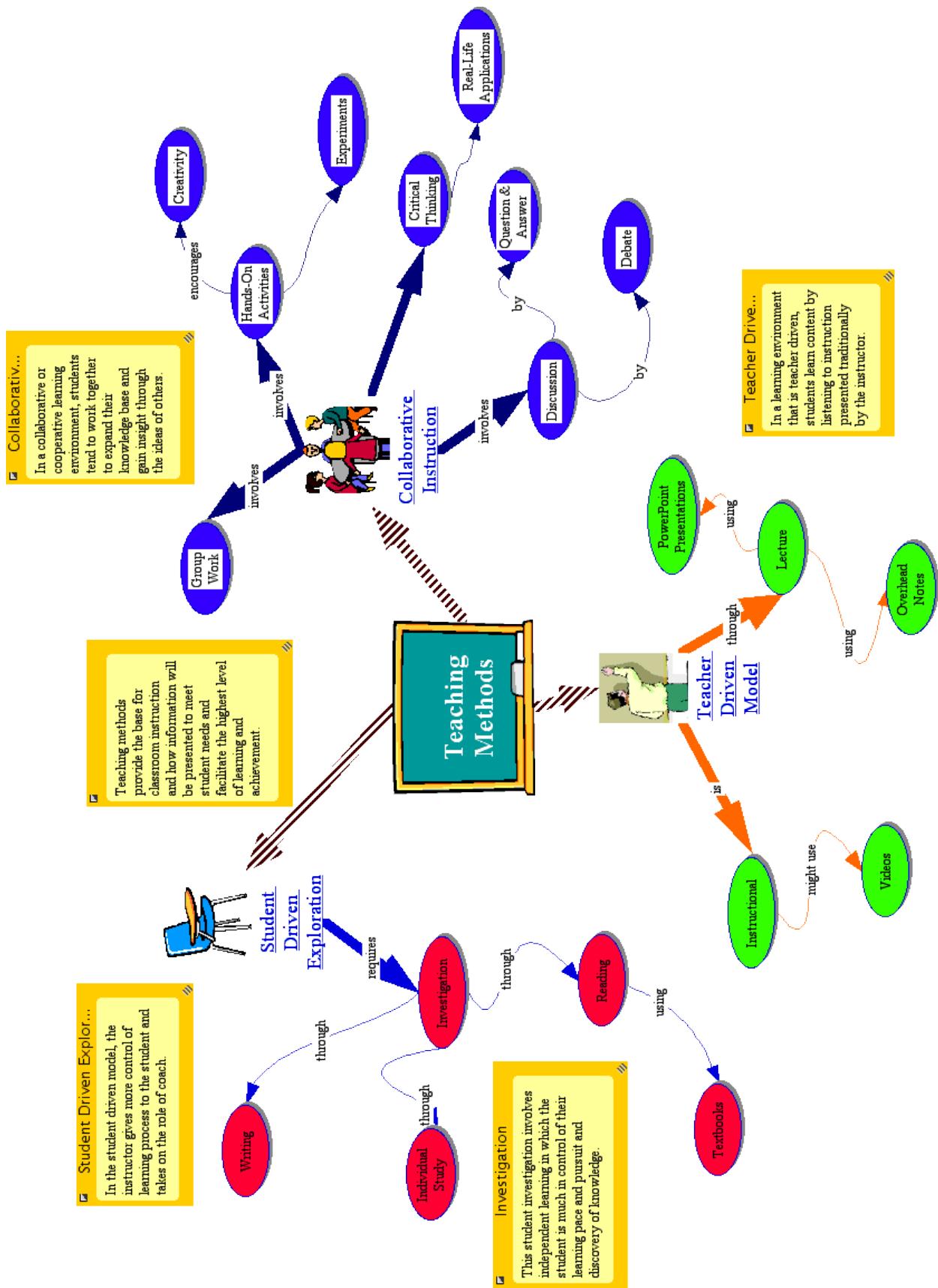
Guided discussion. Works best in classes such as Explain personal integrity and explain decision-making processes.

Role-play. You can use Role Play for classes such as Influence behaviours, leadership scenarios, and history.

Experiential learning. Participating in citizenship activities and attending weekend training.

Problem-based learning. The students are given a problem and are asked to solve it such as Teambuilding activities and leadership styles.

Case study. You can develop a case study on characteristics of a leader and various events in history and have the Cadets discuss it.



