

# QQI Training Needs Identification and Design

## Course Introduction



**Damian McCourt**

# Welcome!

In this introductory module:

- Course aims, objectives and outcomes
- Course structure
- Overview of QQI level 6 training awards
- Overview of course assignments



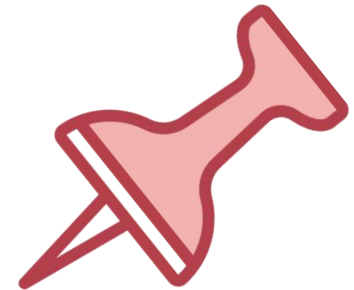
# Course aims

The aim of this training is to equip the learner with the knowledge, skills and competencies to:

- Identify** and describe individual and organisational training needs
- Apply** recognised design and learning theory to the creation of training
- Use** these skills to create effective organisational training programs

# Course objectives

- Identify the organisational and environmental factors that impact training development
- Apply learning theory to the design of training
- Take account of adult learning characteristics and motivation in training design
- Gather and analyse training needs data
- Create a Training Needs Analysis report
- Use Instructional Design models to create a training programme
- Design training materials including slides, manuals and handouts

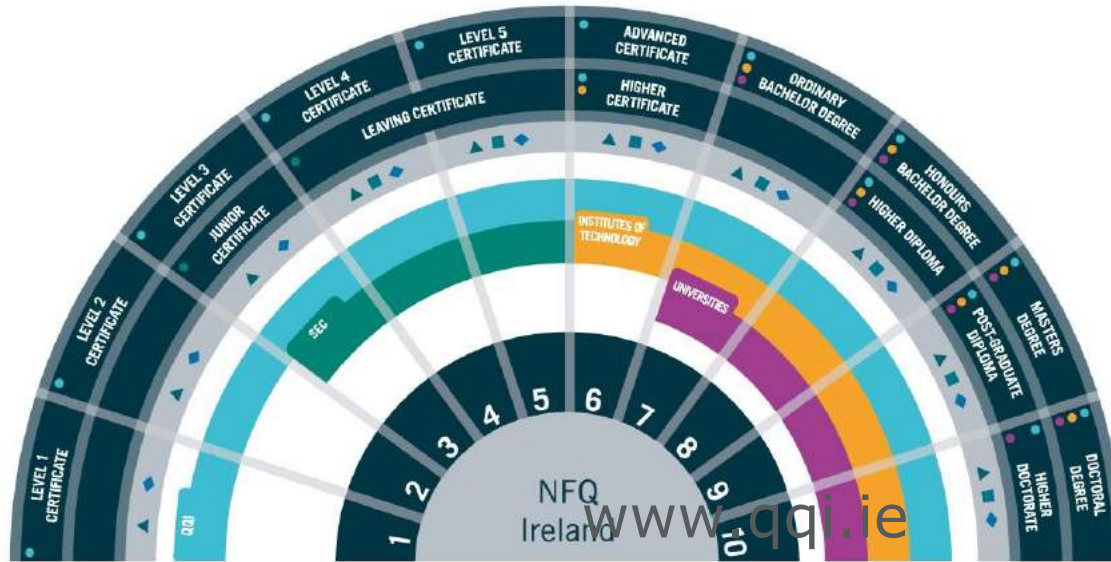


# Course Structure

Five broad areas of learning:

1. Training and Development in the Organisation **Module (2 to 6)**
2. Instructional Design in Training **Module (7 to 11)**
3. The Adult Learner **Module (12 to 15)**
4. Analysing Training Needs **Module (16 to 19)**
5. Planning and Designing Training Programmes **Module (20 to 34)**

# QQI Level 6 Training Awards



# QQI Level 6 Training Awards

**Training Needs Identification & Design (6N3325)**

Training Delivery and Evaluation (6N3326)

Complete both to be awarded:

Special Purpose Award in Training & Development (6S3372)

# Assignments!

- Assignment: 40% of total mark, 2,500 words
- Essay-type questions on course content
- Application of analysis tools to your current (or a past) organisation



# Assignments!

- Project: 60% of total mark ? words
- Practical application of the learning
- Create a training needs analysis
- Design and create materials for a short training programme

# Assignments!

- Pass:** 50% to 64% Show you know the material
- Merit:** 65% to 80% Apply it to real-world issues
- Distinction:** 80% + Deep understanding, research outside the coursework, written and presented professionally

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**Learning, Training,  
Development and  
Education**



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# In this module

Understanding the different types of knowledge acquisition:

- Learning
- Training
- Development
- Education



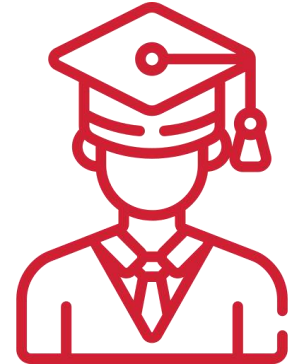
**LEARNING**



*A change in behaviour brought about by  
experience or practice*

# Learning

- Can be through training and education
- But also life experiences, observing others' behaviours,  
learned responses to events
- Learning is a lifelong experience
- Andragogy – the study of adult learning





# Learning

- Happens constantly, not always a deliberate choice!
- Not always correct! Based on personal experiences
- Qualitatively different in childhood and adulthood
- Adults bring a wealth of prior learning into training sessions

# Learning

- Lots of different theories of how humans learn
- **Module 14: Introduction to learning theory**



**TRAINING**



*Teaching skills, knowledge or attitudes that  
relate to specific competencies*

# Training

- Specific objectives, measurable outcomes
- Increased performance, capability, capacity, productivity
- In TNID, training is about teaching skills and knowledge to enable the learner to perform their current role



# Training

- Role-competency training often viewed as essential by staff
- "Give me the knowledge and techniques to do my job"*
- May have to unlearn existing methods or habits
- Requirements developed from task and job descriptions
- Module 18: task and competency analysis**



**DEVELOPMENT**

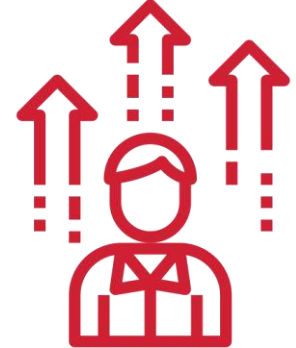


*The provision of new skills and knowledge  
to increase personal capability*



# Development

- “Enable me to do new things”
- Personal development is the main workplace motivator
- Module 15: Motivation theories in training**



# Development

- Development is outside a learner's comfort zone
- Can require a different approach to training design
- Must have the opportunity to apply new skills at work
- Can be more challenging to fund development
- Module 5: Organisational Barriers to Training**



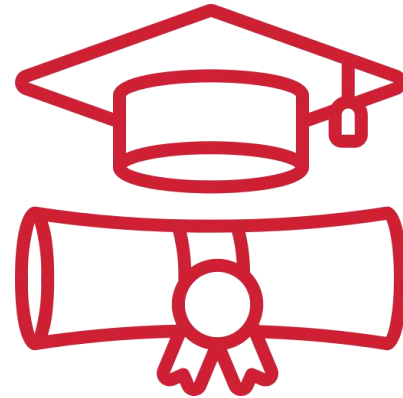
**EDUCATION**



*The process of facilitating the acquisition of  
knowledge, skills and beliefs*

# Education

- A structured environment for learning
- Montessori schools to third level education
- Widely recognised qualifications



# Education in TNID?

- Training needs analysis may indicate
- a need for education rather than training
- May be the most cost-effective option
- Formal education perceived as high value
- Perk / investment in staff

# Definitions

- Learning, training, development, education  
often overlap
- QQI uses a structured educational framework
- This topic may be training or development, depending on  
your current role
- You may be learning that you don't like video training 😊

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## Training and Development Roles



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# In this module

Training and development roles in the organisation:

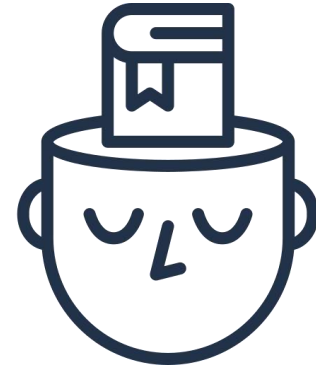
- The learner
- The trainer
- Organisational supports and inputs
- Assessment, verification and authentication



# **THE LEARNER**

# The Learner

- Potentially anyone in your organisation
- Learning is generally a strong motivator
- Adults are busy, distracted, experienced
- Results-oriented
- Require a distinct approach when designing training





# **THE TRAINER**

# The Trainer

- The person who delivers training
- Competent in their area of expertise
- Excellent communicators and listeners
- People and group management skills
- Patient, well-organised and adaptable



# The Trainer

- Many organisations: handles everything related to training
- Analysing training needs
- Designing and evaluating training
- Proactive in the organisation**



# **ORGANISATIONAL SUPPORTS**



# Organisational Supports

## The Learning and Development Team

- Develop and implement learning programmes
- Manage budgets and vendor relationships
- Maintain organisation-wide role / task descriptions
- Investigate and integrate learning technologies
- Advocate for training and development



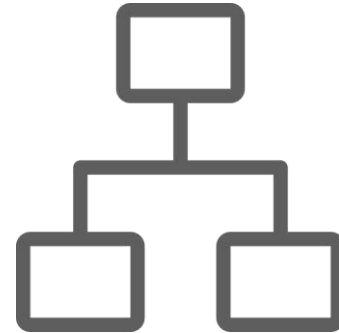


# ROLES

# Roles: Assessment

## Assesses learner performance in training

- Marks exams, grades projects
- Technical expertise, familiarity with assessment criteria
- Consistent, objective
- May involve on-the-job assessment



# Roles: Verification

## **Verifies the learner assessment process**

- Were assessment procedures adhered to?
- Were marks awarded correctly?
- Was marking consistent across learners?
- Manages the framework for assessing learners

# Roles: Authentication

## External confirmation of assessment processes

- Independent confirmation of fairness and consistency
- Adherence to industry standards
- Appeals processes
- Sampling

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# Organisational Inputs To Training



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# In this module

Where do training requirements come from?

