



PROJECT
MANAGEMENT
TRAINING SCHOOL
INSTITUTE

Adult Training Guidelines

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The Value of Project Management

Reinventing the wheel is waste of resources.
But when project teams lack the blueprints to replicate success - and avoid repeating mistakes - they have no choice but to start from scratch.
Going back to drawing board is more than just inefficient.

It also reduces a project's chance of success. Organizations that have formal knowledge transfer processes in place also are more likely to delivery projects on schedule (59% versus 41%) and on budget (62% versus 48%)

source: PMI's 2015 Pulse of the Profession: Capturing the Value of Project Management.



Topics

Training Definitions

- Training Theories
- Learning Styles

Training Plan

- Needs Assessment
- Learning Objectives
- Course Structure

General Considerations

- Pedagogy vs Andragogy



Training Definitions



What is Training?

Training is a form of education

- To develop abilities, gaining new knowledge
- To acquire new skills, employing creative methods of problem-solving

Training is based on a participatory approach

- sharing and exchanging knowledge and problems
- adopting optimal solutions to common issues

Individuals involved

Trainers communicate ↔ **Trainees participate!**



How to Teach?

- To train
- To educate
- To teach
- To instruct
- To inform
- To influence
- To motivate
- To ...
- **To whom?**
- **When?**

**Not the
same!**



How to Learn

Life is a “Teacher”

- On-the-job
- Self study
- Mentoring
- Coaching
- Counseling
- **Classroom training**
- **e-Class training**
- **Online training**
- Meeting
- Work-shop
- Swap-shop
- **and Practice**

=>

Someone teach => Others learn

LISTENING
LISTENING
LISTENING
... and
Understanding



Adult Learning Theory

Effective training principles:

- **Relevant** - Adults learn best when they see the relevance of the taught concept to their experience
- **Engaged** – The adult learner retains knowledge and concepts more readily if they are engaged in the process of discovery and exploration
- **Active** – Adults would retain and apply knowledge more effectively if they worked to discover the content, and then were able to practice its application in a simulation or scenario
- **Learner-centered** – The emerging intent of police academy training is to produce the most effective outcomes possible; to see students apply classroom skills in a real-world setting

The focus on the learner acquiring knowledge, is a critical step in effective training

Source: Malcolm Knowles - *The Modern Practice of Adult Education – Andragogy versus Pedagogy* (1970)



Instructional Systems Design

The most appropriate way to

- Move the current state to an intended different future
- Address deficiencies in conduct training
- Train in a manner that is systemic and replicable by others

Dominant Methodologies:

- ✓ **ADDIE** (Analysis, Design, Develop, Implement, and Evaluate)
- ✓ **CRI** (Criterion-Referenced Instruction protocols)

Not mutually exclusive

Teachers assess the best model for their specific setting

A further theory is for in-depth presentation of

- ✓ **Understanding by Design (UbD)**
 - The meaning of “**understanding**” as an outcome of training
 - What the learner should “**know and be able to do**” at the conclusion of the training efforts.



Multiple Intelligences

Levels of “intelligence” (we use one or two for the most effective learning)

- **Musical** - sensitive to pitch, melody, rhythm and tone
- **Spatial/Visual** - understanding relation between images and meaning
- **Bodily kinesthetic** - full use of body (dancer or athlete) eye and body coordination; manual dexterity
- **Intrapersonal** - possesses the ability to access one’s emotional life to understand oneself and others; understands need for change in relation to the environment
- **Interpersonal** - connected to the intricacies and subtleties of the world around them; understands the relationship between people and their environment or situation

Traditional teaching focuses on two intelligences only:
verbal/linguistic and logical/mathematical

Source: Gardner, Howard. (1999). Intelligence Reframed – Multiple intelligences for the 21st century



Types and Levels of Learning

Major categories: *verbal information, intellectual skills, motor skills, cognitive strategies and attitudes*

Conditions to develop a cognitive process for the planning and delivery of training :