CLOSING NOTES

The key to any successful class is preparation. You cannot expect good results if you grab an IG (Instructional Guide) five minutes before the class and try to teach that. Your Cadets will be bored and tend to lose confidence in you as an instructor as well as a leader. Remember, everything you do in front of a Cadet is noticed. If you are not willing to prepare for a class, those Cadets will feel let down, that you do not care about their wellbeing.

Make sure you look and behave professionally when teaching. Your hair is cut, or up, your uniform is well ironed and you look at all your Cadets. If you spend time on yourself, the Cadets will admire you more and have more interest. If you come in looking like you slept in your uniform, or have no uniform on at all, your class will again feel that you do not care, so why should they.

Have something for the Cadets to see, read and touch will help them retain the information. Spend some time preparing for your class. You will all know ahead of time what your classes are, unless there is a last minute change which will likely not happen often. There is no excuses for not having your class ready to go.

Have fun! A fun instructor is the person who will get material across to their Students. Students want to learn when they can have fun as well!!

ANNEX A
EXAMPLE OF COMPLETED LESSON PLAN



CADET INSTRUCTORS CADRE

LESSON PLAN COVER SHEET



COURSE	PO	EO
GREEN STAR	M122	01

<p>Teaching Points:</p> <p>Identify Types of Maps</p> <ol style="list-style-type: none">1) Explain the Purpose of a Map2) Describe the Various Types of Maps3) Describe the Care of a Topographical Map4) Explain and Demonstrate How to Fold a Map	<p>Method:</p> <p>Interactive lecture</p> <p>Time:</p> <p>30 min</p> <p>References:</p> <ul style="list-style-type: none">• A-CR-CCP701/PF 001 <p>Training Aids:</p> <p>Examples of maps – topo, orienteering, political, street and road, statistical, digital, including gps, relief, outline, air photo.</p> <p>Waterproofing agents (zip lock)</p> <p>Presentation aids</p> <p>Learning Aids:</p> <p>Topo map worksheet</p> <p>Test Details:</p> <p>Through end of lesson check</p>
<p>Notes to Instructor: Smile and have fun</p>	

COURSE: Green Stars
SUBJECT: Identify Types of Maps

LESSON: M122.01

TIME: 30 min

TIME	INTRODUCTION	ACTION
	<p>Review N/A</p> <p>Objectives: By the end of this lesson you will expected to identify different types of maps, care of maps and how to properly fold a map sheet.</p> <p>Approach: Interactive Lecture</p> <p>Importance: It is important to know the different types of maps and their uses in order to select the correct map for the task. Knowing how to fold and maintain a map properly will keep them serviceable and in good condition.</p> <p>Control Statement: if you need the washroom just ask, no cell phones.</p>	

TIME	BODY	ACTION
2 min	<p>TEACHING POINTS</p> <p>TP#1 Explain the Purpose of a Map</p> <p>PURPOSE OF A MAP</p> <p>Maps pass on specific information. It is a scale or proportionately smaller representation of the ground that uses internationally accepted symbols to represent both physical and man-made features on the ground. They identify locations such as towns, lakes and rivers by name. Map designs reflect the individual needs of the users (ie urban planners, travelers, education and cadets).</p> <p>The art and science of making maps is called Cartography. The oldest known maps are preserved on Babylonian clay tablets dating back to about 2300BC.</p> <p>TP #1 CONFIRMATION</p> <ol style="list-style-type: none"> 1) The purpose of a map is to present a picture of what? 	
6 min	<p>TP #2 Describe the Various Types of Maps</p> <ul style="list-style-type: none"> • the first 4 maps are the types Cadets will use the most <p>TOPOGRAPHICAL MAP – most commonly used by the military. The purpose is to present a picture of the ground as it really exists. Topo maps show as much detail as the scale allows, generally 1:25 000, 1:50 000 and 1:250 000.</p> <ul style="list-style-type: none"> - physical features of the ground such as natural features (rivers, woods, hills with the heights and shapes) as well as man made features (roads, railways, towns, villages and buildings) are shown - the names of specific features such as towns, villages, rivers and descriptive names of general features such as railways, fords and Post offices are also found on them 	<p>Where possible show the different types of maps.</p>
	<p>ORIENTEERING MAP – Through the International Orienteering Federation (IOF), specific rules and standards have been set for the production of orienteering maps, including color, symbols and scales. These are much more detailed than regular topo maps, both with reference to vegetation and landforms.</p> <p>STREET AND ROAD MAPS – designed to assist commuters and</p>	

