

Methods of Instruction for Air Cadet Instructors

Course Aim

- A one-day course to enable participants to develop & demonstrate an understanding of basic Instructional Methods & to allow them to deliver effective training to Air Cadets.

Programme for the day

08:30	Introductions	12:00	LUNCH
08:45	Instructors	12:45	Difficult Students
09:15	Training Cycle	13:15	Class Management
09:45	Lesson Structure	14:00	Prepare lesson
10:30	Break	14:45	Break
10:45	Aims & Objectives	15:00	Presentations
11:30	Assessing & Evaluating	16:30	Feedback & Depart

Ground Rules

- Set ground rules with your own participants
- E.G. listen to contributions & maintain good timekeeping
- Session runs more smoothly with ground rules
- What ground rules would benefit at your

Squadron?

The Instructor

Session 2



Objectives

By the end of this session you will be able to:

- Describe some qualities for a good instructor.

Definition of Instruction

“The process of helping learning to occur according to pre-set learning objectives.”

The Role of the Instructor

Present information.

Control the classroom environment.

Answer questions.

Aid the students to remember the content.

Ensure the students understand the material.

What are the characteristics of a good instructor?

Discuss amongst your group the qualities you feel a good instructor must/should have.

(10 minutes)



Instructor Competencies

1. Leadership
2. Promote Equality & diversity
3. Student Welfare support
4. Maintain discipline
5. Training admin
6. Delivery of knowledge
7. Conduct assessments
8. Coach trainees
9. Communication.

Objectives

By the end of this session you would be able to:

- Describe some qualities for a good instructor

The Training Cycle

Session 3



Objectives

By the end of this session you will be able to:

- Describe the principles of The Training Cycle
- List the steps in the training cycle.

Identify your students needs

Who are they?

What do they need to learn?

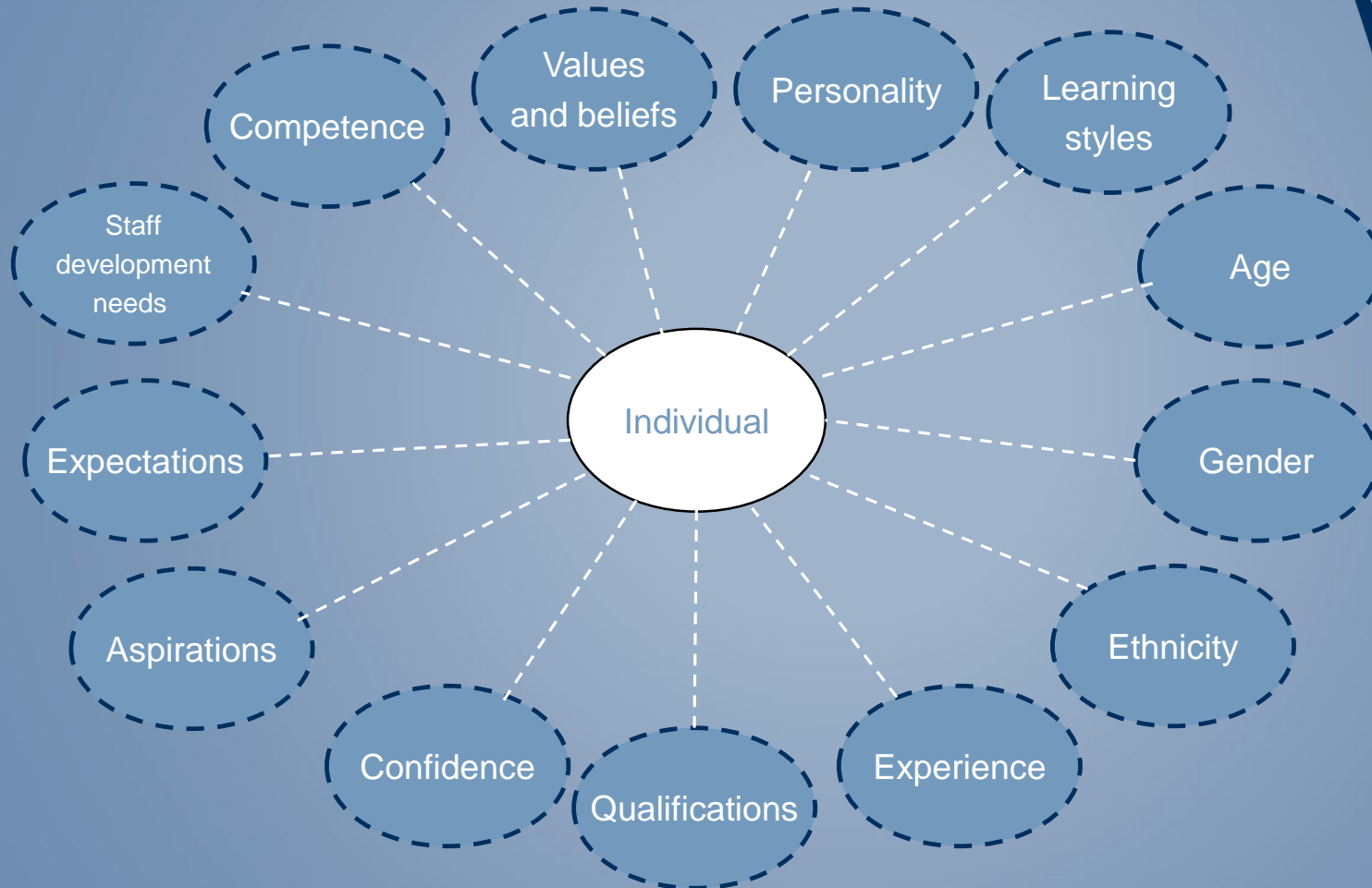
When do they need to learn it?