- Gaining attention of the learner
- Informing learners of the objectives of the instruction
- Stimulating recall of prior learning
- Presenting the stimulus (causing the “need to learn”)
- Providing learning guidance (exit directions, process management)
- Eliciting performance (learning activities)
- Providing feedback (dialogue, questions, prompts to critical thinking)
- Assessing performance (both in the moment and end-state)
- Enhancing retention and transfer

Source: Gagne, Robert. (1992) with Leslie Briggs & Walter Wager. Principles of Instructional Design



Experiential Learning

The four-stage cycle of experiential learning is:

- 1. Concrete experience (CE) – (feelings, kinesthetic responses)**
- 2. Reflective observation (RO) – (watching, analyzing)**
- 3. Abstract conceptualization (AC) – (critical thinking)**
- 4. Active experimentation (AE) – (doing)**

People prefer a single learning style

The style emerges through a process of child and adult experiences which results in preferences regarding whether we wish to “**do**” or “**watch**” and at the same time whether we wish to “**think**” or “**feel**.”

Source: Kolb, David. (1983). Experiential Learning: Experience as the source of learning and development



Kolb: Experiential Learning Theory

David Kolb published Experiential Learning Theory (**ELT**) in 1984, along with a Learning Styles Inventory (LSI) building on the work of

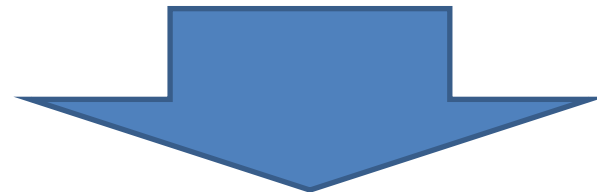
- **Carl Rogers**
- **Jung** and
- **Piaget**

ELT is closely related to theory on **Multiple Intelligences** in that all acknowledge the differences amongst individuals as they seek to construct an understanding of their internal and external environment



Kolb's Learning Styles

- ✓ Diverger (CE/RO) – feel and watch
- ✓ Assimilator (AC/RO) – think and watch
- ✓ Converger (AC/AE) – think and do
- ✓ Accomodator (CE/AE) – feel and do



[More details on Kolb's Theory](#)



Honey and Mumford' s (1986) 'Learning Styles Questionnaire'

- A pragmatic perspective
- A **questionnaire** on practice teacher programs
- It builds on the earlier work of Kolb to identify **preferred ways of learning among adults**
- Four preferred learning styles are identified by **Honey and Mumford (1986)**
 - 1. Activists*
 - 2. Reflectors*
 - 3. Theorists*
 - 4. Pragmatists*



Honey and Mumford' s (1986) 'Learning Styles Questionnaire'

Activists

- They prefer '**here and now**'
- They enjoy the challenge of new experiences but become bored with implementation and consolidation
- They are quick to move into action and enjoy activity centered around themselves
- A student with this preferred learning style is likely to benefit from '**hands on**' **practical experience** at an early stage of a practice placement

Reflectors

- They observe and evaluate situations from a range of different perspectives before reaching a definitive conclusion
- They draw upon a wide perspective and look at the past as well as the present
- They are cautious and seek the observations of others as well as their own before they act
- A student with this preferred learning style is likely to benefit from **learning experiences being introduced at a slower pace**
- Observing others conducting interviews, appearing in court etc. could offer appropriate opportunities for learning



Honey and Mumford' s (1986) 'Learning Styles Questionnaire'

Theorists

- *They integrate observations into complex but logically sound theories*
- *They think through problems in a vertical, systematic manner and assimilate disparate facts into coherent theories*
- A student with this preferred style of learning is likely to **benefit from a logically coherent learning package where connections between the differing learning opportunities are clearly established**

Pragmatists

- *They enjoy trying out new ideas and theories and testing out how they can be applied in practice*
- They like to act quickly and adopt a practical, problem-solving approach to situations. A student with this preferred learning style is likely to benefit from **learning experiences where theoretical understandings are linked directly to the process and outcome of the work undertaken**



Teachers Teaching Styles

1. **Expert** - the expert passes knowledge and skill to the students
2. **Formal authority** - where the status among the students due to knowledge and role as a faculty member sets rules and structure to students
3. **Personal model** – the main instructor normally oversees, guides and directs the students
4. **Facilitator** - the instructor is working with the students on consulting basis asking questions, exploring options and providing alternatives
5. **Delegator** - the instructor is only available as a resource person. This style will develop the students as autonomous learners

(Yazici, 2005)



How to Identify Your Style?

