TRAINING COURSE

THE ENERGY EFFICIENT OPERATION OF SHIPS

Trainer's manual

Part II – PEDAGOGICS

Forewords

The course is an introduction to the topic designed for personnel having different skills, knowledge and experience in air emission by ships.

The objective of the course is to provide a common set of knowledge and skills to all participants to enable them to spread the information in their respective countries and to promote the implementation of the energy efficiency policy and MARPOL Annex VI.

Considering that the topic is new and due to the complexity of the issue, no false expectations should be raised (i.e. it should be highlighted that there is not one receipt for all situations). The current state of knowledge is limited and under development.

This course has a global dimension, and it is not specific to any country in particular. Therefore, trainers are expected to adapt the course to their own context and attendance.

The trainees should bear in mind that, while taking the course, they are not representing their institutions. On the contrary, to enhance the productivity of work in class, it is recommended that they set aside the specific position of their organizations or countries, and think globally. The course provides an excellent opportunity to share ideas, to gather stakeholders together and to establish cooperative networks.

This not an academic course but a hands-on course with exercises, discussion of case studies and a number of practical activities. The Instructors present the content of the modules and guide the discussion of the most relevant issues. It is expected that the participants will contribute substantially, by sharing their knowledge and experiences.

Author:

Ms. Anne Pazaver

World Maritime University, Malmo, Sweden

Table of Contents

Part 1: Factors affecting Learning

Objectives

- Identify and describe 6 characteristics of adult learners that could impact training design and learning outcomes
- Apply adult learning principles to training activities
- Identify 3 learning styles according to the VAK theory
- Identify 4 learning styles according to Honey and Mumford's theory
- Recognize the implications of learning styles on training activities
- Demonstrate an understanding of attention span patterns and their implications on training

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Factors affecting learning

Before designing and delivering a training course to adult learners, it is useful for potential trainers to consider the factors that affect adult learning as well as the implications of those factors on training. By incorporating adult learning principles and techniques into the development and delivery of a training program, the trainer can create an enhanced learning experience for the course participants.

1. Principles of adult learning

The term for the traditional model of education is *pedagogy*, which is derived from the Greek words meaning "child" and "leader of", and refers to *the art and science of teaching children.* Pedagogy has long been the dominant model of instruction for children and is characterized by a didactic or teacher-centred approach. The term **andragogy**, defined as *the art and science of helping adults learn*, was coined to differentiate between child and adult education. The term was popularized by Malcolm Knowles, who is considered to be the father of adult learning theory.

Knowles assumed that as people matured they moved toward greater levels of independence, initiative and responsibility, and that this should be reflected in the approach to teaching more mature learners. He based his concept of andragogy on six assumptions about the characteristics of adult learners that are different from those traditionally held about pedagogy

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6 Assumptions about adult learners

1. Adults need to know why they should learn something

Adult learners are relevancy oriented. They want to know the relevance of what they are learning to their real life situations and goals. Their motivation to learn something is strongly linked to the perceived meaningfulness, applicability and benefits of learning it.

2. Adults have a deep need to be self-directing

Adults are autonomous and like to direct their own learning. Conversely, they may resist learning when they feel that information, ideas or actions are being imposed on them by others. According to Knowles (1975), self-directed learning describes a process "… in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p. 18). Knowles further stated that individuals could be assisted in moving toward increased self-direction and independence by being given access to the appropriate learning tools, experiences and resources and encouragement (Keesee, 2010).

3. Adults have a greater volume and different quality of experience than youth

The wealth of experience accumulated by individuals as they mature can become a rich resource for the learner and others. Adult learners benefit from being given the opportunity to use their existing knowledge and experience and apply it to new learning situations. New learning becomes more meaningful when it is connected to past experiences.

4. Adults are motivated by both extrinsic and intrinsic motivations

Adults respond to some extent to extrinsic motivators such as wage increases and job promotions. However, they are primarily motivated by intrinsic factors such as increases in self-esteem, responsibility, self-fulfilment, power and achievement. Adult learning is most effective when the learner can satisfy an internal need or goal. Conversely, adults may not be motivated to learn unless they perceive a need.

5. Adults enter into a learning experience with a task-centred orientation to learning

Adults are practical. They like to be able to apply their knowledge to real-life situations, and learn the content with the intention of using it. Unlike younger learners, who take a content-focused approach, adults develop a task or problem-centred orientation to learning.

6. Adults become ready to learn when they experience in their life situation a need to know or to be able to do in order to perform more effectively and satisfyingly

Adults are goal oriented and learn best when they choose voluntarily to make the commitment to learn. They must see a need for training and recognize how the training will help them to fulfil a particular role or complete a particular task.

Assumptions about Adult Learners

Malcolm Knowles identified 6 characteristics of adult learners. How might you practically apply these assumptions to your training? Write your suggestions in the chart below.

Assumption	Implication for training
Adults need to know why they should learn something	
Adults have a deep need to be self-directing	
Adults have a greater volume and different quality of experience than youth	
Adults are motivated by both extrinsic and intrinsic motivations	
Adults enter into a learning experience with a task-centred orientation to learning	
Adults become ready to learn when they experience in their life situation a need to know or to be able to do in order to perform more effectively and satisfyingly	

Assumptions about Adult Learners

Malcolm Knowles identified 6 characteristics of adult learners. How might you practically apply these assumptions to your training? Write your suggestions in the chart below.

Assumption	Implication for training
Adults need to know why they should learn something	• Discuss expectations and objectives with the learners • Provide activities that allow learners to connect the theory to their personal experience • Explain how training objectives relate to training activities • Ask learners to reflect on how they can apply what they've learned
Adults have a deep need to be self-directing	• Involve participants in active-learning • Serve as a facilitator – lead learners to enquiry before supplying too many facts • Provide and encourage use of resources • Encourage asking of questions and exploration of concepts • Show interest in learners' thoughts and opinions
Adults have a greater volume and different quality of experience than youth	• Recognize and respect the expertise of participants • Encourage participants to share their experiences and knowledge and apply them to their new learning experiences • Link training activities to participants' experience
Adults are motivated by both extrinsic and intrinsic motivations	• Emphasize the job-related benefits of the training • Create a safe learning environment • Provide meaningful learning experiences that are clearly linked to personal, and professional goals • Use positive reinforcement to enhance learning
Adults enter into a learning experience with a task-centred orientation to learning	• Organize content around tasks as much as possible eg/ case studies, simulations • Focus on doing something with information rather than just "knowing" the information
Adults become ready to learn when they experience in their life situation a need to know or to be able to do in order to perform more effectively and satisfyingly	• Be aware that some learners may not want to be there • Help them find value in learning what the course has to offer • Show how the learning activities meet the course objectives

Learning Styles

Do you prefer to work in a group or work alone? Do you learn better by listening to lectures or reading course books? When asked for directions, do you write them down or draw a map? Your answers to these questions may reflect your personal learning style. A learning style is a pattern of acquiring and processing information in learning situations. Many learning theorists believe that different people have different preferences in their approach to learning. Learning styles may be influenced by past experiences, education, work and the learning situation itself. Proponents believe that teachers and trainers can maximize learning by considering different learning styles in their instructional strategies and lesson plans.

A number of theorists have developed learning style models. Two well-known models are the VARK model and the Honey and Mumford Learning Styles Model, which is based on David Kolb's Learning Cycle.

The VARK Model

The VARK learning styles model was developed by Neil Fleming. It is uses the four main sensory receivers: Visual, Aural, Reading/Writing and Kinaesthetic (movement) to determine the dominant learning style.   According to this model, learners use all four channels to take in and learn new information, but typically one or two channels are dominant. The dominant style defines the best way for a person to learn new information.   VARK theorists believe that teachers and trainers should present information using all four modalities to appeal to all learners no matter what their preferred learning style.