How will you train them to meet their
needs?

The Training Cycle



All learners are different!



All learners are different

There are many theories regarding preferred learning styles

Widely accepted view divides into 3 groups:

- Visual Learners
- Auditory Learners
- Kinaesthetic Learners.

Learning Styles

(Not true but we have to tell you this)

- Visual
- Auditory
- Kinaesthetic

Planning and preparing sessions

- Check the training venue (room, layout, facilities, health & safety)
- Check the equipment: is it available, appropriate, working!?
- Check and rehearse your timings

Planning and preparing sessions

- Rehearse the delivery of the session
- Allow time for questions
- Have a **Plan B** in case anything goes wrong
- Prepare a session plan with a clear objectives

Example lesson plan

Timing	Phase	Resource and activities
	Introduction:	
	Development:	
	Summary & Conclusion:	

Designing resources

Be simple & interesting

Help participants understand the topic

Help you to clarify & simplify the topic

Help to promote & maintain interest

Help the trainer but NOT replace him/her

Four Main Features

1. Slides can include : text, image, movies, sound
2. The speaker decides when each point appears
3. Slides can be animated to attract attention
4. Timing can be set so that it appears with a mouse click, or automatically

Be careful with colour

There is a big
difference
between this

And this

And this!

Things to watch out for!

- If copying graphics from the internet, always **“Save Picture as”**
- Sounds & movies do not attach themselves to your PowerPoint file as easily as you first think
- Beware of streaming media file formats such as .ram.

Animation

Use animation to:

Help tell your story

Reveal points one at a time

Show a flow of events

Be wary **not** over do it!

Golden Rules

- Keep slide content to a minimum
- Don't use too many slides
- Sensible number of points per slide
- Spaced to make them easier to read

The Training Cycle



Objectives

By the end of this session you would be able to:

- Describe the principles of training cycle
- List the steps in the training cycle

Lesson Structure

Session 4



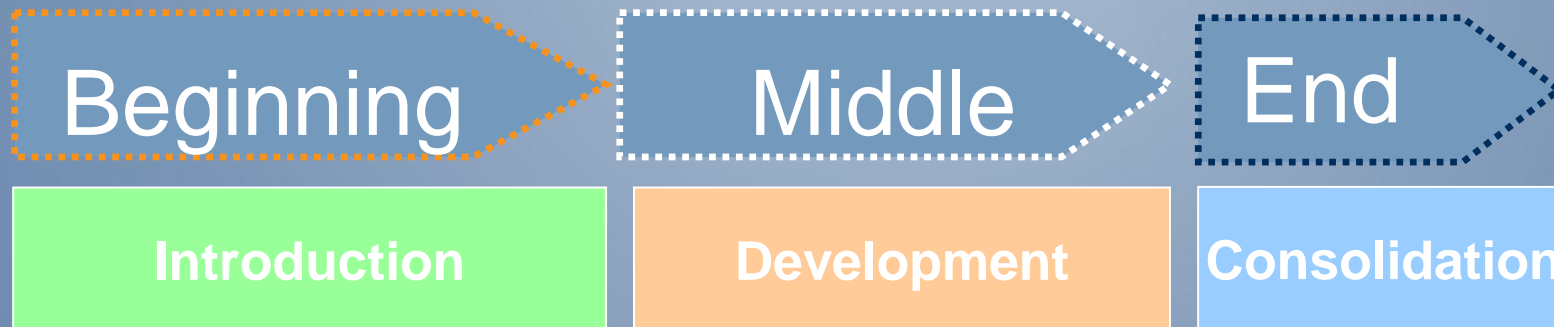
Objectives

By the end of this session you will be able to:

- Describe the structure of a simple lesson
- List the parts of a lesson
- Identify what take place during each phase of the lesson.