- Individual training needs
- Organisational training requirements
- Organisational change
- Legislation and industry standards
- Competitors / markets





# **INDIVIDUAL TRAINING NEEDS**

# Individual training needs

- Job and task descriptions
- Cross-skilling within teams
- Performance reviews
- Personal development plans
- Training to address performance gaps

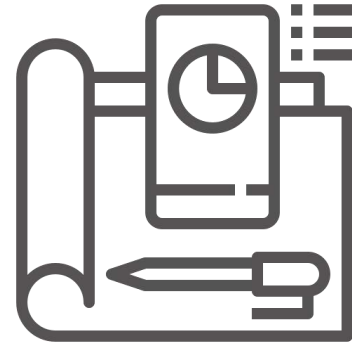




# **ORGANISATIONAL REQUIREMENTS**

# Organisational requirements

- Strategic plans
- Culture-specific training
- Gap analyses
- Module 6: Mission, Values and Training**

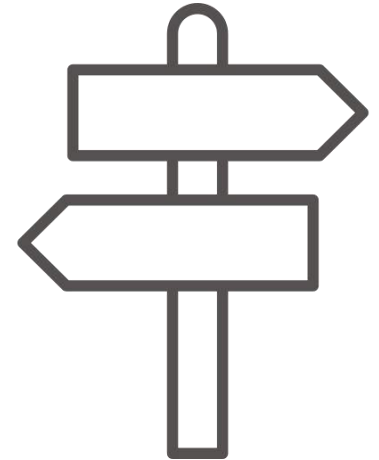




# **ORGANISATIONAL CHANGE**

# Organisational Change

- Change is the only constant!
- Usually through project / program management
- Project plans: training requirements plans
- Proactive engagement with project managers
- Training and development as stakeholders
- Issues with ad-hoc organisational change





# **LEGISLATION & STANDARDS**

# Legislation & standards

Huge variety of legislation-led training requirements:

- Health and safety
- Finance
- Data protection
- Employment law
- ...





# Legislation & standards

Industry specific standards and legislation:

- Research
- Food safety
- Working with children
- Hazardous materials
- EU manufacturing standards
- ...



# **COMPETITORS & MARKETS**

# Competitors & markets

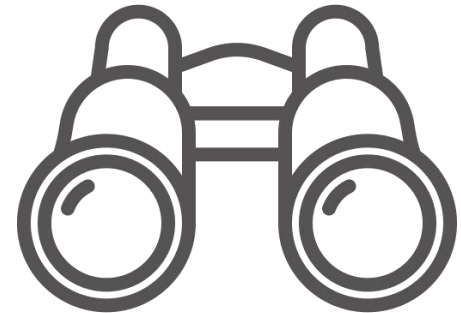
Competitor-driven changes:

- Training producing or supporting new products
- New ways of working
- Customer-facing training
- Accessing new markets

# Competitors and markets

Training driven by markets, social and technological change:

- Sales training (e.g. digital marketing)
- Diversity training
- Covid-19 training
- Social media training
- ...



# Measurement?

- Modules 16 to 20!**
- Gap analyses
- Job, task and competency analyses
- PESTLE analysis
- ...

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# Organisational Barriers to Training



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Barriers to training in the organisation:

- Measurement, attitudes and communication
- Staff turnover
- Workload
- Cost
- Facilities





# **ATTITUDE TO TRAINING**

# Attitudes to training

- Training (understandably) seen as an organisational cost
- Especially if benefits aren't immediately visible
- Training design has to include success measurements
- Feedback forms – how the training was perceived



# Attitudes to training

- Tests – how well the facts were learned
- Behaviour – how well the training was put into effect



# **MEASURING TRAINING**

# Measuring Training

- 6N3326 – Training delivery and **Evaluation**
- Module 24 of this course**
- Kaufman's training evaluation model
- Cost of implementing training and efficiency of design
- Measurable benefits to the organisation
- Cost/benefit analysis model for training



# Measuring Training

- Training costs!
- Time spent on TNID!
- Resources, time for everyone involved
- Time spent training is time spent not working
- Benefits of training are seldom measured accurately



# **TRAINING COMMUNICATION**

# Training Communication

Training and development team must be proactive in communicating with the organisation:

- Training requirements
- Training benefits
- Measurement of benefits in the workplace
- Consequences of lack of training







# **BARRIERS**

# Barriers: staff turnover

- Development is *the* fundamental workplace motivator
- Gallup workplace motivation research No.1 response:

**“opportunities to learn and grow”**

- Training gives staff the tools to carry out their role
- Educate (train!) senior managers in this regard
- Training and development reduces staff turnover





# Barriers: workload

- Time spent training is time spent not working
- Work build up = stress, anxiety
- Stressed learners aren't focused on training
- Training design must take account of workload

# Barriers: workload

- Timing, duration and structure of training
- Work coverage while training
- Interruptions while training
- Collaboration with line managers: structure of training, coverage, ground rules

# Barriers: cost

- Separate issue from attitudes to training
- Training necessary but resources simply not available
- Lots of different ways of delivering training
- Module 21: delivery methods**
- Cost-benefit analysis, again!

# Barriers: facilities

- Training needs analysis: what do we actually need?
- Permanent training space: we value training!
- Test environment?
- Off-site locations: interruptions, attitude to training

# Organisational barriers to training

Demonstrating that training has value to the organisation

- Staff retention and motivation
- Measuring organisational benefits from training
- Taking account of workload, coverage, operational factors
- Costs and approaches to training delivery
- Formalising training facilities and equipment

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## Mission, Values and training



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- Organisational mission and strategic plan
- Training design implications
- A Business Case for training
- Organisational values and training



# **ORGANISATIONAL GOALS**

# Organisational Goals

Time Horizon

Function or  
Arena

Relatively  
Long

Relatively  
Broad



Relatively  
Short

Relatively  
Specific



# Goal Pyramid

- Mission: be Europe's number one recruitment company
- Strategic goal: Establish a German presence by 2023
- Operational goals:
  - Acquire offices in Berlin
  - Establish a hiring policy and structure
  - Create a training course on German workplace legislation

# Goal Pyramid

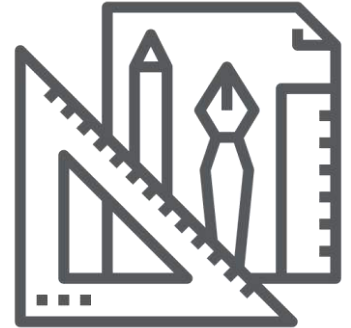
- Most training happens at the operational level...
- ...but is driven by the mission and strategic objectives
- Be aware of (involved in!) the strategy layer
- Allows you to be proactive in training design
- Ensure training aligns with the organisation's mission
- Training program design as a business project



# **TRAINING AND DESIGN IMPLICATIONS**

# Training design projects

- TNID produces unique, one-off deliverables
- Project management specifically designed for this type of work
- Business Case: tool for aligning project with organisational goals









# **ORGANISATIONAL VALUES**

# Organisational values

Values Statement?