	<p>tourists to locate key sites such as roads and highways, police stations, fire halls, hospitals, schools, parks and more.</p> <p>RELIEF MAP – 3D representations, usually of terrain. The terrain elevation is usually exaggerated by a factor of between 5-10. This helps to visually recognize the terrain features.</p> <p>DIGITAL MAP – found on computer programs and when using a GPS are useful as reference tools as they are updated regularly. This allows for a generally more accurate reference.</p> <p>POLITICAL MAP – shows countries, provinces or other political boundaries (globes and atlas)</p> <p>STATISTICAL MAP – show statistical information such as the production levels of crops or minerals across a country</p> <p>OUTLINE MAP – shows only borders, rivers, coastlines etc</p> <p>AIR PHOTO MAP – actual pictures used in reconnaissance or to create many of the maps listed.</p>	
TIME	BODY	ACTION
5 min	<p>TP #3 Describe the Care of a Topographical Map</p> <p>CARE OF A MAP</p> <p>Some maps are being designed already waterproof, however, most are printed on normal paper. Paper maps are expensive and easily damaged. You must protect them from water, dirt and wind. Obviously when maps are exposed to water they become soggy, deteriorate and tear.</p> <p>WATERPROOFING A MAP – Preparing a map for the elements is a vital step to prolong the life of the map. Ways to waterproof:</p> <ol style="list-style-type: none"> 1) Zipper Bag Method – uses a large heavy weight zipper bag 	

	<p>and waterproof tape (duct or packing tape). Cut enough tape to completely adhere to one edge of the bag from corner to corner. Stick one half of the tape from corner to corner. Flip the bag over and fold the tape down on itself and the other side of the bag. Perform each step 2 more times to the other sides of the bag</p> <p>2) Contact Paper (Mac Tac) – Covering the map with mac tac will waterproof the map but it will make it stiff. A permanent marker or grease pencil will be required to write on the map. You can use rubbing alcohol to remove the marker from the map.</p> <p>3) Chemical Coatings – effective in waterproofing, but they must be handled carefully in a well-ventilated area. Applied with a brush, to a map on a flat surface, and must be allowed to dry fully before attempting to use them.</p> <p>DRYING A MAP – if it gets wet let it dry completely on a flat surface</p> <p>OPENING A MAP – should never be opened fully in a strong wind. Should only be opened to the area you are using, and refolded along the original fold lines</p> <p>WRITING ON A MAP – Only use pencil to mark your maps and erase all markings gently. Do not use a mechanical pencil as this will damage the map. Maps that are protected by plastic can be marked using grease pencils or fine tipped markers.</p>	Show waterproof maps if able
TIME	BODY	ACTION
12 min	<p>STORING A MAP – Should be stored in a dry place, rolled, folded or laid out flat.</p> <p>TP #3 CONFIRMATION</p> <ol style="list-style-type: none"> 1) What are three things we should protect maps from? 2) What can we use to write on maps? 3) How are maps to be stored <p>TP #4 Explain and Demonstrate How to Fold a Map</p> <p>FOLDING A MAP</p>	See figure 11-1-1 in IG

- | | | |
|--|--|--|
| | <ol style="list-style-type: none">1) Lay the map face up, then fold the map in half by bring the top (north) of the sheet down to the bottom (south). Crease where the bed in the map occurred...this is the center of the map2) Fold the top half of the map sheet in half again, then turn the map over and fold the bottom half to match the top3) Fold the ends of the map in half from left to right4) Fold each of the open ends back in half again so that the name and index to adjacent map sheet appears on the outside (the map should look like the letter M) | |
|--|--|--|

TP #4 CONFIRMATION

Have the cadets fold a topographical map

END OF LESSON CONFIRMATION

- | | | |
|--|---|--|
| | <ol style="list-style-type: none">1) What are some of the common maps discussed during this lesson?2) How do we dry a map when it gets wet?3) Using a piece of paper, fold it like you would a map. | |
|--|---|--|

TIME	CONCLUSION	ACTION
	<p>Homework/Reading/Practice:</p> <p>Have cadets practice folding a map.</p> <p>Method Of Evaluation:</p> <p>none</p> <p>Closing Statement:</p> <p>It is important to know the different map types so that you can select the correct map for your needs. Also knowing how to fold and maintain a map properly will keep them in good condition for a long time.</p> <p>Remotivation:</p> <p>You have been a good class and I look forward to teaching you again.</p>	

ANNEX B
BLANK LESSON PLAN TEMPLATE

	<p>Teaching Method:</p> <p>TP 2:</p>	
	<p>TP 2 Confirmation:</p>	
TIME	END OF LESSON CONFIRMATION	NOTES
TIME	CONCLUSION	NOTES
	<p>Summary: In this lesson you have learned</p> <p>Re-Motivation:</p> <p>Your next lesson will be</p>	