Structured Lessons

- Planning structured lessons ensures that the instructor does not miss anything.
- In general lessons should have 3 distinct stages



Lesson Introduction

Motivate the student to learn. Should clearly state:

- What the lesson is about
- How the student will benefit
- What the Instructor is setting out to achieve
- Outline any rules the students must follow.

Introduction

- Create interest
 - Define the need
 - Title
 - Range
 - Objectives
 - Performance conditions
 - Handout
- *I'm Sgt Smith and I'm here because*
 - *Why do they need to know*
 - *Full description of subject*
 - *How long? Aim to cover x-y-z*
 - *You will be able to----*
‘ SMART ’
 - *Supplied? y/n? If Yes when?*

Lesson Development

New training material introduced in this part of the session. Choice of **Method** will vary for the subject being taught & resources available

- Instructor demonstration
- Instructor / student led questions
- Discussion
- Practical activity

Lesson Development

- Key Points
- Questions (Teaching & Reasoning)
- Visual Reinforcement
- Amplify KEY Points
- Any Questions
- Structured Logical Sequence
- Maintain student involvement
- Clear & Simple to suit the students
- Recaps
- Clarify and check of understanding

Consolidation

Provides the instructor the opportunity to reinforce & consolidate the training session:

- Test student knowledge
- Review material
- Students can appraise learning

No new information should be delivered
Instructor *can* link to next lesson

Consolidation

- Summary
- Review Objectives
- Testing Questions
- Any Questions?
- Link to next Lesson
- Revise Key Points
- Summarise objectives
- Summarise achievements
- Last chance for queries
- Look forward to the next session, & show progression

Types of lessons

Theory Lesson

Discussion

Skills Lesson

Lecture

EDIP

Brief - Monitor - Debrief

Theory lesson

INTRODUCTION

Create interest

Define the need

Title

Range

Objectives

performance conditions

Handout

DEVELOPMENT

Key points

Questions

teaching &

reasoning

Visual reinforcement

Amplify key points

Any questions

CONSOLIDATION

Summary

Review objectives

Testing Questions

Any Questions

Link to next lesson

Skills Lesson



Introduction	Development		Consolidation		Application
Create interest	Demonstration		2 nd Demo		Brief
Define the need	Reasoning questions		Testing questions		Supervise monitor
Title	Why	Create the problem	What	Did I do next	Do not take over
Range	What	So what must we do?	How	Did I do it?	Appraise
Objectives performance conditions	How	This is how you do it	Why	Why I do it	Any questions
	Pass around		Pass around		Next lesson

EDIP Lesson

INTRODUCTION

- Create Interest
- Define the Need
- Title
- Range & Scope
- Objectives
- Performance Conditions
- Handouts

DEVELOPMENT

- Explanation
- Demonstration
- Imitation
- Practice
- Any Questions

CONSOLIDATION

- Summary
- Review Objectives
- Test Skills
- Any Questions
- Link to next Session

Brief Monitor Debrief

BRIEF

- Motivate
- Objectives
- performance conditions
- Confirm previous knowledge
- Rules
- Deliver new information
- *Recap and check*

MONITOR

- Student does task
- Observe
- Control with appropriate intervention
- Do not take over
- Record

DEBRIEF

- Rapport
- Student analyses
- Review objectives
- State strengths
- Elicit weaknesses
- Re-state strengths
- Remedial action
- Assess progress
- Any questions
- Encourage

The Lecture

“ A straight talk or exposition,
with minimal student involvement”

The quickest way to get the
contents of your notebook into the
students' notebook.

Objectives

By the end of this session you would be able to:

- Describe the structure of a simple lesson
- List the parts of a lesson
- Identify what should take place during each phase of the lesson

BREAK

Please be back on time

As per your program for the day

Aims and Objectives

Session 5



Objectives

By the end of this lesson you will be able to:

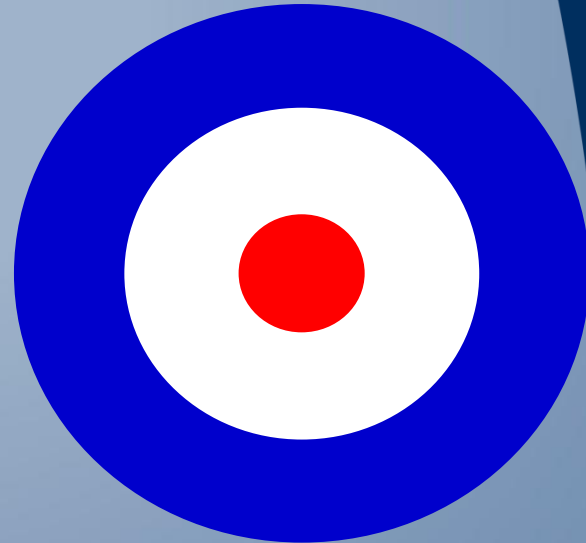
- Describe the function of an objective
- List some of the words that should be used when writing objectives

Aims and objectives

AIM : The whole topic

OBJECTIVE : the breakdown of the topic & what your participants should achieve

(Usually, the objective can be assessed to check your participants' learning)



Aim

Why I am
planning this
training?

To provide participants
with the opportunity
to use a computer

Objective

What do I want
my participants
to do to achieve
my aim?

Participants will:

- switch on a computer
- use a keyboard and mouse
- Open a MS WORD document
- Print the document
- Save the document

Objectives should be SMART:

Specific – are they clearly defined?

Measurable – can they be met?

Achievable – are they possible?

Realistic – do they relate to the aim?

Time bound – can they be met in the time?

Use Specific Verbs

Vague verbs such as "understand" , "know" or "learn about" cannot be assessed.

"At the conclusion of this lesson you will be able to:

list

identify

state

describe

define

solve

compare and contrast

Operate"

Can be assessed

Robert Mager

Preparing Objectives for Programmed Instruction, 1962



Objectives

By the end of this lesson you would be able to:

- Describe the function of an objective
- List some of the sort of words that should be used when writing objectives

Assessment and Evaluation

Session 6



Objectives

By the end of this Session you will be able to:

- List methods for involving students in lessons
- Describe main question types
- State the best method for question nomination
- Describe strategies for dealing with student questions.

Advantages of class participation

Student

increase retention rates

keep students awake

aids group bonding.

Instructor

monitor student progress

change pace of lesson

builds rapport.

Disadvantages of class participation

Time consuming

Relies on abilities of Instructor.

Methods of participation

Learning Style *Involvement*

Lecture - Low

Presentation - Low

Theory / Practical - Medium

Exercises - High/Medium

Methods of participation

<i>Learning Style</i>		<i>Involvement</i>
Tutorial	-	High
Discussion	-	High
Role Playing	-	High
Simulators	-	High.

Types of questions

Open

Closed

Leading

Funneling.



Asking questions

- Prepare all questions before lesson
- Remember that the moment you ask a question to one person, all others stop thinking!.
- **POSE** a Question.....
- **PAUSE** while they ALL think
- **POUNCE** on your “Victim” for an answer

Nominating

- METHOD :
- direct nomination
 - group / syndicate nomination
 - wait for response
- FACTORS :
- size of class
 - ability of class
 - maturity and rank / rate of class.

How to engage everyone

Pause for a few seconds THEN select a respondent

Let them discuss first with neighbour

Answering out loud by everyone

Let them write down the reply

How to engage everyone

Give coloured cards for answers to
multiple choice questions

Students to write summary after each
module.

Dealing with answers

Correct:

Say it's correct

Repeat answer

Consider giving
praise

Incorrect:

Say it's incorrect

Rephrase if possible

Ask same student
again

Still wrong - give
answer yourself or
nominate someone
else.

Dealing with class questions

Relevant:

Repeat back to class before answering

If covered later say so - don't skip ahead

Irrelevant to lesson:

Be encouraging but don't waste time

Use an issues storage board if you or they wish to return to it

Don't know answer:

Admit it and find out.

Objectives

By now you would be able to:

- List 8 methods for involving students in lessons
- Describe 4 main question types
- State the best method for question nomination
- Describe 3 strategies for dealing with student questions.

Lunch

Please be back on time

We still have work to do !

Learning Difficulties

Session 7



Objectives

By the end of this session you will be able to identify and list the main features of:

1. Dyslexia
2. Dyspraxia
3. Dyscalculia
4. Attention deficit disorders

1. Dyslexia

Language Processed Differently by the brain

4% of cases are “Severe”

Further 6% “mild / moderate”

Can learn effectively, but need a different approach.

Common signs of Dyslexia

- Difficulty reading ,writing and spelling
- Personal organisation
- Forgetting where they put things
- Mixing number sequences
- Difficulty maintaining concentration.