- Diversity
- Corporate social responsibility
- Accountability, integrity, respect
- Volunteering, charity work
- Mix of internal and customer-facing values



# Organisational values

Usually translate directly to training requirements:

- Diversity training
- Corporate social responsibility training
- Interpersonal communications, emotional intelligence
- Effort here can be a valuable branding/marketing tool
- [microsoft.com/diversity](https://microsoft.com/diversity)

# Mission, values and training

- It's possible to let training requirements filter down to you
- Far more effective to be proactively involved in strategy
- Use project management to align training to business goals
- Values statements result in direct training requirements...
- ...also a promotional / branding opportunity

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# Kolb's Experiential Learning Theory



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# In this module

- Kolb's Experiential Learning Theory
- Implications for training design





# **KOLB LEARNING CYCLE**

# Kolb Learning Cycle

- David A. Kolb – American educational psychologist
- Kolb's experiential learning theory (ELT)
- Kolb Learning Cycle



Learning is the process whereby  
knowledge is created through  
transformation of experience

*David A. Kolb*



# Kolb Learning Cycle

- Theory of how humans learn naturally
- Have an experience
- Reflect on the experience
- Think about how you might change or improve it
- Test those changes (experiment)

Concrete Experience

Reflective Observation

The Kolb Learning Cycle

Abstract Conceptualisation

Active Experimentation

# Kolb Learning Cycle

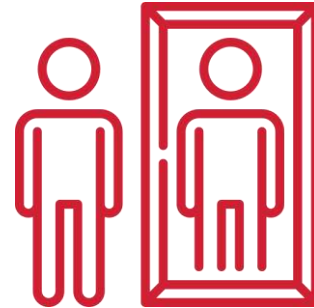
- Iterative learning (cyclic)
- Natural cognitive process – happens automatically
- Very useful to mirror this process in training...
- ...if **understanding** is a training requirement



# **IMPLICATIONS FOR DESIGN**

# Kolb in Training Design

- Have (or simulate) the experience being trained
- Allow learners to get it wrong
- Reflection & conceptualisation – discuss more efficient methods
- Experimentation – let's try them out!





# Implementing Kolb

- Props, models, interactive exercises
- Roleplay exercises, fishbowl exercises
- What-if scenarios and discussions
- Differentiated group exercises (different methods in each group)
- Videos and stories

# Keep in mind

- Understanding not always required
- Longer, more costly training
- Not always possible to allow learners to have the experience
- But can be worth putting effort into simulating it
- Organisational constraints may limit creativity

# Retraining

- Kolb is useful when retraining existing skills or abilities
- Resistance to change – my way is good enough
- Practical exercises to compare the old and new
- Highlight issues and efficiencies with both methods
- Gain buy-in to change through understanding

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## Honey and Mumford Learning Styles



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# In this module

- Honey and Mumford Learning Styles Theory
- Questionnaire and common scoring trends
- Implications for training design



# **HONEY AND MUMFORD LEARNING STYLES**

# Honey & Mumford Learning Styles

- Adapted from Kolb's Learning Cycle
- Experience – Reflect – Theorise – Experiment
- Do people spend differing amounts of time on each part?
- Questionnaire developed to test this
- Complete this now!



# Honey & Mumford Learning Styles

- **Activist**
- **Reflector**
- **Theorist**
- **Pragmatist**



# Honey & Mumford Learning Styles

- Highest scores in general tend to be Reflector & Theorist
- Consequence of methods of education?
- Sometimes scores trend by organisation or sector
- Test your organisation!



# **IMPLICATIONS FOR TRAINING DESIGN**

# Implications for Training Design

- We tend to design training that reflects our high and low scores
- Theorist / reflector – theory heavy, passive, discussion-based
- Activist / pragmatist – very hands-on, may neglect theory
- Vary training design to accommodate a variety of learning styles

# Activist

## Description

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

## Training Style

- Brainstorming
- problem solving
- group discussion
- puzzles
- competitions
- role-play

# Reflector

## Description

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

## Training Style

- paired discussions
- self analysis questionnaires
- time-outs
- observing activities
- feedback from others
- coaching
- interviews

# Theorist

## Description

These learners 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 synthesise, drawing new information into a systematic and logical 'theory'.

## Training Style

- models
- statistics
- stories
- quotes
- background information
- applying theories

# Pragmatist

## Description

These people 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 are experimenters, trying out new ideas, theories and techniques to see if they work.

## Training Style

- time to think about how to apply learning in reality
- case studies
- problem solving
- practical discussion



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# Introduction to Learning Theories



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# In this module

Introduction to influential learning theories:

- Behaviourism
- Cognitive Learning Theory
- Social Learning Theory

# Learning!

- What drives human learning?
- The environment?
- Rational decision-making?
- Other people?
- Training design draws on many different learning theories

# Learning!

## Behaviourism

Learning is driven by our external environment; we learn by responding to external stimuli

## Cognitive Learning

Learning is driven by thinking; by using the brain make observations, generalise and come to conclusions about the world

## Social Learning

Learning is driven by watching and learning from other peoples' actions, and by our interactions with other people

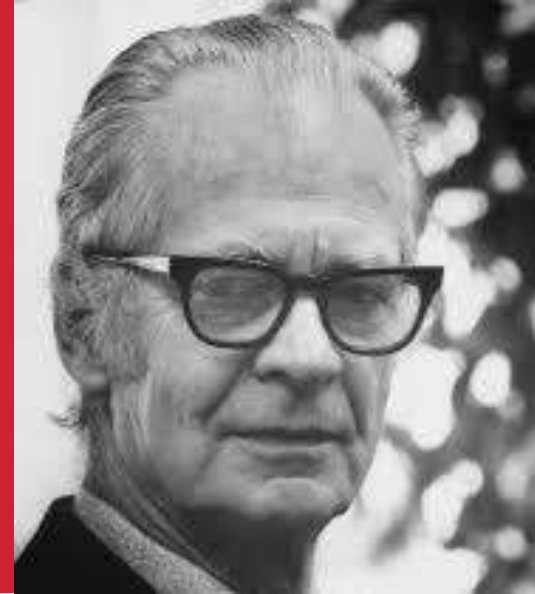


**BEHAVIOURISM**

“

A failure is not always a mistake, it may simply be the best one can do under the circumstances. The real mistake is to stop trying.

*B.F Skinner*



# Behaviourism

- B.F. Skinner
- Learning through environmental stimulus
- Internal thought processes didn't matter
- Evidence-based
- Worked primarily with animals



# Behaviourism

- External stimulus?
- Learning happens through
  - interacting with the environment
- “Conditioned stimulus”
- Learning can be imposed

# Behaviourism

**PIDGEON**

**GUIDED**

**MISSILE**



# **COGNITIVE LEARNING THEORY**

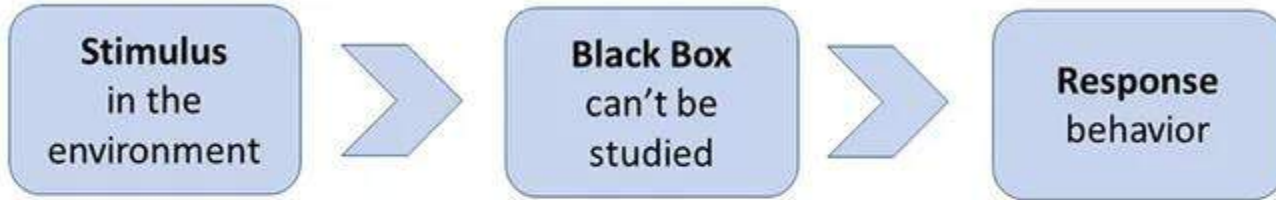
# Cognitive Theory

- Response to the constraints of behaviourism
- Helped by the advent of the computer
- Internal thought processes play a central role in learning
- These processes can be mapped and understood
- Humans as information processors

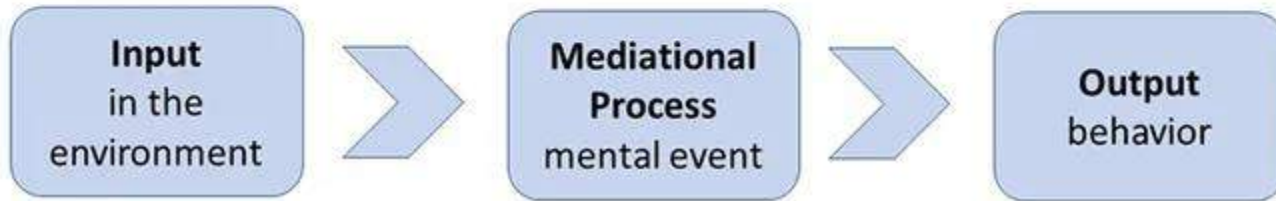


# Cognitive Theory

Behaviorist Model (only study observable / external behavior)



Cognitive Model (can scientifically study internal behavior)





# **SOCIAL LEARNING THEORY**

“

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action.

*Albert Bandura*



# Social Learning Theory

- Attention: distinctiveness, prevalence, functional value
- Observer characteristics: arousal level, perceptual set
- Retention: organisation and rehearsal
- Motor reproduction
- Motivation: self-reinforcement, external



# Training

- Bloom, Merrill, Gagne – all based on cognitive learning
- Behaviour modelling – social learning
- Applied behavioural analysis – behaviourism
- Lots of others!