The VARK Styles

Visual Learners

Visual learners learn best through seeing. They pay attention to the teacher's body language and facial expressions, and can easily visualize objects, places and processes. Charts, demonstrations, videos, pictures and diagrams are useful tools for visual learners. They prefer information to be presented in visual rather than written form.

Tips for trainers

- o   Use graphs, charts, illustrations, or other visual aids.
- o   Include outlines, concept maps, agendas, and handouts for reading and taking notes.
- o   Encourage learners to create mind maps
- o   Leave white space in handouts for note-taking.
- o   Emphasize key points to signal when to takes notes.
- o   Supplement textual information with graphics when possible.

Aural learners

Aural learners learn best through listening. Recording lectures and replaying them, talking to colleagues and participating in discussion groups are useful activities for these learners. They may talk to themselves, move their lips while reading or read out loud. They can get meaning from the tone of voice, pitch and speed of the speaker.

Tips for Trainers

- o Begin new material with a brief outline of what is coming and conclude with a summary
- o Use the Socratic method of lecturing by questioning learners to draw as much information from them as possible and then fill in the gaps with you own expertise
- o Include auditory activities, such as brainstorming and discussion groups. Reserve time to orally debrief activities.
- o Encourage learners to ask questions
- o Encourage learners to record presentations to review later

Reading and Writing Learners

These learners learn best when information is presented in written form. They benefit from text books, handouts, PowerPoint presentations and lists.

Tips for Trainers

- o Provide opportunities for guided note-taking
- o Encourage learners to re-read or re-write their notes
- o Provide handouts and other textual materials that can be re-read after the session
- o Provide access to dictionaries, word lists and glossaries
- o Ask learners to summarize key points from the session in writing

Kinesthetic learners

Kinesthetic learners learn best through an active, hands-on approach. They do best in learning situations that include laboratory or field components, and may lose concentration if the situation involves little or no movement or external stimulation.

Tips for Trainers

- o Include tasks that get the learners up and moving
- o Use colours to emphasize key points on PPT presentations
- o Include demonstrations when possible
- o Encourage note-taking

The Honey and Mumford Model

The Honey and Mumford Learning Styles Model was developed by Peter Honey and Alan Mumford and is based on David Kolb's four stage learning cycle.   According to Kolb, a learner may begin the learning process at any one of the four stages (see figure below), but in order for deep learning to occur, all four stages must be completed.
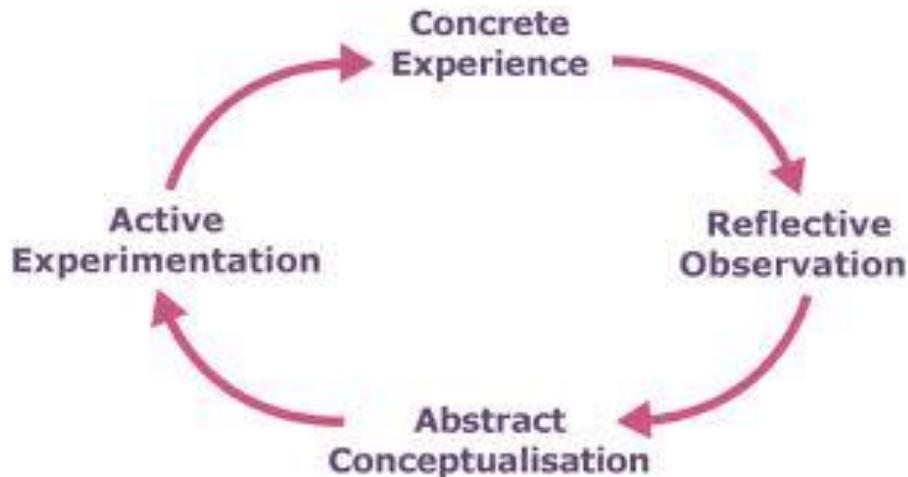
From: Kolb, D.A. (1984) Experiential Learning, Englewood Cliffs, NJ: Prentice

The Honey and Mumford Learning Styles are based on the stage at which the learner begins the learning process. The four processes that must be present for learning to occur are described and illustrated with the example of learning to ride a bicycle:

Stage of Learning	Description	Example
Concrete experience (feeling)	Learning from specific experiences and relating to people	The learner receives practical tips and techniques from a cycling expert
Reflective Observation (watching)	Observing the environment from different perspectives before making a judgement	The learner watches another person ride a bicycle and thinks about riding a bicycle themselves
Abstract Conceptualization (Thinking)	Logical analysing ideas and acting on an intellectual understanding of the situation	The learner understands the concept and theories behind riding a bicycle
Active Experimentation (Doing)	Taking action in order to get things done; includes risk taking	The learner gets on the bicycle and tries to ride it

Honey and Mumford: Learning Styles Questionnaire

There are no right or wrong answers. If you agree more than you disagree with a statement, put a check (v) on the line. If you disagree more than you agree put an X.

1 _____   I like to be absolutely correct about things.

2 _____   I quite like to take risks.

3 _____   I prefer to solve problems using a step by step approach rather than guessing.

4 _____   What matters most about what you learn is whether it works in practice.

5 _____   I like to make decisions very carefully and preferably after considering all the other possibilities first.

6 _____   In discussions I like to get straight to the point.

7 _____   I like the challenge of trying something new and different.

8 _____   I tend to judge other people's ideas on how they work in practice.

9 _____   I don't think that you can make a decision just because something feels right. You have think about all the facts.

10 _____   I am rather fussy about how I do things - a bit of a perfectionist.

11 _____   In discussions I usually contribute a lot of ideas.

12 _____   In discussions I put forward only ideas that I know will work.

13 _____   Usually I talk more than I listen.

14 _____   I believe that careful logical thinking is the key to getting things done.

15 _____   If I have to write a formal letter I prefer to try out several rough workings before writing out the final version.

16 _____   I like to consider all the alternatives before making my mind up.

17 _____   I usually do more listening than talking.

18 _____   I'm usually the 'life and soul' of the party.

19 _____   I do whatever I need to do, to get the job done.

20 _____   I like meetings or discussion to follow a proper pattern and to keep to a timetable.

Scoring

For each question you checked (√), put a '1' beside the question number below. Add up the 1s in each column and write the total below.

Theorist	Pragmatist	Activist	Reflector
1	4	2	5
3	6	7	9
10	8	11	15
14	12	13	16
20	19	18	17

Honey and Mumford Learning Styles Model: The Activist

Activists are people who learn by doing. They need to get their hands dirty. These learners have an open-minded approach to learning, involving themselves fully and without bias in new experiences.

Learn best from activities where:	Learn least from activities where:
- There are new experiences, problems or opportunities from which to learn. - They can immerse themselves in activities such as games, competitive teamwork tasks or role-playing exercises. - There is a diverse range of activities and tasks - They are allowed to generate ideas without restriction - They are involved with other people - There is a difficult or challenging element	- Learning involves a passive role, such as listening to lectures or reading - There is a lot of data to be analysed or interpreted - They are required to work alone - They find the content overly theoretical - Instructions must be followed precisely with no room for adjustment - They are asked to be very thorough and meticulous
Strengths:	**Weaknesses**
- Flexible and open-minded - Happy to try anything - Enjoy new situations - Not resistant to change	- Sometimes take action without thinking - May take unnecessary risks - Often rush in to action without enough preparation - Get bored easily

Training activities for activists:

Team games
Brainstorming
Presenting information to a group
Competitive activities
Problem solving
Role play

Honey and Mumford Learning Styles Model: The Reflector

Reflectors learn by observing and thinking about what happened. They may avoid leaping in and prefer to watch from the sidelines. They prefer to view experiences from a number of different perspectives, collecting data and taking the time to work towards a conclusion.