Choose your style, between:

- What I **hear**, I *forget*
- What I hear and **see**, I *remember a little*
- What I hear, see, and **ask questions about or discuss with** someone else, I begin to *understand*
- What I hear, see, discuss, and **do**, I *acquire knowledge and skill*
- What I **teach to another**, I *master*

(Silberman, 1996)



FACTORS AFFECTING LEARNING

Learning is not an automatic process. Factors affecting learning could be:

- Learner feels he or she is at least as competent in the subject matter as the instructor.
- Learner resents authority figures such as the instructor.
- Learner is fearful of being seen as inferior or of being embarrassed.
- Learner is anxious.
- **Learner has had a bad learning experience in the past.**
- **Learner comes to the session with other problems on his or her mind and is unable to focus.**
- **Learner is in class against his or her will and resents this.**
- **Learner is interested in the material but is constrained by time and focused on other priorities.**
- Learner has personal barriers or biases to learning about the topic.
- Learner has culturally based inhibitions to discussing or learning about the topic.
- Learner focuses on an annoying mannerism of the instructor.
- Learner is uncomfortable with the learning technique being used; this is common when learners are being introduced to technology for the first time.



Building a Training Plan



Training Plan

A Training Plan shows:

- The structure of training content designed to meet specified objectives
- It defines contents and sequences of training in order to provide direction to the learning
- It is useful to map trainee progresses
- It consists of programs, courses, modules or other units of training
- It involves training centers, companies and other community locations



How to Develop a Training Plan

1. Identifying Units of Learning
2. Producing Unit Objectives
3. Determining Training Sequence
4. Identifying Tools, Type of Training & Duration
5. Identifying Appropriate Assessment

**Based on the Assessment of
Training Needs**



Training Plan Purpose

- **Training Plan** is based on Participants' knowledge and their abilities to acquire new information
 - Sharing experiences and analyzing progresses
- Participants can learn through practice
- Participation is voluntarily, taking responsibility for skills and knowledge to be acquired

Success depends on participants' involvement



Needs Assessment

- Needs assessment help to uncover gaps between current situation and desired or necessary situation
- ***Current Situation Analysis***
 - Present skills, knowledge, and abilities of the audiences
 - Specific organizational goals
 - Internal and external constraints
- ***Desired Situation Analysis***
 - Necessary standards for change, and skills, knowledge, and abilities needed to be compliant
 - Desired or necessary conditions for organizational and personal change
- **Actual needs and Perceived needs**
 - Needs, purposes, and objectives of the training plan



Needs Assessment

- 1. What do the organization want or expect from the training?**
- 2. What materials are already available?**
- 3. What do the participants know of the matter?**
 - Has a needs assessment already been done?
 - *Can we meet some participants to assess their training needs?*



Needs Assessment

4. What documentation we can access?

- Reference materials to be consulted?
- Previous courses agendas or feedback?
- What literature should be addressed?
- What resource materials might be consulted?
- Materials already available?
- Local experts usefully consulted?
- **The facilitator's perspective after preparing for the course?**



Needs Assessment

5. What are the goals and objectives of the training plan?

- Desired changes in knowledge, skills and attitudes of the participants?
- How to assess whether the goals/objectives have been achieved?
- Which deliverable are to be produced?