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## Motivation Theories In Training



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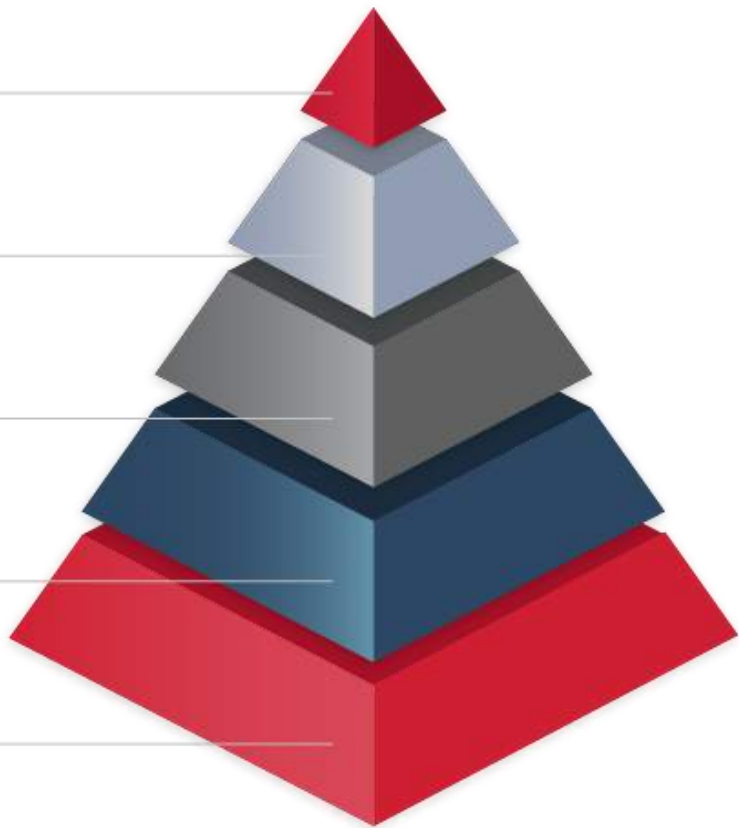
# In this module

- Maslow's Hierarchy of Needs
- Herzberg's Two-Factor Theory of Motivation
- Behavioural learning motivation
- Using motivation theory to inform training requirements
- Using motivation theory to frame training aims and outcomes



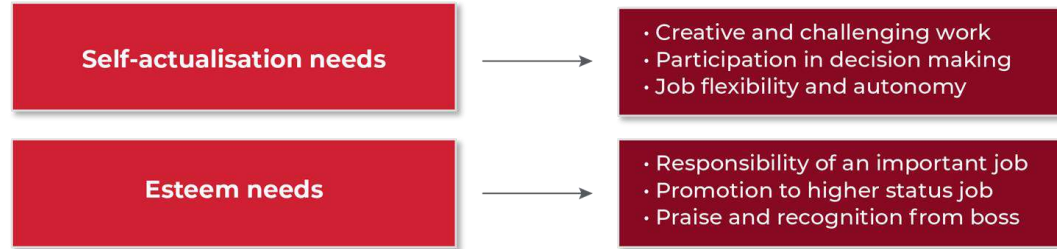
# **MASLOWS HIERARCHY OF NEEDS**

- SELF ACTUALISATION**  
Desire to become the most that one can be
- ESTEEM**  
Respect, self-esteem, status, recognition, strength, freedom
- LOVE & BELONGING**  
Friendships, intimacy, family, sense of connection
- SAFETY NEEDS**  
Personal security, employment, resources, health, property
- PHYSIOLOGICAL NEEDS**  
Air, water, food, shelter, sleep, clothing, reproduction

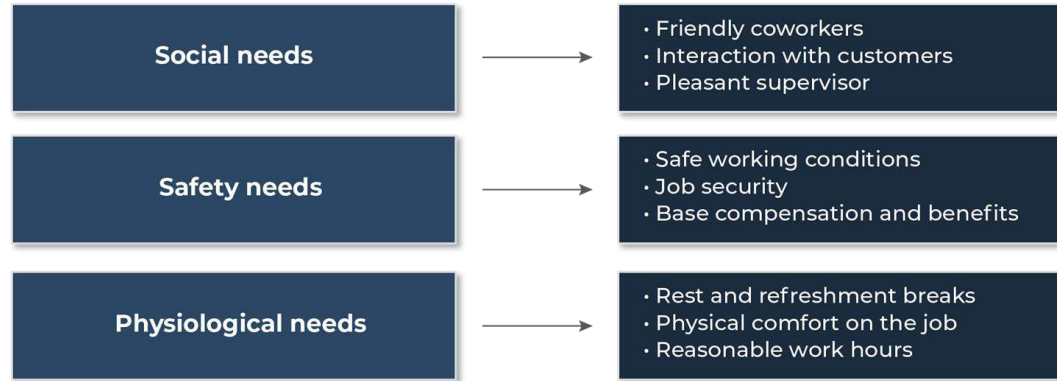


## Abraham Maslow's Hierarchy of Needs

### What satisfies higher-order needs?



### What satisfies lower-order needs?



## Abraham Maslow's Hierarchy of Needs

# Maslow

- Low-level needs need to be satisfied first
- Higher levels of the hierarchy won't motivate learners if there are unmet needs at lower levels
- Humans naturally try to work their way up the hierarchy



# Maslow: training design

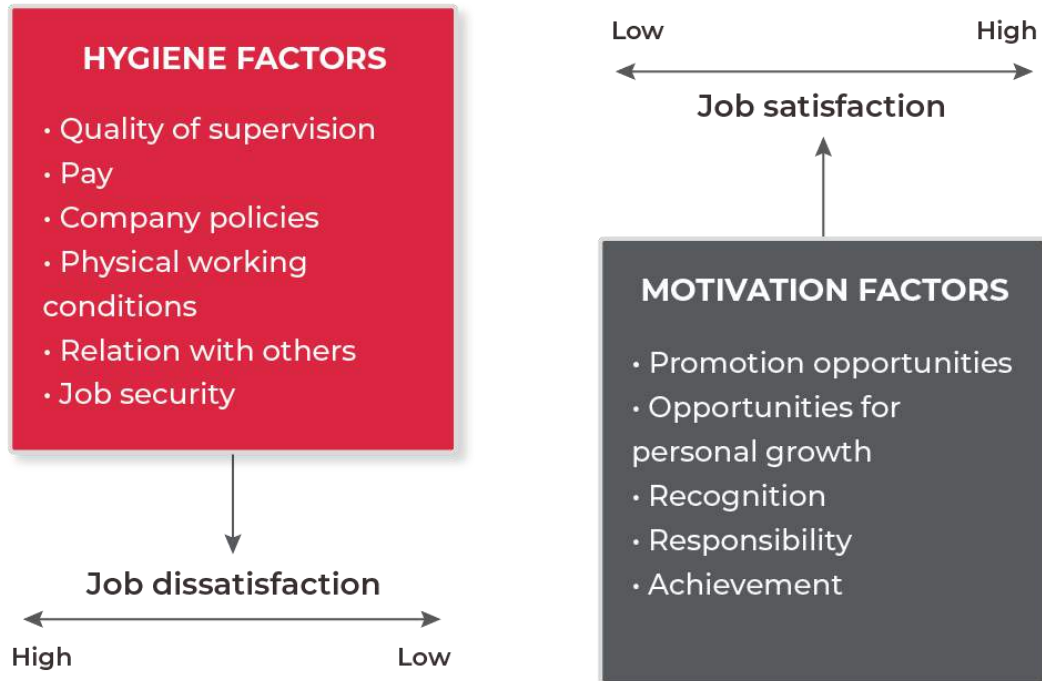
Useful guide to:

- Prioritising training requirements
- Designing the training environment
- Troubleshooting training failures
- Creating individual training plans



# **HERZBERG'S TWO FACTOR THEORY**

# Herzberg's Two Factor Theory



## Comparison of Satisfiers and Dissatisfiers



# Herzberg: training design

- Learners are motivated by growth, responsibility, recognition
- Staff value training that provides development
- 'Motivation blockers' – things that stop me doing my job
- Staff value training that enables them to fulfil their current role

# Herzberg: training design

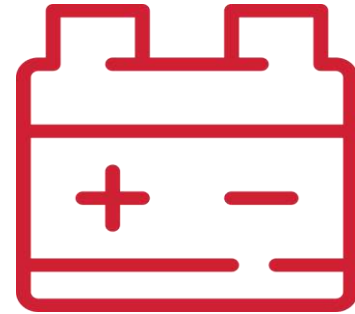
- Extremely useful for informing organisational training requirements
- Leadership training, process training
- Training itself as the productivity blocker
- Mandatory, repeat training



# **BEHAVIOURAL LEARNING MOTIVATION**

# Behavioural motivation

- Skinner's Behaviourism
- Positive and negative reinforcement
- Positive and negative punishment





# Positive and negative reinforcement

- Increasing the occurrence of a desired behaviour...
- ...by accompanying it with praise, prizes, recognition
- ...or by removing an unwanted consequence
- Focus on rewarding correct learner behaviour

# Positive and negative punishment

- Decreasing the occurrence of a undesired behaviour...
- ...by accompanying it with criticism, punishments
- ...or by imposing an unwanted consequence
- Focus on punishing incorrect learner behaviour

# Behavioural motivation

- Valid uses in training? Sometimes!
- Mission-critical training
- Training mandated by legislation or industry standards
- Reinforcement tends to work better than punishment
- Training design – highlighting organisational consequences



# **USING MOTIVATIONAL THEORY TO INFORM TRAINING REQUIREMENTS**

# Framing aims and outcomes

- Training should provide benefit to the learners...
- ...not just to the organisation
- Almost all training is transferable to some degree
- Always frame aims and outcomes in personal terms