Learn best from activities where:	Learn least from activities where:
• They are encouraged to watch, think about and review activities • They are able to stand back from events and observe what is happening • They have time to prepare/research before being asked to do something •	• They are forced to act as a group leader or participate in role plays • They are given insufficient time or data to come to a satisfactory conclusion • They are asked to produce ideas spontaneously ie/ brainstorming • They are involved in situations that require action without planning
Strengths:	**Weaknesses**
• Good at listening and taking in information • Thoughtful and careful • Thorough and systematic • Avoid making unsupported conclusions	• Avoid direct participation in groups • Slow to reach a decision • Often overly cautious, avoid risks • Not assertive

Training activities for reflectors:

Videos
Paired discussions
Observing and giving feedback to others
Read/research and report back

Honey and Mumford Learning Styles Model: The Theorist

Theorists like to understand the theory behind the actions. They need models, concepts and facts in order to engage in the learning process. They prefer to analyse and synthesize, drawing new information into a systematic and logical theory.

Learn best from activities where:	Learn least from activities where:
• A system, model, concept or theory is offered • They can explore how ideas, events and situations are connected • They are intellectually challenged or asked to analyse complex situations • They are given an opportunity to question the methodology or logic behind something • They are in structured situations with a clear purpose	• The purpose of the activity is not clear • Activities are unstructured or have a high degree of ambiguity ie/ problems with no clear answer • They find the subject matter shallow or inconsequential • They are faced with a number of theories, techniques or methods without exploring any of them deeply
Strengths:	**Weaknesses**
• Highly logical thinkers • Rational and objective • Disciplined	• Creative thinking • Avoid uncertainty and ambiguity • Intolerant of the subjective or emotional

Training activities for theorists:

Presenting information in graphic form
Reading tasks
Logical thinking puzzles or games
Quizzes, crossword puzzles, word games
Presenting "how something works"

Honey and Mumford Learning Styles Model: The Pragmatist

Pragmatists need to be able to see how to put the learning into practice in the real world. Abstract concepts and games are of limited use unless they can see a way to put the ideas into action in their lives. They often experiment and try out new ideas, theories and techniques to see if they work.

Learn best from activities where:	Learn least from activities where:
• There is an obvious link between the subject matter and a problem or opportunity on the job • They are shown techniques and strategies for accomplishing practical things ie/ saving time or money • They can immediately implement what they've learned • They can work on practical issues • They are shown models that they can adopt or imitate	• The activity is not related to an immediate need • They subject matter is overly theoretical • Clear guidelines are lacking • They see too many obstacles to implementing the learning ie/ political or managerial problems • There is no obvious reward from the learning activity
Strengths:	**Weaknesses**
• Enthusiastic to test things they've learned • Practical and realistic • Usually highly professional	• Impatient with theoretical explanations • Usually task oriented rather than people oriented • Tend to seize the first convenient solution to a problem

Training activities for pragmatists:

Case studies
Problem solving
Practical demonstrations
Discussions

Concentration and Attention Span

Studies on attention span demonstrate why many learners have difficulty with the traditional lecture format. Adult learners can remain attentive in a one-way lecture for no more than 15 to 20 minutes at a time at the beginning of a lecture. Researchers found that attention span lapsed severely as the lecture progressed, and often fell to three or four minutes by the end of the lecture (Middendorf & Kalish, 1995). As attention span drops, so does retention of information. When asked to write summaries of presentations, Burns (1985) found that the average student recall rate was 70% from the first 10 minutes of the lecture, and 20% from the last 10 minutes.

A number of factors affect attention span and concentration rates in lectures and presentations. Attention span is typically held for longer periods by people taking part in activities that interest them. On the other hand, tiredness, time of day and illness are some of the factors that negatively impact on concentration.

To address the issue of loss of learner concentration, a number of researchers (Carbone, 1998; Rowe,1980; Middendorf & Kalish, 1998) advocate modifying lectures by pausing every 15-20 minutes (as shown in the figure below) to allow discussion among students, or review and revision of notes. Combining lecture segments with regular breaks for short activities has been shown to not only keep learners interested and involved, but to significantly improve information recall and test performance (Rao & Di Carlo, 2000).
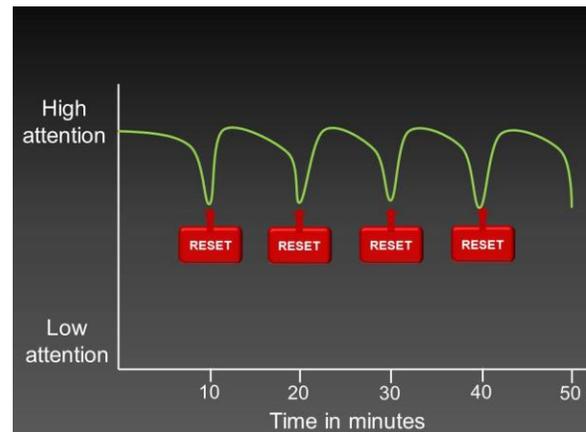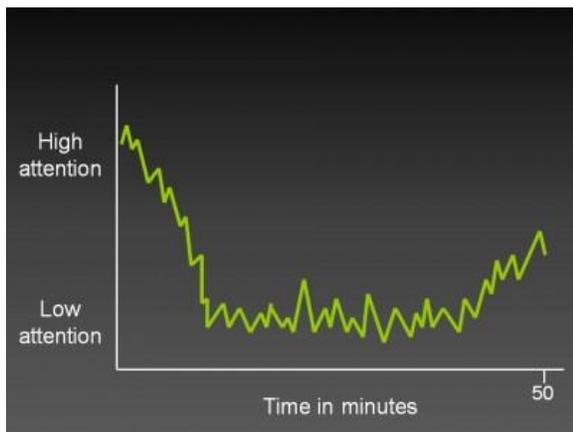
From: Hartley J and Davies I. (as cited in Mitchell, O.(n.d) What to do when you're losing your audience. *Speaking about Presenting*. Retrieved from http://www.speakingaboutpresenting.com/audience/losing-audience)

Training methods Checklist

Adult learning principles

☐ Have I made the course/session objectives clear?

☐ Have I created a safe and comfortable learning environment where ideas can be freely expressed?

Have I Included training activities that:

    ☐ draw on participants' existing knowledge and previous experience?

    ☐ require learner participation?

    ☐ are task-oriented?

    ☐ can be linked to learners' jobs or "real life" situations?

Learning Styles

Do my teaching materials/methods appeal to:

    ☐ Visual learners (pictures, diagrams, models, videos)?

    ☐ Aural learners (discussion, explanation)?

    ☐ Reading/Writing learners (PPT slides with key words, hand outs)?

    ☐ Kinesthetic learners (hands on activities, opportunities to move around)?

Have I included training activities that will engage:

    ☐ Activists (brainstorming, competition)?

    ☐ Reflectors (videos, paired discussion, reading)?

    ☐ Theorists (quizzes, logic puzzles, reading)?

    ☐ Pragmatists (case studies, problem solving)?

Attention Span and Concentration

☐ Have I divided my lecture into manageable "chunks" (15-20 min)?

☐ Have I included breaks or active learning activities that can "reset" learner attention?