Course Goals and Objectives

- **Clear goals statement** introducing what to deliver
 - *Why a participant need to follow this training*
- **Identify the training objectives**
 - Needs assessment and the general goals statement
 - They are the central focus for the preparation,
explained clearly to the participants

Clear objectives facilitates the selection of the appropriate content and structure of courses



Learning Objectives

- ***Cognitive***
 - What participants perceive, comprehend or remember
 - Participant receive information and develop knowledge
- ***Affective (attitude)***
 - What participants feel, value, become committed to or enthusiastic about.
 - Participants will be involved in the issue of the course
- ***Behavioral***
 - What participants will be able to do, perform, demonstrate, use or explain
 - Participants will acquire or reinforce skills

knowledge + skills + attitudes = appropriate behavior



Criteria For Developing Learning Objectives

- Relevant to the participant's needs
- Consistent with the overall learning goals
- Consistent with the knowledge and skills of the trainers
 - Stated in behavioral terms and clear language
- Narrow, specific and measurable
- Achievable within the time of the training
- Achievable in terms of learning resources
- Incorporate varied and interactive training techniques
- Flexible and adaptable to participants' needs
- Suitable for evaluating learning results



How to Write Learning Objectives

- What they intend to produce on trainees:
 - goals and objectives
- How are they going to approach it:
 - content, methods and materials
- How will they know if they have succeeded:
 - monitoring and evaluation

Content - A sequenced list of topics to be covered with an amount of time for each topic

Methods - A parallel list of methods should be used in covering the content of each topic

Materials - A parallel list of materials and services for each topic



General Guidelines 1/2

- Be specific in addressing participants' needs
- Don't divide the time between all topic areas
 - *Each topic should only be given the amount of time it will take to adequately cover the important points*
- More complex information should be introduced only after the first break
- **Spend more time on some topics if needed**
(as the audience reacted)



General Guidelines 2/2

- **Be prepared for unexpected questions and problems**
 - *Prepare general time guidelines, but be flexible*
- Show the training plan during the training session
- Restate training plan and training objectives as need
- Prepare usable written materials
- **Involve the participants as early as possible**
 - *It could be difficult to sit and listen to a presentation for many hours*
- Consider the team approach for a better planning course structure
 - *Involve 2-5 training specialists and facilitators for a coherent course*



Course Structure

- 1. Introduction and Acquaintance**
- 2. Problem Identification**
- 3. Sessions and Exercises**
- 4. Closing Exercises**
- 5. Closing Course**
- 6. Evaluation of the training**



Course Structure

1 - Introduction and Acquaintance

- Introduction of the training team
- Introduction to training topics
- Training methods for the course
- Introduction of participants
 - **Why participants com to this course**
 - **What knowledge they need have**
- **Initial Participants Assessment**
- Training schedule
- Guidelines exercise



Course Structure

2 - Problem Identification

- Determine the terminology to be used
- Lead the group into a discussion of the main issues

3 - Sessions and Exercises

- Topics by module or sessions
- Exercises

4 - Closing Exercises

- Final exercise and eventually an evaluation

5 - Closing Course

- **Final Participants Assessment**
- Participants feedback



Course Structure

6 – Evaluation of the training

- Determine to what extent it was effective
- Determine needs for correcting the content of the course
- Stimulates the generation of new ideas
- Establish to what extent the preliminary objectives were met

Evaluation provides indicators to alter participants practices

- It is important collect feedback on the effect of training on the actual behavior at work of participants

Use questionnaires or surveys

- Written forms are useful for the purposes of documentation and continuity for materials to be used by more teachers



Effective Balanced Classes

An effective balanced course includes:

- **60% topic presentations**
- **20% exercises**
- **20% discussions on topics or exercises**
- Learning Objectives need be recap at conclusion of each module or topic
- Attendants need be free to make questions at the end of each module or topic
- Teacher needs invite attendants to make questions to promote the discussion of each topic