# Framing aims and outcomes

“The aim of this training is to ensure all employees are compliant with health and safety requirements”

“The aim of this training is to give you the tools and techniques to do your job safely”

# Framing aims and outcomes

“At the end of this course you will be able to carry out the required health and safety audit procedures for your department”

“At the end of this course you will be able to carry out a workplace health and safety audit”

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# Introduction to Instructional Design



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# In this module

- What is instructional design?
- Why do we use it?
- Instructional training design
- Instructional learning design



# **INSTRUCTIONAL DESIGN**



The process by which instruction is improved through the analysis of learning needs and systematic development of learning experiences

# Instructional Design?

- Systems engineering + cognitive learning theories
- How to structure effective learning activities within courses
- How to build effective training courses

# Instructional Design?

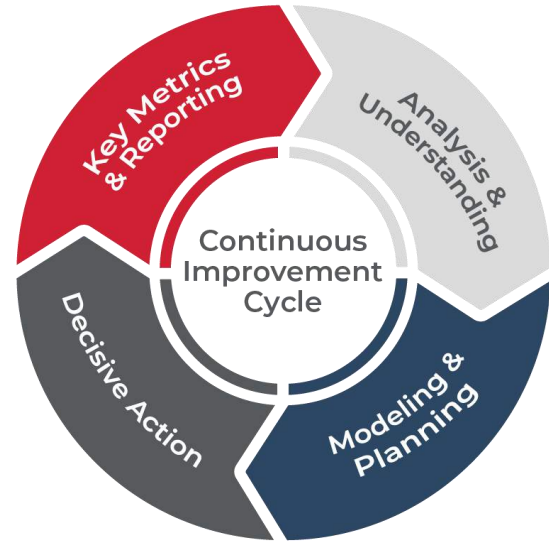
- Very easy to get training design wrong
- Involving, interesting, well-structured
- Takes account of the learner – knowledge, attitude, energy
- Achieves the learning objectives
- Achieves the organisational objectives
- Facility to measure these learning and organisational objectives

# Instructional Design?

- Lots** of different ideas about the best way to do this!
  - <https://www.instructionaldesign.org/models/>
1. Determine the needs and current abilities of the learner
  2. Define a clear learning goal
  3. Define some kind of intervention to achieve the learning goal
  4. Define a way of evaluating how successful the intervention was

# Instructional Design?

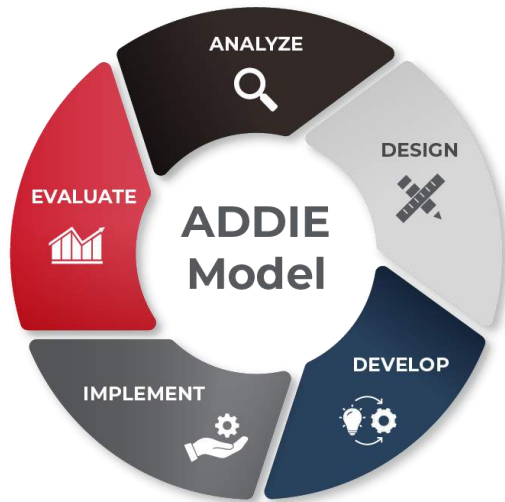
- Feed the lessons learned into future training
- Continuous improvement process**



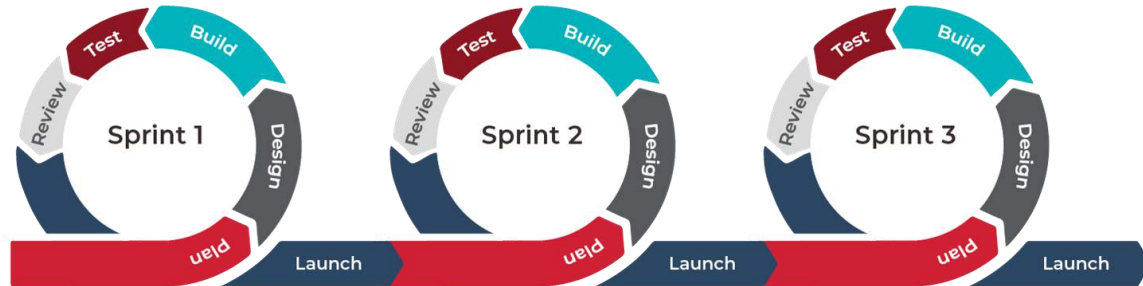


# Instructional Training Design

□ Designing the training course itself



## AGILE METHODOLOGY

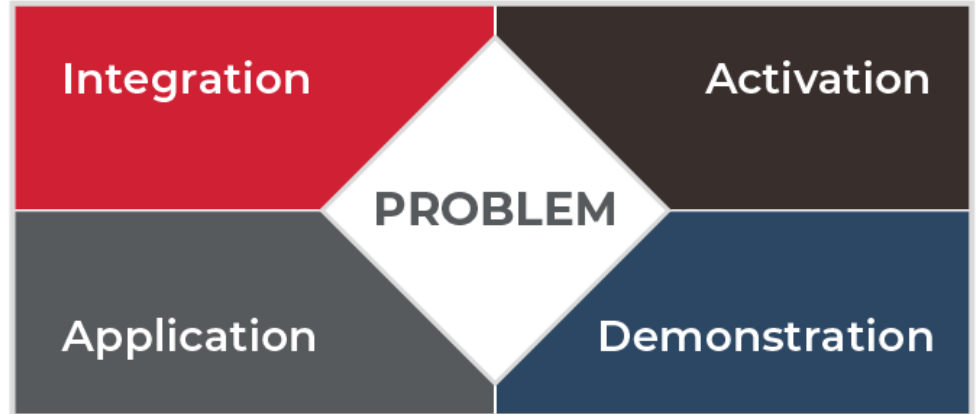


# Instructional Learning Design

□ Designing the learning experience within training

## 9 EVENTS OF INSTRUCTION

1	Gain Attention (the hook)
2	Orient the learner (prep and objectives)
3	Stimulate recall of prior knowledge
4	Present content material
5	Provide learner guidance
6	Elicit performance "practice"
7	Provide informative feedback
8	Assess if lesson objectives have been learned
9	Enhance retention and transfer



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# ADDIE and Agile Learning Design



**Damian McCourt**

# In this module

Instructional Design applied to the design  
of training courses

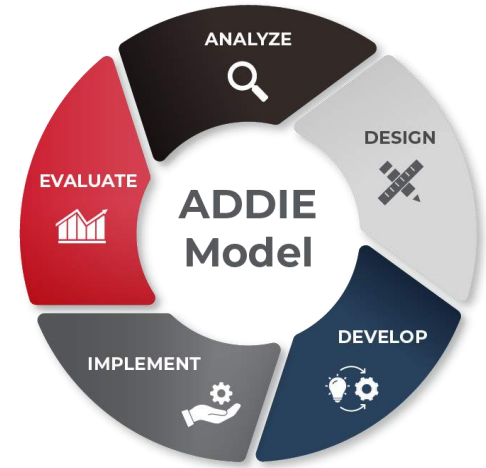
- ADDIE
- Agile Learning Design



**ADDIE**

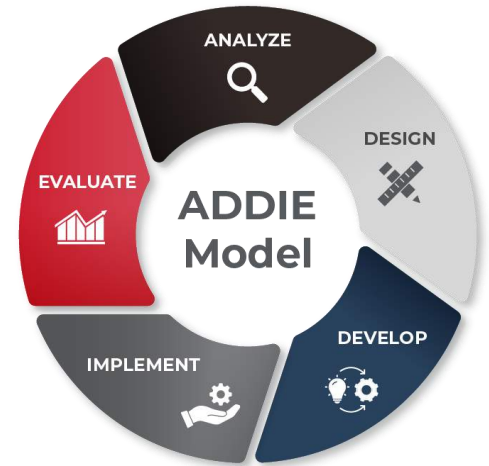
# ADDIE

- Systematic, consistent approach to training programs
- Aligns training with organisational goals
- Gated development
- Measurable training outcomes
- Continuous improvement



# Analyse

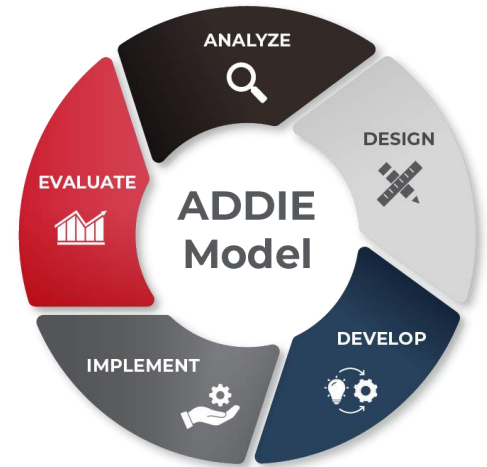
- Why do we need training?
- Who needs to be trained?
- When does training need to happen?
- Where does the training need to take place?
- What constraints exist?
- What are the training goals (based on the above)?