Part 2: Active Learning

Objectives

- Analyse the advantages and disadvantages of lectures as an instructional technique
- Define active learning and apply active learning theory to the lecture situation
- Provide examples of active learning activities and define their role in training
- Define the factors used to determine the suitability of different learning activities to a specific training situation

The Lecture: Advantages and Disadvantages

Traditional lectures or presentations, where the lecturer or presenter speaks while the participants passively listen, are commonly used instructional methods in academic and training situations. Take a moment to consider the pros and cons of the traditional lecture as a training method. Share your thoughts with a small group and use the chart below to summarize your discussion.

Advantages	Disadvantages

The Lecture: Advantages and Disadvantages

Advantages	Disadvantages
• Lecturers can present up-to-date materials otherwise unavailable to learners • Efficient way to present information to a large audience • Allows a lot of information/facts to be presented in a short period of time • Appeals to those who learn best through listening • A good lecturer can arouse interest in the subject • The lecture is often useful to supplement or synthesize material from other sources	• Difficult for lecturer to assess student learning • The learner remains passive, not actively engaged with the subject matter • Lectures do not appeal to all learning styles • Students frequently lose concentration during long lectures • Retention of information is low from lecture alone • Lectures assume that students learn at the same pace and are at the same level of understanding

Active Learning

What is Active Learning?

Active learning is an approach to instruction that engages the learner in the learning process and puts the responsibility for learning on the student. It stands in contrast with the traditional model of instruction where the teacher or trainer does all of the talking and the learner passively absorbs the knowledge of the expert. Active learning requires learners to engage with the subject matter in a meaningful way through tasks and group interaction to build an understanding of the facts, ideas and skills.

Active learning includes a variety of teaching methods that can address some of the drawbacks inherent in the traditional lecture, especially when a combination of approaches is used. In the active learning situation, the instructor's role is to talk less and facilitate more by setting up situations and tasks that allow learners to engage with the subject matter in a variety of ways. This not only appeals to different learning styles, but promotes greater retention of information and the development of higher cognitive processes such as synthesis, analysis and evaluation (see below)
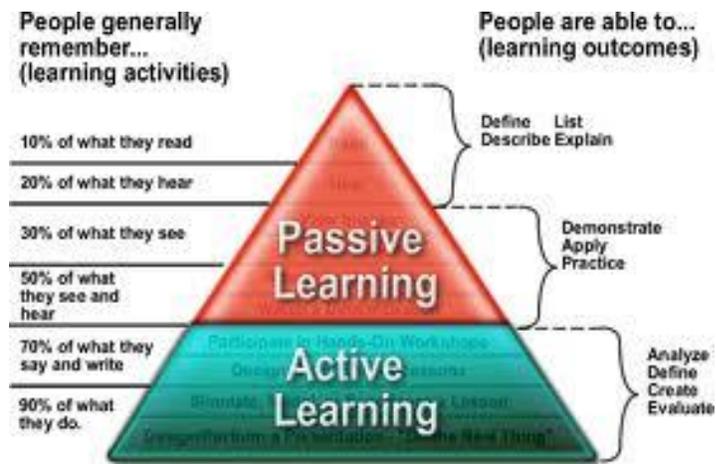
From: Dale. E. (1946. 1954. 1969). Audio-visual methods in teaching.

The Active Lecture

Teaching strategies that promote active learning are numerous, but have five common elements. These are: 1) student involvement beyond passive listening; 2) greater emphasis on the development of skills and less on transfer of information; 3) student involvement in higher order cognitive skills; 4) student involvement in activities, such as reading, discussing, writing; and 5) an emphasis on students' exploration of values and attitudes (Bonwell & Eison, 1991).

Active learning techniques are a way to supplement rather than replace the lecture or presentation. The lecture is not abandoned completely, but is enhanced by the incorporation of student-centred activities. In an active lecture, the trainer pauses periodically to introduce an active learning activity with the objective of:

  ▸ Promoting learner engagement with the subject matter

- ▶ Consolidating ideas given before the pause

- ▶ Activating knowledge about ideas to be given after the pause

- ▶ Giving learners an opportunity to apply theory to a practical situation

- ▶ Giving learners the opportunity to integrate new information with existing knowledge

- ▶ Appealing to different learning styles

- ▶ Assessing existing knowledge and learning progress

- ▶ Re-setting the attention button

Planning Active Learning Activities

When planning to incorporate active learning activities into a training session, a number of factors should be considered.

Time: How much time is available? Some activities are complex and require time to set up and carry out. If time is limited relative to the scope of material to be covered, simpler activities should be considered.

Number of participants: Some activities may be more difficult to carry out with a large number of participants; equally, very small numbers can pose challenges.   Knowing the number of participants in advance will determine the feasibility of group activities.

Training environment: The ideal training space can be arranged (and re-arranged) to suit a variety of activities, including lectures and group work. Fixed training rooms make certain activities difficult to carry out. It is important to be aware of and consider the training environment.

Trainer's style/Participant experience: An instructor's teaching style impacts his or her preference for the level of participant involvement in instructional activities. Similarly, course participants may have varying levels of experience with active learning. Trainers should consider their own and participants' comfort levels when selecting between low and high participation activities.

Course objectives: Active learning activities should be purposeful and should be aimed at achieving specific course objectives. The link between the activity and the objective should be clear to the participants. Training strategies and activities can differ depending on whether the objective is for the learner to acquire knowledge, skills, or attitude.

Examples of Active Learning Activities

Activity	Description	Time (est.)
Think-Pair-Share or Write-Pair-Share	Pose a question or task (summarize or apply a concept to their own situation) for the participants to think about. 1. Individuals think about or write a response to the question or task. 2. Participants pair up and discuss their responses (maybe come to a consensus or synthesis of ideas) 3. The trainer asks participants to share their ideas with the group	5 -10 min
One-minute paper	Ask participants to write for 1 – 3 minutes in response to a question or prompt. Can be used to: a) Summarize or consolidate a concept before moving on to another. b) Activate the participants' knowledge on a particular topic before it is addressed by the trainer. c) To allow the participants an opportunity to apply an idea presented to their experience.	1-3 minutes (possible to ask participants to share what they've written)
Discussion	Small group or whole group discussion on a topic or question(s) provided by the trainer.	5 – 20 minutes
Debate	Can be prepared in advance or spontaneous. Ask small groups to take a side on a controversial/topical issue and debate it. The rest of the learners can be the audience.	5 min – open (can take longer if research & preparation are involved)
Case-study	Provide students with a real or hypothetical example of an issue or concept from the lecture. Participants should use the information provided to analyse the scenario and present their findings.	Open (depends on the complexity of the scenario)
Brainstorming	Can take place in small groups or with all of the participants (led by the trainer). Participants generate ideas in answer to a question or problem. Responses can be reviewed with the entire group.	5 – 15 min
Simulation/role play	Participants take on different stakeholder roles related to an issue presented in the training session. They present their interests/problems/issues to the group, and the group tries to reach a compromise, solution or approach to the issue.	10 min (if spontaneous), longer if research/ preparation is involved