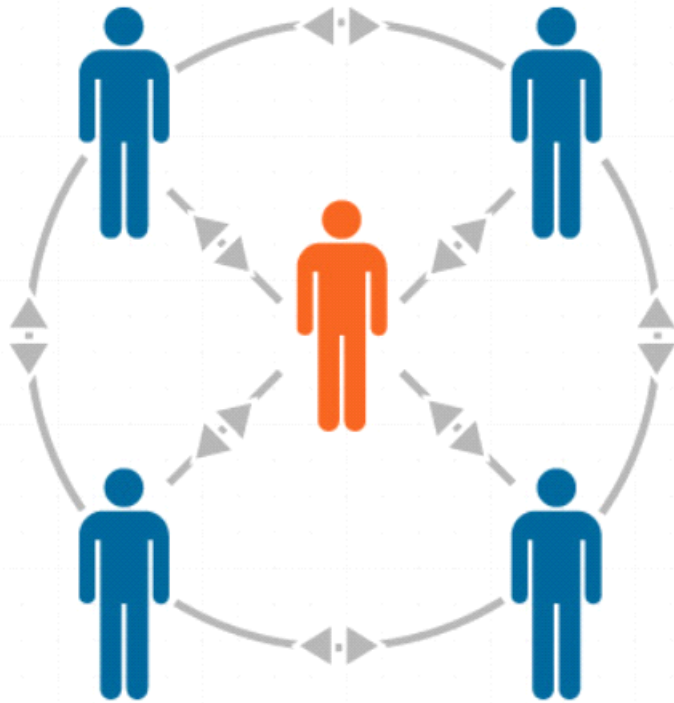


General Considerations



Pedagogy and Andragogy

ANDRAGOGY



Pedagogy - Child-Leading
(the art and science of teaching children)

Since Ancient Greeks

Andragogy - Man-Leading
(the art and science of teaching men)

Since 1833 by Alexander Capp a German educator

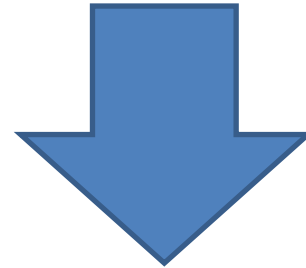
Focus on the Art of
Adult Learning

Source: <http://elearningindustry.com/the-adult-learning-theory-andragogy-of-malcolm-knowles>



Children and Adults

- **Children** are viewed as empty vessels for knowledge with little real world experience
- **Adults** have great deal of accumulated experience that can influence their education
- **Adults** compare and contrast new knowledge against past learning and their habits
- Lets see some differences



Children vs Adults

Children	Adults
Rely on others to select what to learn	Decide for themselves what is important to be learned
Accept the information being presented at face value	Need to validate the information based on their beliefs and experience
They learn for their long-term future	Expect what they are learning to be immediately useful
Are relatively “clean slates”	Have much experience upon which to draw – may have fixed viewpoints
Little ability to serve as a knowledgeable resource to teacher or fellow classmates	Significant ability to serve as a knowledgeable resource to trainer and fellow learners



Learning Components

- ✓ **Cognitive** - what the student should learn
- ✓ **Affective** - motivate the student to learn
- ✓ **Meta-cognitive** -how to learn, identify and correct areas of deficit



Principles of Adult Learning

- Apply what is learned shortly after learning it
- Emphasize learning concepts and principles over facts
- Attendees participate in setting own learning objectives
- Attendees use feedback to evaluate their own performance



Learning Styles

- There are many learning styles
- Each one of us has his preferred style
- The more common styles are:



☐ **Visual Learners**

☐ **Auditory Learners**

☐ **Kinesthetic Learners**



Visual Learners

Visual learners generally think in pictures

- They prefer to see things
 - Written,
 - text,
 - PPT slide
- They prefer to see
 - maps, graphs, charts,
 - and other visual learning tools
- They remember things by **seeing something**



Auditory Learners

Auditory learners learn best by listening

- They typically like to learn through
 - lectures,
 - discussions, and
 - reading aloud
- They remember by hearing or saying things aloud



Kinesthetic Learners

Kinesthetic or Tactile learners learn by

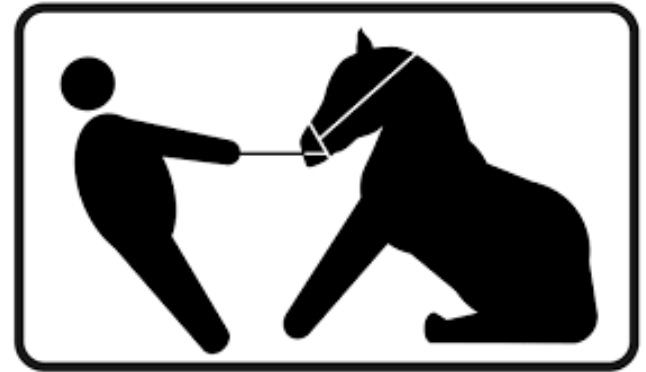
- Touching
- Feeling
- Experiencing what are trying to learn
- They remember by **writing** or physically **manipulating** the information