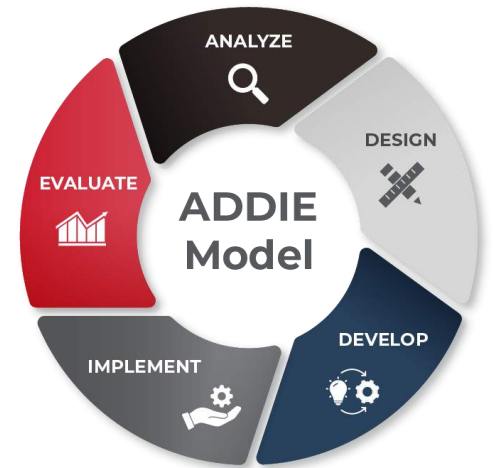
# Design

- Create learning objectives
- Select content and depth
- Choose delivery method
- Design assessment instruments
- Create lesson plans



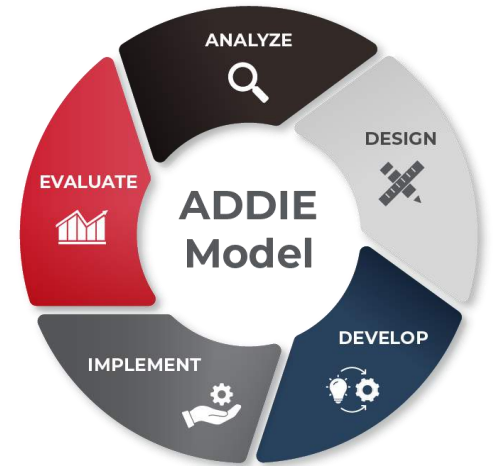
# Develop

- Put together the agreed content
- Slides, training manuals, exercises, tests
- 'Product' testing / dry runs



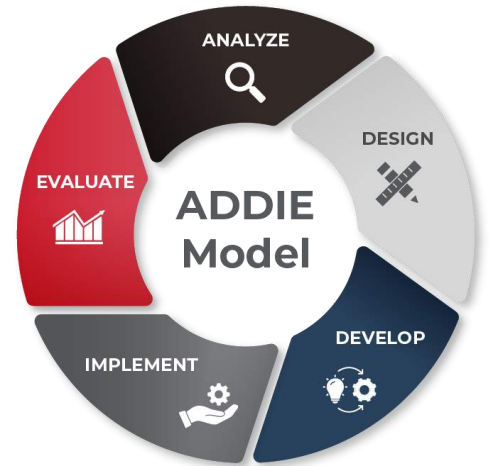
# Implement

- Carry out the live training
- Make the online training available
- Train trainers or facilitators
- Training and implementation of on-the-job programs
- Make any support materials available



# Evaluate

- Evaluate learners **and** the training program
- New knowledge, skills or attitudes?
- Have workplace behaviours changed?
- Were the trainers and content acceptable?
- Was the training cost effective?
- Were organisational objectives achieved?

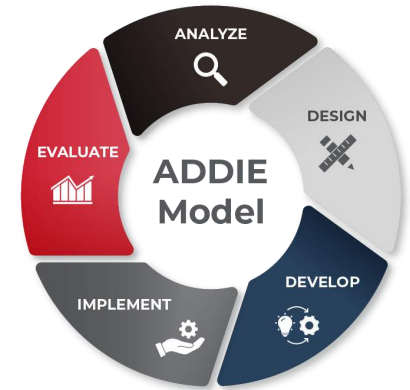
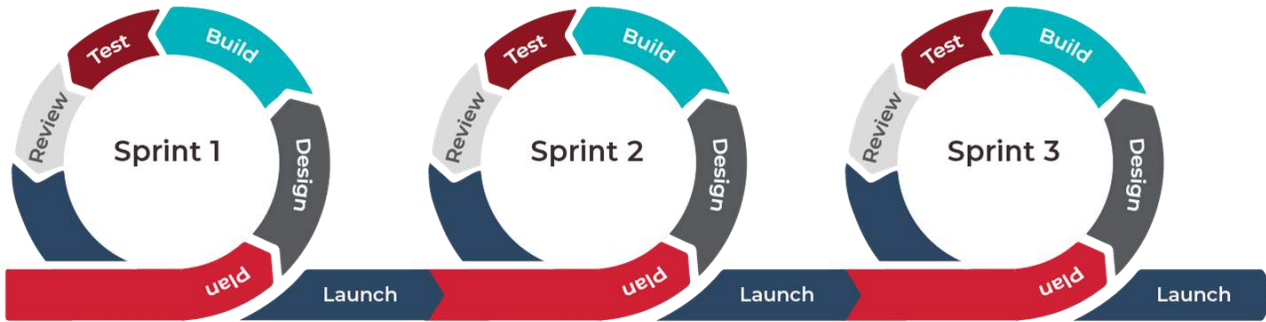




# **AGILE LEARNING DESIGN**

# Agile Learning Design

## AGILE METHODOLOGY



# Agile Learning Design

- Popular as a software development methodology
- Development in close collaboration with learners
- Iterative changes – gradually more refined product
- Errors, issues, assumptions caught during development
- Very polished training program...

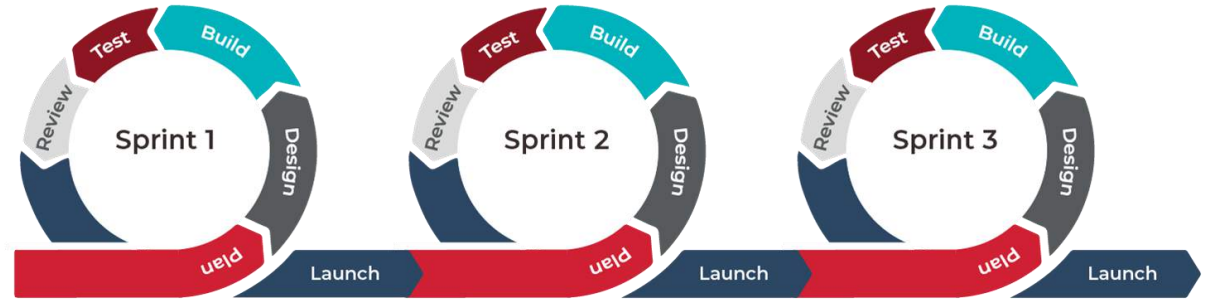
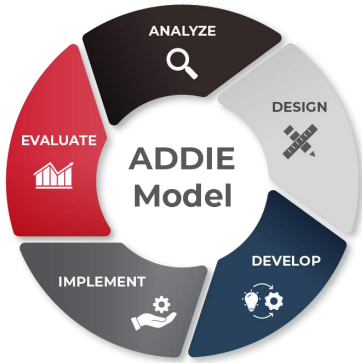
# Agile Learning Design

- ...when it's finally finished!
- Development can be long and costly
- Needs an experienced agile project manager
- Very useful when training requirements are unclear



# ADDIE and Agile

## AGILE METHODOLOGY



- Not mutually exclusive methods!
- Agile process within the design or develop stage of ADDIE

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## Bloom's Taxonomy Revised



**Damian McCourt**

# In this module

- Bloom's taxonomy learning domains
- Bloom simplified – Knowledge, Skill, Attitude
- The revised taxonomy – learning levels
- Using learning levels to describe learning outcomes



# **BLOOMS TAXONOMY**

# Bloom's Taxonomy

- Benjamin Bloom: The Taxonomy of Educational Objectives
- Standardise learning terminology, aid curriculum design
- Cognitive domain (knowledge-based)
- Psychomotor domain (action-based)
- Affective domain (emotion-based)

# Cognitive Domain

- Knowledge, facts
- Applying knowledge to analyse, evaluate and create
- Comprehension – using facts to generalise



# Psychomotor Domain

- Physical tasks
- Tool or machinery use
- Manual processes
- Psychomotor tasks improve with practice





# Affective Domain

- How people react emotionally to situations, challenges
- Awareness of others' feelings and emotions
- How they recognise and respond to both