Focused Listing	Can be used to summarize a lecture or topic (ie/ list the 5 main points from the lecture or list some factors that should be considered when selecting learning strategies), or to introduce a new topic (ie/ list 5 characteristics of an effective trainer). Can also be used to synthesize information from lectures or lectures and readings. The lists can be taken up/compared with the entire group	10-15 min
Mind-mapping	Ask students to create a mind map to summarize what they've learned in a module or section, to activate their knowledge about a particular topic or to make connections between ideas. Can be done are shared with a partner. (See example of mind map below).	
Corners	A question or problem is posed on a flip chart in each corner of the room. Small groups move around to each corner, discuss their answer or solution and write it on the flip chart. Answers can be discussed/compared with the entire group. (Groups can also be asked to pose the questions or problems themselves).	20 min or longer
Guided note taking	Provide learners with a "skeleton" outline of the topic to be covered in the lecture. They can fill in the missing details to complete the notes. Learners may compare their notes.	One or more lecture sections
Survey	Periodically survey the group for their opinions, predictions, answers. Use card paper or different coloured post-it notes and have learners hold up their responses.	1 minute or less
Jigsaw	Learners work in small groups (3 or4). Each person in the group is responsible for one reading or one part/section of a reading. Individuals read and become experts on their section/article and teach it back to the rest of the group, so that everyone gets all the information.	20 min or more
Question and answer pairs	At the end of a lecture section, learners prepare questions to quiz their partner. The questions can be content questions or opinion questions, but must be based on the preceding lecture section.	5-10 minutes
2-Column method	Learners work in pairs or small groups to consider an issue from different perspectives. They write their ideas under 2 column headings, for example, "Advantages" and "Disadvantages", "feasible solutions" and "unfeasible solutions".	10 – 20 min
Note check	The trainer pauses the lecture to allow learners to compare their notes with a partner. They may clarify key points or add information they are missing.	5 min
The muddiest point	At the end of a lecture section, or module learners write and submit a point that was unclear or confusing to them in the lecture. Alternatively, they could write a question that they would like the trainer to answer. The trainer collects the questions and answers them or clarifies "muddy" points.	5-15 min

Mind Map (example)
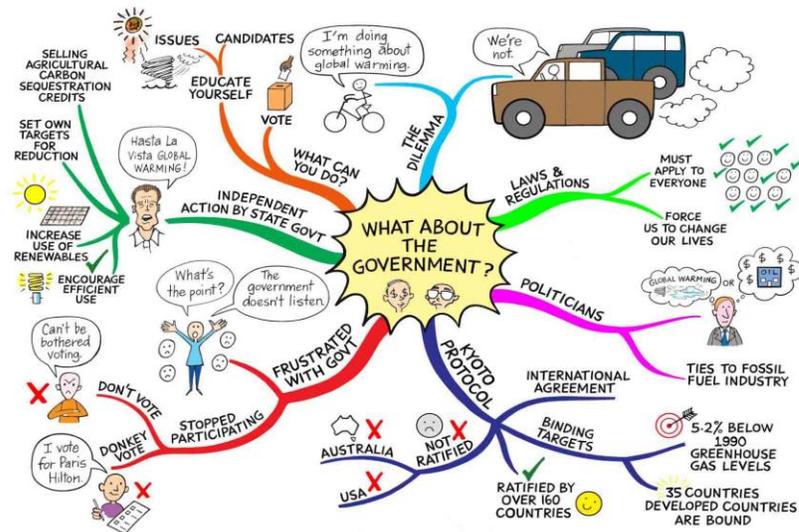
Guided note-taking (example)

Introduction

Topic: How to Plan and Deliver an Effective Oral Presentation

3 Main areas:

    1. _____

    2. _____

    3. _____

Body

1. How to plan your presentation

3 Points:

    i) _____

    ii) _____

    iii) _____

i) _____

2 ways of looking:

    a) _____

- Do you want to inform? entertain? persuade?

    b) _____

- What do you want to accomplish?
- Why am I giving this presentation?

ii) _____

    Things to consider:

Role play/Simulation (example)

Scenario

The issue of ship recycling has been discussed in the IMO for a number of years. It is not a straight forward issue, as it involves a number of stakeholders with different issues and concerns. In recent years, ship breaking activities have taken place primarily in developing countries. Many organizations have expressed concerns about the impacts ship breaking activities on the local environment and the safety of ship yard workers. In addition, there has been pressure on the shipping community to dispose of its end of life ships in a safe and environmentally friendly way. In 2009, the IMO adopted the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships to address these issues. However, this convention has yet to enter into force, and may not do so until 2020. While some states have ratified the convention and are working toward establishing green recycling facilities and ship recycling plans, others are unsatisfied with the terms of the convention. The objective of this meeting is to identify the concerns of each party and to try to find some fair resolutions that would preserve both the interests of shipping and the maritime environment.

Jigsaw (example)

Information Exchange

Form a group with 3 students so that each of the 4 news reports is represented. Using your notes to help you, exchange information about the reports you have heard, and complete the chart below.

	Details of Incident	Impact of Oil Spill	Response to Incident
Sea Empress			
New Carissa			
Diamond Grace			
Jessica			

Part 3: Course Development

Objectives

- Identify and distinguish between the 3 domains of learning
- Define the stages of course development according to the ADDIE Model
- Identify goals and methods of needs analysis
- Write clear learning objectives
- Create a detailed lesson plan for a training session

Domains of Learning

When designing a training course, Bloom's taxonomy of learning domains offers a framework that can be used as a useful starting point. It can help the trainer or training team set objectives for the course and also to determine how learning will be assessed.

Bloom's taxonomy is a three part model of learning behaviours developed in the 1950's by a committee of educational psychologists led by Benjamin Bloom. According to the model, learning behaviours are categorized into three overlapping domains. The learner moves through six stages (from simple to complex) in each domain as their learning develops.

1. The Cognitive Domain (intellectual capability ie, Thinking)

Level	Description	Key Words
Evaluation	Judging the value of new information	review, justify, assess, present a case for, defend, report on, investigate, direct, appraise, argue, project-manage
Synthesis	Building a new pattern from previously learned materials	develop, plan, build, create, design, organise, revise, formulate, propose, establish, assemble, integrate, re-arrange, modify
Analysis	Breaking down informational materials into smaller parts for better understanding	analyse, break down, compare, quantify, measure, test, examine, experiment, relate
Application	Using previously learned materials in new or real situations	use, apply, solve, produce, implement, construct, change, prepare, conduct, perform, react, respond, role-play
Comprehension	Understanding the meaning of materials	explain, reiterate, classify, summarise, illustrate, translate, discuss, re-estimate, paraphrase, example
Knowledge	Remembering previously learned material	define, describe, label, list, memorise, recognise, reproduce, select, state

2. The Affective Domain (feelings, emotions and behaviour ie., Feeling)

Level	Description	Key Words
Internalize Value System	Behaving in a way that is consistent with the new value	act, display, influence, solve, practice
Organize Personal Value System	Incorporating a new belief or value into one's personal value system	build, develop, formulate, defend, modify, relate, prioritise, reconcile, contrast, arrange, compare
Value	Showing involvement with or commitment to the topic	argue, challenge, debate, refute, confront, justify, persuade, criticise
Respond	Taking an active part in learning; participating	react, respond, seek clarification, interpret, clarify, provide other references and examples, contribute, question, present, cite, become animated or excited, help team, write, perform
Receive	Being aware of a topic and being willing to listen	ask, listen, focus, attend, take part, discuss, acknowledge, hear, be open to, retain, follow, concentrate, read, do, feel

3. The Psychomotor Domain (Manual and Physical Skills ie., Doing)

Level	Description	Key Words
Naturalization	Performing the activity with unconscious or automated mastery	design, specify, manage, invent, project-manage
Articulation	Adapting and integrating expertise to meet a new objective	construct, solve, combine, coordinate, integrate, adapt, develop, formulate, modify, master
Precision	Performing a new skill reliably without assistance	demonstrate, complete, show, perfect, calibrate, control
Manipulation	Reproducing learned activity from memory	re-create, build, perform, execute, implement
Imitation	Observing and copying the action of another	copy, follow, replicate, repeat

Bloom's Taxonomy and the KSA Model

Training is often defined as "the systematic acquisition of attitudes, knowledge or skills that results in improved performance in another environment." The Knowledge-Skills-Attitude (KSA) model frequently used in training correlates to Bloom's Domains of Learning.