Teaching Adults

How to gain adult's attention:

- Understanding how they learn
- Pay attention to special needs
 - Consider adults' needs, insights, skills and habits in place
- Consider “passive”
Resistance to Change



“A lavare la testa all'asino, si perde acqua e sapone”



How Trainer Can Help

Motivate adults to learn (without forcing)

- They learn effectively if they want:
 - To develop a new skill
 - To acquire new information
 - To fulfill inner desires
 - To improve professional competence
- Adults learn, if they consider useful what they hear
 - Most ask to attend training classes to learn new things
 - Other are there, because are invited to participate
- In both cases, they need to buy the value of the training they will receive



How Adults Learn

Adults prefer practical approaches to learning

- Immediate applicability - problem and task oriented
- **They want to** understand changes impacting their profession
- **They don't want to** learn information for future use
- Successful adult learning must relate to a lifetime of experiences.
- **If it does not fit in with what they already know, they**

**They learn if they perceive a connection
between the training and their goals**



Training Involvement

- Adults retain more knowledge if they practice what they learn
- Involving them in training means an environment where attendees can support each other and receive feedback
- The more a training deals with real-life issues, the more it reinforces the feeling that **“learning can be useful”**



What limit Adult Learning Process

- Adults have no time to be engaged in learning
 - They are absorbed by day-to-day tasks
 - The time they spend in training is an investment
- Adults see the trainer as a resource for information
- An adult's willingness to learn is not related to his/her ability to learn
- Adults do not view themselves as learners
 - they are parents, spouses, breadwinners, and/or professionals
- People do things for their own reasons



Theory Into Action

- Plan events to take advantage of participants' intellectual, social and cultural resource
- Assess the makeup of participants to determine how to design and deliver training, looking at:
 - Familiarity with the topic
 - **Resistance to learning**
 - Expectation levels
 - Outside classroom commitments
 - **Motivation to learn**
 - The likelihood of participants using the training immediately personally or in their profession



How to Teach Adults 1/2

Create a comfortable learning environment

- **Emphasize the training's applicability**
 - Practical examples
 - Role play
 - Practice activities that help to apply the new information
 - Relate training to their needs
 - The material must be intended for direct and immediate application
 - Start from concepts familiar to the participants
- **Keep them actively involved**
 - Adults have low tolerance for sitting and listening
 - After a major point, ask participants to think how it could relate to their job
 - Vary the presentation of information and help participants understand the meaning of the new knowledge or skills
- **Encourage them to share ideas and information**
 - Explain the information and encourage and answer questions
- **Get feedback, reinforcing the positive and redirecting the negative**
 - As learning is an act of changing, give them feedback on how they are doing



How to Teach Adults 2/2

Provide opportunities to practice what is learned

- Co-presenters
- Visual aids
- PowerPoint
- Diagrams of key concepts
- Guide note-taking
- Encourage and use questions and provide answers
- Encourage group discussion
- Use brainstorming
- Involve learners through written participation
- Use role-plays or simulations
- Use case study or practical examples
- Structure a lecture to solve a problem
- Prepare supplementary handouts
- Guide follow-up and summarize
- As a trainer, be prepared with optional activities and strategies to incorporate as your training progresses in response to participants



Adult Learning Assumptions

✓ Immediacy

New information and skills to solve immediate challenges

✓ Self-direction

Identify their learning needs and pace themselves

✓ Experience

Reservoir of experience and insight

✓ Motivation

Motivated to learn rather than dependent upon external motivation



Role of Trainers

- **Trainers are not entertainers**
- They are professionals who are tasked with providing accurate, quality information so that learners can perform their jobs effectively once they leave a training program
- It is the learners' responsibility to pay attention
- They should not expect a trainer to motivate them to listen and learn

Training is not a Show



Thank you

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