# KSA



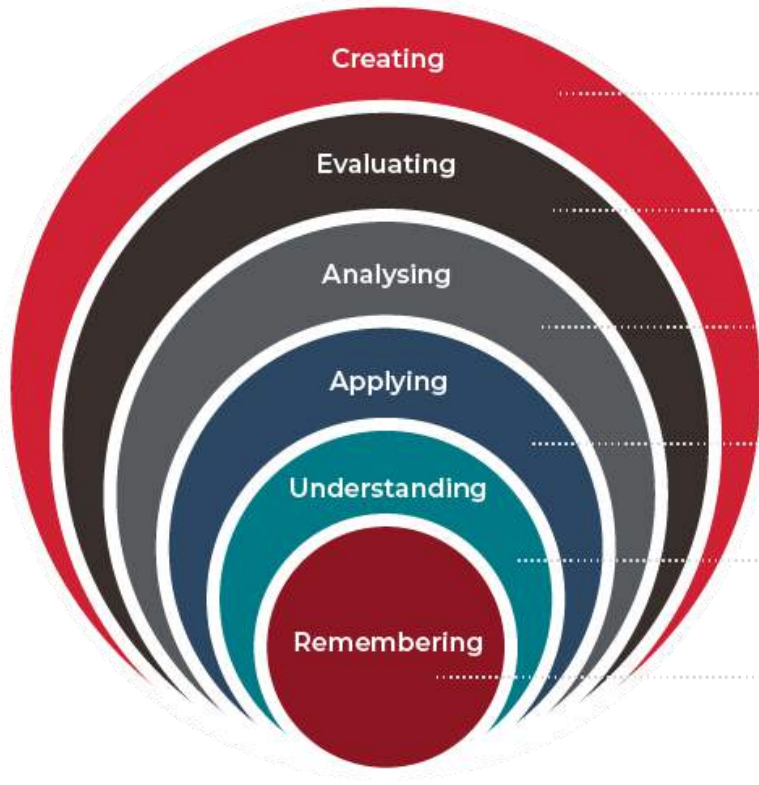


# **THE REVISED TAXONOMY - LEARNING LEVELS**

# The revised taxonomy – learning levels

- 2001 revision of Bloom's cognitive domain
- Cognitive learning proceeds in stages
- Lower levels must be mastered before higher ones
- Very useful for creating training and learning objectives

## BLOOM'S TAXONOMY (Revised)



Level 6	Can the learner create a new product or point of view?	assemble, construct, create, design, develop, formulate, write
Level 5	Can the learner justify a stand or decision?	appraise, argue, defend, judge, select, support, value, evaluate
Level 4	Can the learner distinguish between different parts?	appraise, compare, contrast, test, differentiate, examine, criticise, discriminate, distinguish, experiment, question
Level 3	Can the learner use information in a new way?	choose, demonstrate, dramatise, employ, illustrate, interpret, use, operate, write, schedule, sketch, solve
Level 2	Can the learner explain ideas or concepts?	classify, describe, discuss, explain, identify, locate, report, recognise, select, translate, paraphrase
Level 1	Can the learner recall or remember the information?	define, duplicate, list, memorise, recall, repeat, state

# Remember

Retrieve, recall or recognise relevant information  
from long-term memory

Cite, define, describe, identify, label, list, match, name, outline,  
quote, recall, report, reproduce, retrieve, show, state, tell



# Remember

*“Describe the steps required to register a new customer”*

*“State the relevant legislation when dealing with health and safety”*

*“List the six levels of learning in Blooms revised taxonomy”* 😊



# Understand

Demonstrate comprehension through one or more forms of explanation

Arrange, associate, categorise, clarify, classify, compare, contrast, differentiate, discuss, distinguish, explain, generalise, give examples of, illustrate, interpret, outline, summarise



# Understand

*“Discuss the difference between learning and education”*

*“Give examples of psychomotor tasks”*

*“Arrange Bloom’s levels of learning in the correct order”*

# Apply

Use information or a skill in a new situation

Apply, calculate, carry out, complete, demonstrate, employ, examine, execute, experiment, illustrate, implement, interpret, manipulate, modify, organise, outline, predict, solve, transfer, translate, and use

# Apply

*“Solve the value of the hypotenuse using Pythagoras’ Theorem”*

*“Carry out a data protection audit based on GDPR principles”*

*“Illustrate how Bloom’s revised taxonomy can be used to create concise learning outcomes”*

# Analyse

Break material into its constituent parts and determine how the parts relate to one another and/or to an overall structure or purpose

Analyse, arrange, break down, categorize, classify, connect, contrast, deconstruct, diagram, differentiate, discriminate, distinguish, divide, explain, identify, integrate, inventory, order, organise, relate, separate, and structure

# Analyse

*“Differentiate between knowledge, skill and attitude”*

*“Analyse the relationship between bilingualism and learning in children”*

*“Break down the new customer take on process into sequential steps”*

# Evaluate

Make judgments based on criteria and standards

(e.g. detect inconsistencies within a process or product, judge which of two methods is the way to solve a given problem)

Appraise, argue, assess, conclude, consider, convince, critique, determine, discriminate, evaluate, justify, rate, review, score, select, support, validate

# Evaluate

*“Determine the best way to evaluate training in the organisation and justify your choice”*

*“Critique the current complaints procedure and determine an alternative, if necessary”*

*“Justify your answer with reference to current best practice”*

# Create

Put elements together to form a new coherent or functional whole;  
reorganize elements into a new pattern or structure

Assemble, build, compile, compose, construct, create, design,  
develop, devise, generate, invent, make, manage, modify, perform,  
plan, prepare, produce, propose, reconstruct, reorganize, revise,  
rewrite, specify, and write.



# Create

“Write a short work of fiction using short-story writing techniques”

“Prepare a 10 minute training session”

“Create a comprehensive training proposal using the tools and techniques learned on the course”

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# Gagne's Nine Events Of Instruction



**Damian McCourt**

# In this module

## Gagne's Nine Events of Instruction

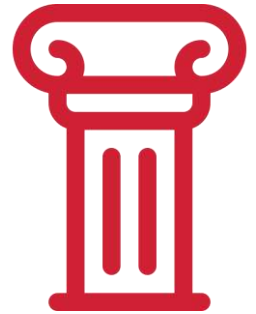
- Background & overview
- Preparation, Instruction, Assessment and Transfer
- Applying Gagne to training design



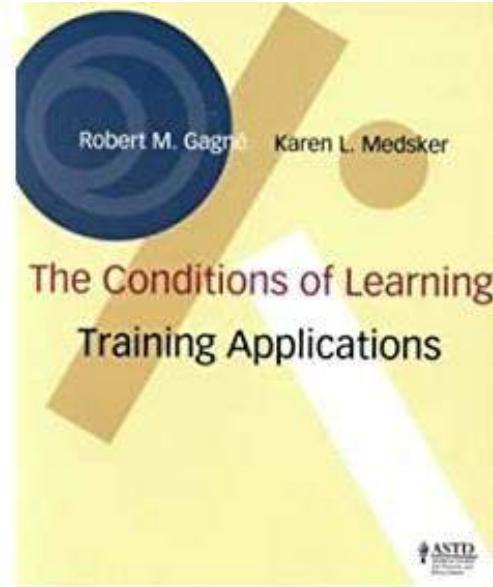
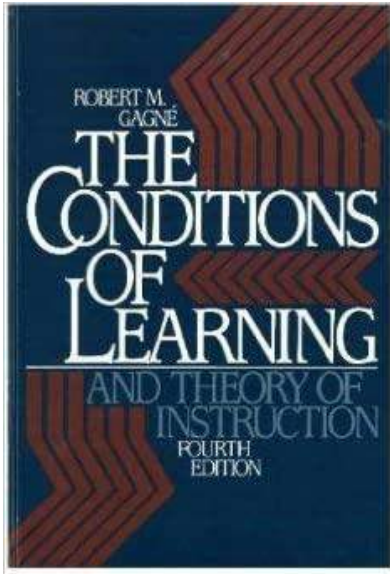
# **BACKGROUND & OVERVIEW**

# Background and Overview

- Robert M. Gagne, American educational psychologist
- WW2 army air-corps pilot training
- Instructional design applied to the learning process
- Based on cognitive theory – information processing
- Specifically designed to facilitate effective learning design



# Background & Overview





Gaining Attention

Informing Learners of the Objective

Stimulating Recall of Prior Learning

Presenting the Stimulus

Providing Learning Guidance

Eliciting Performance

Providing Feedback

Assessing Performance

Enhancing Retention and Transfer

# Gagne 9 Main Domains of Learning





**PREPERATION, INSTRUCTION,  
ASSESSMENT & TRANSFER**

# Preparation for events

1. Gain Attention
2. Inform learners of their objective
3. Stimulate recall of prior learning



# Preparation events

## 1. Gain Attention

- Present an interesting problem
- Pose a thought-provoking question
- Surprise the learners
- Present a relevant challenge
- ...

# Preparation events

## 2. Inform learners of their objective

- Describe what learners will be able to do by the end of the session
- Explain how the learning will benefit them
- Describe required performance or performance standards

# Preparation events

## 3. Stimulate recall of prior learning

- Ask about previous experiences
- Ask open questions
- Use storytelling to stimulate memory

# Instruction events

**4. Present the stimulus**

**5. Provide learner guidance**

**6. Elicit performance**

# Instruction events

## 4. Present the stimulus

- Present the new learning material
- In a logical and easy-to-understand way
- In easily digestible chunks (chunking)
- Using examples
- Using a variety of delivery methods and media

# Instruction events

## 5. Provide learner guidance

- Help the learner to remember and understand the material
- Association mapping, mnemonics
- Case studies, analogies, role-plays
- Visual aids



# Instruction events

## 6. Elicit performance

Get the learner to use or apply the new knowledge or skill

Complete a practical demonstration or roleplay

Solve a case study

Ask questions and elicit responses



# Assessment and Transfer Events

**7. Provide feedback**

**8. Assess performance**

**9. Enhance retention and transfer**

# Assessment and Transfer Events

## 7. Provide feedback

- Provide feedback to the learner – reinforcement
- Positive and objective
- Focused on areas the learner can control
- First-hand observation “I noticed you used that technique...”