KSA
• Knowledge
• Skills
• Attitude

Bloom's
• Cognitive
• Psychomotor
• Affective

When the KSA model is compared to Bloom's Taxonomy, Knowledge (K) correlates to the Cognitive domain, Skills (S) correlates to the Psychomotor domain, and Attitudes (A) correlates to the Affective domain. Training objectives generally aim to address all three components of KSA, as each component is an essential part of learning and development. *Knowledge* refers to the body of information to be acquired by the training participants, and training should aim to increase the knowledge base of the learners. In addition to providing participants with a sound knowledge of the subject matter, training should address the question of how to use the knowledge. *Skills* involves the application of the new knowledge in order to accomplish a particular goal. Finally, *Attitude* pertains to personal opinions and beliefs in relation to the subject matter and the training. *Attitude* is strongly connected with motivation and can affect the participant's ability to gain knowledge and skills (Blanchard & Thacker, 2010). A training participant who knows *why* they should learn the subject matter is more likely to benefit from the training experience.

Stages of Course Development

Instructional Systems Design (ISD) is the process of designing and developing instructional courses or materials aimed at effective and efficient knowledge or skills acquisition for learners. The model provides a framework for decision making to determine the who, what, when, where, why and how of a training program. There are many Instructional design models which describe the training cycle. They are broad in scope, focusing on five phases of the training design process*: analysis, design, development, implementation and evaluation*

Instructional System Design is sometimes referred to as the *ADDIE* model of instruction:

A • Analysis

D • Design

D • Development

I • Implementation

E • Evaluation

It is important to remember that rather than being a linear process, the phases in the ADDIE model are cyclical; once the evaluation stage is complete, analysis begins again.   Additionally, the evaluation process is on-going over each phase and throughout the life-time of the training project. The following diagram illustrates the ADDIE process.
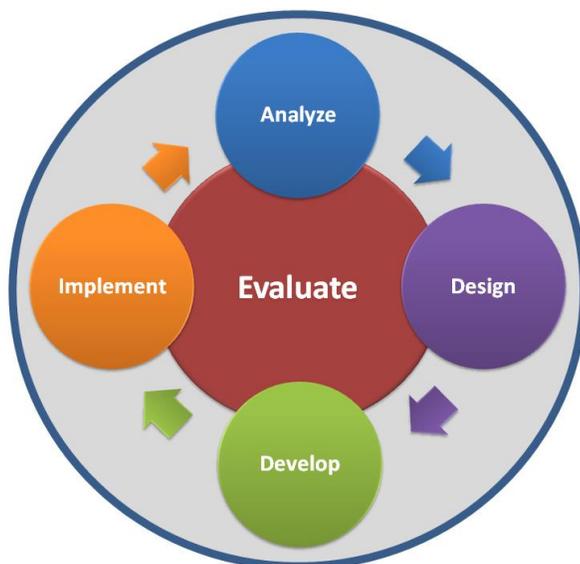
Overview of ADDIE Stages

Stage	Description	Tasks
Analysis	Define what is to be learned Establish goals and objectives for the training	• Clarify the instructional problem • Analyse the task • Perform a needs assessment • Identify and characterize the learners • Identify learners' existing knowledge and skills • Assess the learning environment • Assess the budget • Identify potential problems/constraints
Design	Specify how the subject matter is to be learned	• Write learning objectives • Select instructional techniques • Write detailed lesson plans • Select content and media for delivery • Select assessment methods
Development	Create instructional materials	• Select or create learning materials or review and revise existing materials • Develop visuals: PPT, Prezi, handouts • Select or develop assessment instruments
Implementation	Deliver the training course	• Gather and organize materials • Prepare training environment • Facilitate the training • Monitor learners' progress/needs • Provide feedback to learners • Evaluate and make adjustments as necessary
Evaluation	Determine whether training objectives were achieved	• Analyse learner evaluation results • Analyse learner and trainer course evaluations • Follow up with learners for further feedback • Revise objectives • Revise instructional materials

Questions that drive ADDIE analysis

In the *Analysis* phase of the ADDIE model, a training needs analysis is conducted to collect critical information about business needs, learners' capabilities, and course content. Here are some of the questions that a training specialist may ask during the ADDIE analysis phase:

- Who is the audience?
  - Who are the learners and what are their characteristics?
    - number of learners
    - Location of learners
    - Education and experience of the learners
    - Background of learners
    - Experience in present or related jobs
    - Job performance requirements versus present skill levels
    - Language or cultural differences of learners
    - Motivation of learners
    - Physical or mental characteristics of learners
    - Specific interests or biases of learners

- What do they need to learn?
  - What are the instructional goals and objectives?
  - Has the management clearly defined the goals or the outcomes of the training?

- What are the delivery options?
  - Classroom training, one-one-one coaching , web-based training, Video/DVD, written manual
  - What are the adult learning theory considerations to take into account

- What constraints exist?
  - Time, learner age, resources

- How will learners be evaluated?
  - Assignments, exams, quizzes, performance

- What is the timeline for completing the project?
  - Including course design and development and learner feedback

- What is the budget allocated to the project?

Writing Training Objectives

A training objective is an "*outcome statement that captures specifically what knowledge, skills, and attitudes learners should be able to exhibit following instruction*" (Effective use, 2005). Training design follows from a clear knowledge of training needs, and is based on clearly formulated objectives.

Why write learning objectives?

▶ To provide a solid basis (and guideline) for the selection of course content, design and assessment
▶ To connect content and assessment with learning activities
▶ To clarify the expectations of participants
▶ To validate learning activities
▶ To provide a basis for the evaluation of trainer, learner and curriculum effectiveness

A clearly formulated training objective should:

▶ Answer the question: "What should the participant be able to do at the end of the module/training day/course?
▶ Be specific, attainable, and measurable

Steps to writing a clear training objective:

Step 1:

Begin with the phrase: "At the end of this activity/module/training session/course, the learner should be able to…."

Step 2:

Follow step one with an observable action verb that communicates what the learner should be able to do. Use key words from Bloom's Taxonomy of Learning Domains (Refer to pages 28-29 for extensive key word list). Avoid verbs that are subjective or not measurable.

Verbs to Use			Verbs to avoid
▶ Cognitive Domain (Knowledge)	Define Identify Classify	Contrast Explain Evaluate	Understand Believe Improve Remember
▶ Psychomotor Domain (Skills) ▶	Adapt Perform	Demonstrate Develop	Learn Know Appreciate
▶ Affective Domain (Attitude)	Discuss Argue	Interpret Clarify	Be familiar with Grasp the significance of

Step 3:

Specify the criteria concerning the expected standard of the learner's performance.

Example:

Input (Conditions)   Action Verb

At the end of part three, participants will be able to **write** a **specific, attainable and measurable** learning objective.