Strategies for Dyslexia

- Give notice of tasks
- Give both verbal & written instructions
- Use visual images, and colour
- Identify learning styles

www.bda-dyslexia.org.uk

2. Dyspraxia

An impairment or immaturity of movement, which affects perception, language, and thought

- Poor balance
- Poor hand - eye coordination
- May use either hand for same task at different times.

2. Dyspraxia

- Talks continuously and repeats
- Clumsy gait and movement
- Difficulty planning and organising thought.

www.dyspraxiafoundation.org.uk

3. Dyscalculia

Specific learning difficulty in maths
No single set of signs, nor a single
cause

- Understanding signs and symbols
- Reversing and transposing numbers
- Times tables
- Inability to follow instructions.

4. Attention Deficit

- Careless mistakes
- Hard to maintain attention
- Does not seem to listen to what is being said
- Fails to follow instructions
- Difficulty with organisation.

4. Attention Deficit

- Often loses things
- Easily distracted
- Forgetful
- Dislikes tasks requiring sustained mental effort.

Hyperactive impulsive

- Fidgets and squirms with hands and feet
- Inability to stay seated
- Climbing on things when inappropriate
- Talks excessively.

Hyperactive impulsive

- Difficulty queing
- Often interrupts
- Difficulty with leisure activities.

Attention Deficit Hyperactivity Disorder (ADHD)

- Symptoms begin about age 7
- Symptoms are present always
- Medical History.

www.addiss.co.uk .

Objectives

By now you would be able to identify
and list the main features of:

- Dyslexia
- Dyspraxia
- Dyscalculia
- Attention deficit disorders.

Classroom Management

Session 8



Objectives

By the end of this session you will be able to:

Identify key features to a good classroom delivery

Describe methods to engage cadets in different circumstances.

Delivering sessions

Be aware of your

- body language
- voice projection
- eye contact

Try to relax, remain focused & enjoy it

A GOOD ENVIRONMENT

No distractions

Quiet

Laid out for involvement

Preferably cool temperature

Ventilated

Light



GOOD MATERIAL

Material derived for best way to teach
each specific item

Appropriate to audience

Involving & varied

Simple approach

Build knowledge in small bites.

VARIETY

Can Cadets share knowledge they have?

Use the method to suits a topic – not a
whole lesson

Provide variety

Provide fun

Provide competition.

GOOD UNDERSTANDING

Need to test frequently

rephrase difficult items

change method if it is not working

review and revise throughout

Repetition improves retention.

Cadet talks too much...

Interrupt tactfully with question or summary

Assign to take notes or summarize discussions

When they pause, rephrase & change topic

Allow group to handle him/her if they persist.

No Participation...

Make eye contact when asking
questions

Involve the person in group work

Ask a direct question using name.

Side conversations...

Walk closer

Stand in front whilst continuing

Change seating arrangement

Ask a direct question using name.

Cadet keeps disagreeing...

Name and park the disagreement

Change the subject

Let the group handle the person

If all else fails – stop lesson – take outside.

Gaining & maintaining attention

EYE contact <1 sec considered shifty >2 threat !

Use names Treat your participants as individuals

Ask questions Regularly check they understand.

use Open questions like **why, how, what...**

Involve your participants and respect their opinions

Last Minute.com

Final Prep – Go to the loo.

Before you go in – Check Tie, Check
Fly

Speak normally – a little louder

Let your eyes “make contact” with
each person in turn

Objectives

By the end of this session you would be able to:

Identify key features to a good classroom delivery

Describe methods to engage cadets in different circumstances.

BREAK

Please be back on time

As per your program for the day

Delivering Your Lesson



Prepare your session

You need to prepare & deliver a 5 Min session

You will be stopped if you go over this time

You will be given a lesson plan which you must follow, produce any training aids you think will be relevant & useful

Introduce yourself & state your aim for the session

Your Presentation

No need to include :

- an icebreaker,
- ground rules,
- formal assessment
- or evaluation.

Ensure you have adequate relevant resources.

Your delivery

You will be formally observed.

An observation checklist will be used.

You will be stopped after 5 minutes if you have not concluded your session.

Feedback will be given on an individual basis.

Prepare your Presentation

You now have up to 45 Minutes to
prepare a presentation lasting NO
MORE than five minutes

Reminder for your delivery

Max 5 minutes (stopped if you go over).

You do not need to include an icebreaker, ground rules, formal assessment or an evaluation.

Ensure you have adequate relevant resources.

Deliver individual sessions

You will now deliver your 5 minute session.

Feedback will be given by your trainer on an individual basis after all deliveries have taken place.