                                                        Standard
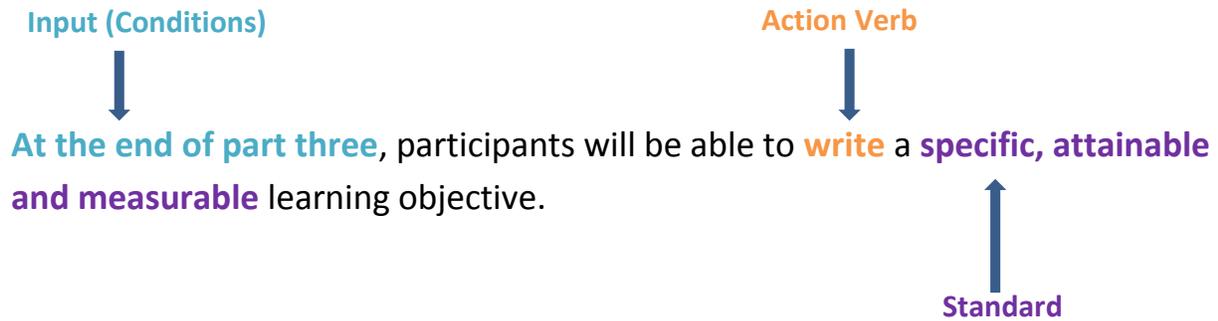
Effective Training Objectives:

At the end of this module participants will be able to identify the origins of the issues related to air pollution.

By the completion of this Module, participants will be able to explain the activities of port operations.

By the completion of this module, participants will be able to calculate how much fuel can be saved by reducing port time in a case study.

After attending this module, the participants will be able to define and establish an EEOI for a ship operated under your control.

Lesson Plan (Template)

Course Title:			
Session Title:			
Resources:			
Time	**Learning Objectives**	**Training Activities**	**Assessment**
Homework/Reading Assignment:			
Notes:			

Lesson Plan (Example)

Course Title: IMO Train the Trainer: Energy Efficient Operation of Ships			
Session Title: Factors affecting learning			
Resources: PPT, Course book, Flip chart paper, post it notes			
Time	**Learning Objectives**	**Training Activities**	**Assessment/Follow-up**
15 min	Activate pre-existing knowledge of factors affecting learning	Brainstorming and information sharing • Participants think of a positive and negative learning experience they've had and why • Share answers w small grp and write on chart paper - display	Identify similarities and discuss as class
15 min	Explain M. Knowles 6 assumptions about adult learners	Presentation • Outline diffs b/w andragogy and pedagogy • Introduce and explain assumptions about adult learners	
15 min	Apply adult learning principles to training activities	Think/Pair/Share • Participants discuss how they would apply each of Knowles' 6 assumptions to their training	Discuss briefly and present table (PPT)
Homework/Reading Assignment: Review pages 4-7 in course book/ Optional recommended reading (Knowles)			
Notes: Create checklist for incorporating assumptions about adult learners into lesson plan			

Part 4: Teaching and Presentation Skills

Objectives

- Contrast the roles and responsibilities of presenters, trainers and facilitators
- Identify the qualities of an effective trainer
- Evaluate personal presentation skills using a checklist
- Assess the strengths and weaknesses of sample PowerPoint slides
- Demonstrate an understanding of the elements of effective PowerPoint design
- Explain and demonstrate the elements of effective presentation delivery

Are you a Presenter, Trainer, or Facilitator?

Your role in the instructional situation may vary depending on a number of factors, including the time frame, your audience and your objectives. Sometimes you may be required to take on a combination of these roles.

	Presenter	**Trainer**	**Facilitator**
Role	• Delivers lectures or presentations to groups of learners. • Delivers vital information/subject matter to learners	• Lectures, presents, teaches new skills to learners • Involves the participants and helps them explore their learning • Poses questions and activities to encourage discussion and practice • Knows the outcome and steers sessions to achieve the outcome	• Creates opportunities for and facilitates discussion • Asks many open-ended questions to encourage self-discovery • Ties things together by mentioning ideas , thoughts, opinions or questions mentioned earlier • Forms small groups to discuss the material presented, solve a problem, or do some other topic-related task to make the students used what they've learned
Focus on	Subject matter	Subject matter	Methods and Process
Level of interaction with participants	Low	Medium	High
Approach	Instructor-Centred	Learner-Centred	Learner-Centred
Content expert?	Yes	Yes	Not necessarily
Time frame	Suits short courses	Suits mid to longer duration courses	Suits mid to longer duration courses

Characteristics of Effective Trainers

The following characteristics are most often mentioned when describing an effective trainer or facilitator. Consider how you would rate yourself in each of the characteristics.

Enthusiasm: Effective trainers are high energy facilitators of learning, who strive to encourage all trainees to actively participate and enjoy the training. They use humour, personal anecdotes, examples and creative training activities to keep learners interested and challenged.

Knowledge: They have researched their topic, and are well-informed and up-to-date. They can establish themselves as an authority on the topic while being able to acknowledge that some learners will know more than they do.

Empathy: Effective trainers are able to acknowledge the difficulties and challenges that learners can face, especially adults returning to the learning environment. They make the training environment a safe and non-judgmental place for participants to express their views and share their experiences.

Flexibility/Responsiveness: Effective trainers pay close attention to learners' verbal and non-verbal responses. Regardless of the amount of preparation prior to the training event, they can recognize the need to adjust, adapt or eliminate material during a training session, based on the unique needs of the trainees and the time constraints.

Communication: Good trainers are effective communicators. They use clear, concise language and active listening skills. They present one idea at a time, show the relationships between ideas and illustrate the subject matter with elucidating examples, visuals and explanations. Additionally, effective trainers know how to use vocal qualities and body language to enhance the communication of ideas.

Honesty/Sincerity: Effective trainers are honest about their own strengths and limitations, establishing a rapport with their learners. If they don't know the answer to a question, they admit it.

Presentation Skills Inventory

Examining your current presentation skills can help you to identify your strengths as well as areas that can be improved. Read each statement below and circle the number that best describes you.

	Always Never
Content	
I open my presentation in a way that captures and focuses the attention of the audience	1 2 3 4 5
I make the purpose of my presentation clear (the audience knows what I'm going to tell them and why it's important)	1 2 3 4 5
I focus on no more than 3 or 4 main points	1 2 3 4 5
I present ideas in a logical way from beginning to middle and end	1 2 3 4 5
I try to relate the content of my presentation to the background and needs of the audience	1 2 3 4 5
I use interesting and authentic examples and illustrations to support the main points of my presentation	1 2 3 4 5
I leave enough time at the end of my presentation for questions	1 2 3 4 5
Delivery	
I rehearse well so there is minimum use of notes	1 2 3 4 5
My notes contain only key words so I avoid reading to the audience	1 2 3 4 5
I make frequent eye contact with the audience	1 2 3 4 5
I face the audience not the screen	1 2 3 4 5
I vary my pitch, tone and intonation to emphasize key points and maintain the attention of the audience	1 2 3 4 5
I use pauses appropriately	1 2 3 4 5
I speak loudly enough to be heard by the whole audience	1 2 3 4 5
I use gestures and body language effectively and not to distraction	1 2 3 4 5
I communicate ideas enthusiastically	1 2 3 4 5
I interact with the audience and involve them in my presentation	1 2 3 4 5
I move around the room	1 2 3 4 5
Visuals	
I use visual aids to support my presentation not as the "main event"	1 2 3 4 5
My visual aids are simple and easy to read and follow	1 2 3 4 5
I use graphics to illustrate complex concepts	1 2 3 4 5
My visual aids contain key words and phrases rather than complete sentences	1 2 3 4 5
I avoid using irrelevant/distracting pictures and graphics in my visual aids	1 2 3 4 5

Visual Aids (PowerPoint)

Visual aids can be a powerful tool in supporting your presentation and helping the audience remember your key points. While effective use of PowerPoint can enhance a lecture or presentation, poorly considered and constructed visuals can detract from it. Understanding how PowerPoint can be used to enhance a presentation can help a trainer decide when, why and how to use it as an instructional aid.

Use PowerPoint to:	Do not use PowerPoint to:
- support your message - highlight key points - focus the audience's attention - create interest - illustrate complex concepts that are difficult to visualize - appeal to visual learners	- substitute for your oral presentation - serve as a transcript of your speech - present simple ideas that are easily stated orally - overwhelm or distract the audience with too much details, graphics and text

Tips for PowerPoint Presenters

Slide Content

1. **Use slides sparingly**: Avoid overwhelming your audience with too many slides. To keep your message clear and simple and your audience attentive, minimize the number of slides in your presentation. A good general rule to follow is to use an average of one slide for every two minutes of presentation time. Some slides, such as those that contain photographs or illustrations require very little time, while those containing flow charts or info-graphics will require considerably more time.

2. **Present one key point per slide**: Limit the information on each slide to a single point or idea. Presenting more than one main idea can detract from the impact of the visual and confuse the audience.

3. **Use graphics rather than text whenever possible**: Using pictures, diagrams, flow charts, graphs, videos and info-graphics to present data, processes, procedures and other complex concepts enhances learner comprehension and retention of subject matter. However, keep in mind that graphics should enhance the message, not detract from it. Graphics should always be relevant to the topic being presented.

Slide Design

1. **Keep it Simple:** Simple slides get your message across more effectively than overly complicated or over-crowded slides. To keep your design simple, avoid:

- **too many contrasting colours**
- **TOO** *many* different **font styles**
- Too much text: Follow the 6 x 7 rule
  - No more than 6 lines of text per slide
  - No more than 7 lines per slide
- Complete sentences: Use key words and point form
- Distracting transitions, animations and sound effects

2. **Keep it Clear:** To be effective, your slides should be easily readable. Some font styles and colour combinations are easier to read than others. To make your slides clear, avoid:

- UPPER CASE and *italics*
- Serif fonts (fonts with decorative lines or curls such as Times New Roman, Century): Use sans serif fonts instead, for example: Tahoma, Arial, or Verdana
- Low contrast (dark text on dark background or light text on light background): Use colours and backgrounds that contrast or complement (for example: black on white or white on black)
- Distracting backgrounds: Pictures as slide backgrounds are distracting and detract from your message

3. **Make it Big:** If the font size on your slides is too small, it will not be visible from a distance. Choose a font size between 24point and 36 point to ensure visibility.

4. **Be Consistent:** Choose a background style, heading format and font for your PowerPoint slides and keep them consistent from the beginning to the end of your presentation.

5. **Use bulleted and numbered lists appropriately:** Using bulleted and numbered lists is an effective way to present complex information in a simple way. However, if lists are over-used in PowerPoint presentations, they can lose their effectiveness. To use lists effectively:

- Use numbered lists to indicate a hierarchy or sequence of ideas (for example, the steps in a procedure)
- Use bulleted lists when the items are of equal value or importance

- Avoid mixing numbers and bullets in one list

- Use the same style of bullet points throughout your presentation

- Make sure that list items contain parallel grammatical phrasing

- Punctuate the lead in sentence to a list with a colon

Slide Presentation

1. Familiarize yourself with the presentation environment: Prior to delivering a presentation, the presenter should assess the location to ensure that the necessary resources are available and compatible by asking the following questions:

- Is all of the necessary equipment present, connected and in working order?

- Is my presentation format compatible with the equipment available?

- Where will I stand?

- Is there any obstruction that could prevent audience members from seeing the screen?

2. Interact with the PowerPoint slides and the audience: The presenter, rather than the PowerPoint , should be the main focus of the audience. The presenter can keep the audience attentive and avoid distraction by avoiding:

- Standing in front of the screen: the audience will be distracted by trying to see around the presenter

- Reading to the audience from the slides

- Skipping over slide content: if content that appears on the slide presentation is not covered by the presenter, the audience will wonder what they are missing

- Going through slides too quickly: Give the audience a chance to process what they are seeing

- Over-using a pointer: pointers should be used sparingly, and only to quickly draw the audience's attention to a particular item of significance

TIP!

Use the "B" key on your keyboard to turn the screen black, or the "W" key to turn the screen white. This is useful when you move off topic or are answering questions from the audience. Having a blank slide put all of the attention on the presenter.

Presentation Delivery

Making a presentation is not only about what you say, but how you say it. That is, an audience not only listens to your ideas, it also responds to the way you use your voice and your body. A presenter needs more than a well prepared presentation to make an impact. The subject matter needs to be delivered in an enthusiastic, memorable and interesting way. Presentation delivery is comprised of a number of factors:
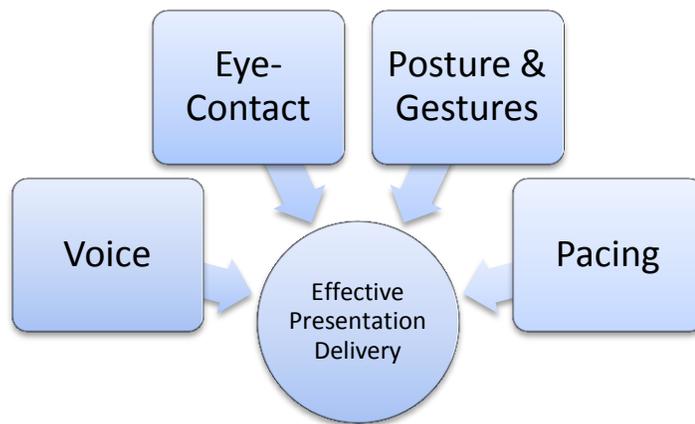
Voice: There are a number of vocal techniques that presenters can develop and use to keep their audience engaged and attentive while establishing their authority as a speaker. Voices that make a positive impact on the audience are:

- pleasant, conveying a sense of warmth
- natural, reflecting sincerity
- dynamic, giving the impression of confidence and strength
- expressive, portraying variety and emphasis without sounding flat or monotonous
- easily heard, thanks to proper volume and clear articulation

Eye-Contact: Eye-contact keeps the listeners engaged and helps the speaker to build a rapport with the audience. If done effectively, it involves the audience in the presentation and increases their willingness to listen. When making eye-contact with the audience, the speaker should:

- try to look at everyone in the audience; a good general rule is to look at each person for three to five seconds or, if the audience is too large, look at individuals in different sections of the

audience
- be mindful of the duration of eye-contact; avoid looking at one person for too long as this could make the person in question feel uncomfortable

Posture and Gestures: Effective body language supports the message and projects a strong image of the presenter. Audiences respond best to presenters whose bodies are lively and energetic. Audiences appreciate movement when it is meaningful and supports or enhances the spoken message.

Do	Don't
- maintain a natural but erect posture - Use your hands for emphasis, description and illustration - Make welcoming (open hand) gestures - Move around the room	- Slouch or lean on the podium or desk - Cross your arms or keep your hands in your pockets - Point at the audience - Stand in one place

Pacing: Pacing means balancing the amount of information delivered in your presentation with the speed of presentation and the time allotted. **Conceptual pacing** has to do with the speed at which you communicate information, ideas and concepts. It is not the same as how fast you talk, but it has to do with how quickly you go through a topic.

Because people can grasp and understand simple ideas and details quite quickly, but have to think longer to understand more complex topics, the presenter or speaker needs to slow down for the complex, and speed up for the easy or simple.

With difficult or complex ideas, slow down. Use silence and pausing to allow the audience to think about what you have said or shown them. The same applies with the use of visuals. Some visuals (for example, pictures) can be processed very quickly, while others, such as diagrams, charts and animations, are more complex and require more time. Audience behavior (non-verbal cues) can tell you if your conceptual pace is too fast, or too slow. Watch them and modify your pacing.

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