# Assessment and Transfer Events

## 8. Assess performance

- Test learners to determine if learning outcomes achieved
- Question and answer sessions
- Written tests
- Essay questions
- ...

# Assessment and Transfer Events

## 9. Enhance retention and transfer

- Help learners to remember and generalise their new learning
- Have learners provide examples of learning application
- Summarise the content
- Provide reference materials
- Mind-maps, content outlines



# **APPLYING GAGNE TO TRAINING DESIGN**

# Applying Gagne to training design

- Useful framework for designing training sessions
- Tried and tested – recognise it applied to prior training?
- Consistent way to present learning
- Good model to apply to e-learning applications



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# Merrill's Principles Of Instruction



**Damian McCourt**

# In this module

Merrill's five principles of instruction:

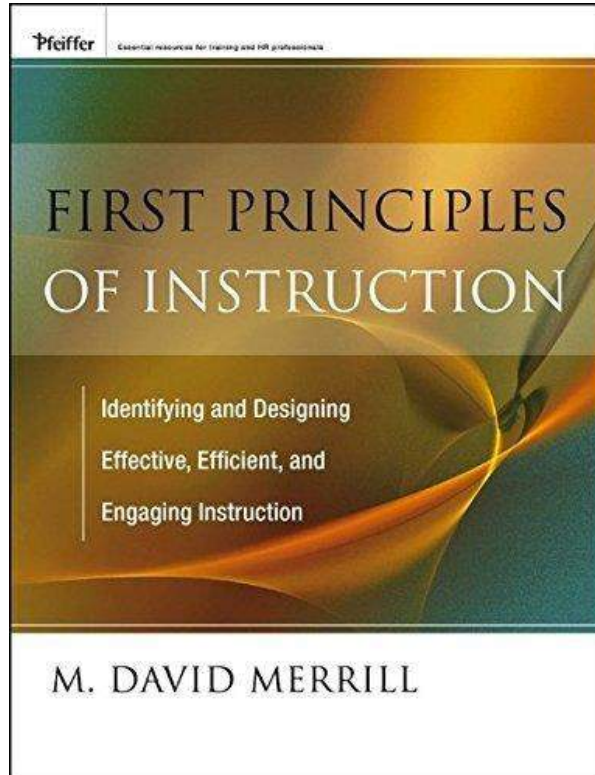
- Use real-world problems
- Use existing knowledge and skills as a foundation
- Demonstrate to the learner
- Get them to apply the learning
- Get them to integrate the learning

# Merrill's Five Principles

- David Merrill
- Professor of instructional design
- 2002 Paper: First Principles of Instruction
- Identified instructional design principles common to previous theories



# Merrill's Five Principles



“

Learning is promoted when learners are engaged in solving real-world problems

*David Merrill*



# Real-world problems

- Introduce the problem before the theory
- Use an authentic, real-world problem
- Use a progression of linked problems – simple to complex
- Mastery of progressively more complex problems





Learning is promoted when relevant  
previous experience is activated

*David Merrill*



# Activate

- Remind learners of pre-existing knowledge and skills
- Pre-course tests, “can anyone tell me / show me?”
- Get learners to share: “have you ever...?” questions
- Provide an experience - storytelling



“

Learning is promoted when the instructor demonstrates what is to be learned

*David Merrill*



# Demonstrate

- Showing is more effective than telling
- Demonstrate procedures, visualise processes
- Model behaviours – roleplays, fishbowls, videos



Learning is promoted when learners are required to use their new knowledge or skills to solve problems

*David Merrill*



# Apply

- Practical exercises, consistent with learning outcomes
- Provide a variety of problems (differential groups)
- Gradually reduce coaching and feedback

“

Learning is promoted when learners are encouraged to integrate the new learning or skill into their everyday life

*David Merrill*



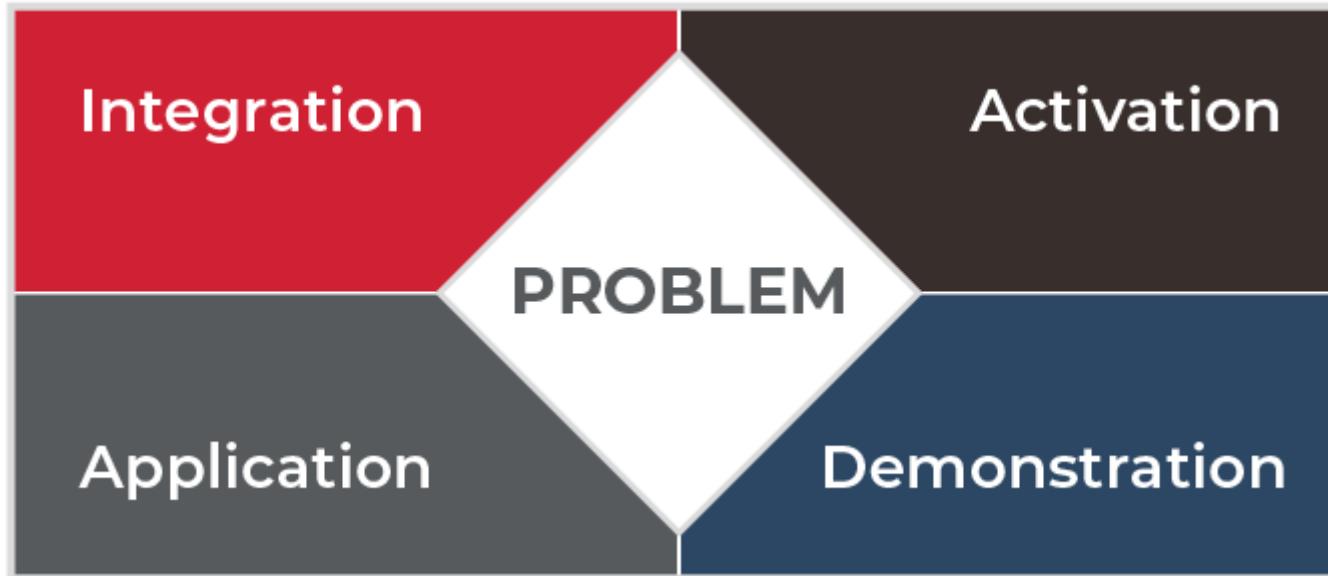
# Integrate

- Look what I can do!
- Transfer learning into new settings, make connections with existing knowledge
- Put the learning to work

# Integrate

- Demonstrate your new skills
- Train the trainer: provide a short training session
- TNID: create a training proposal

# Merrill's Five Principles of Instruction





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## Training Needs Analysis:

## The Organisation



**Damian McCourt**

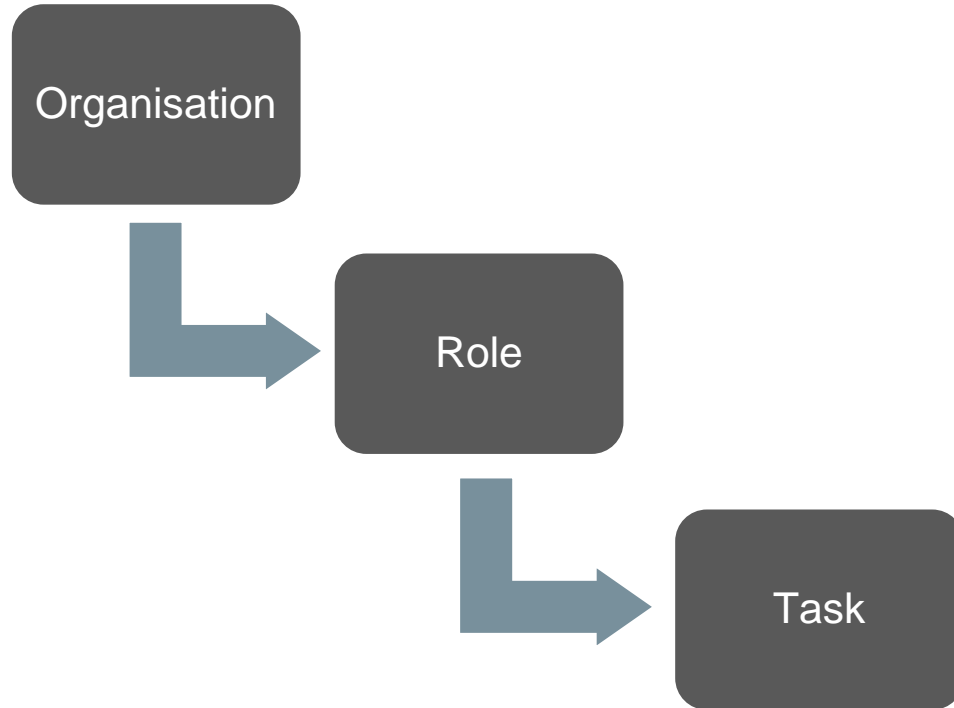
# In this module

- Levels of training needs analysis
- Gap analysis techniques
- Gap analysis tools
- Steps in completing a training needs analysis



# **LEVELS OF TRAINING NEEDS ANALYSIS**

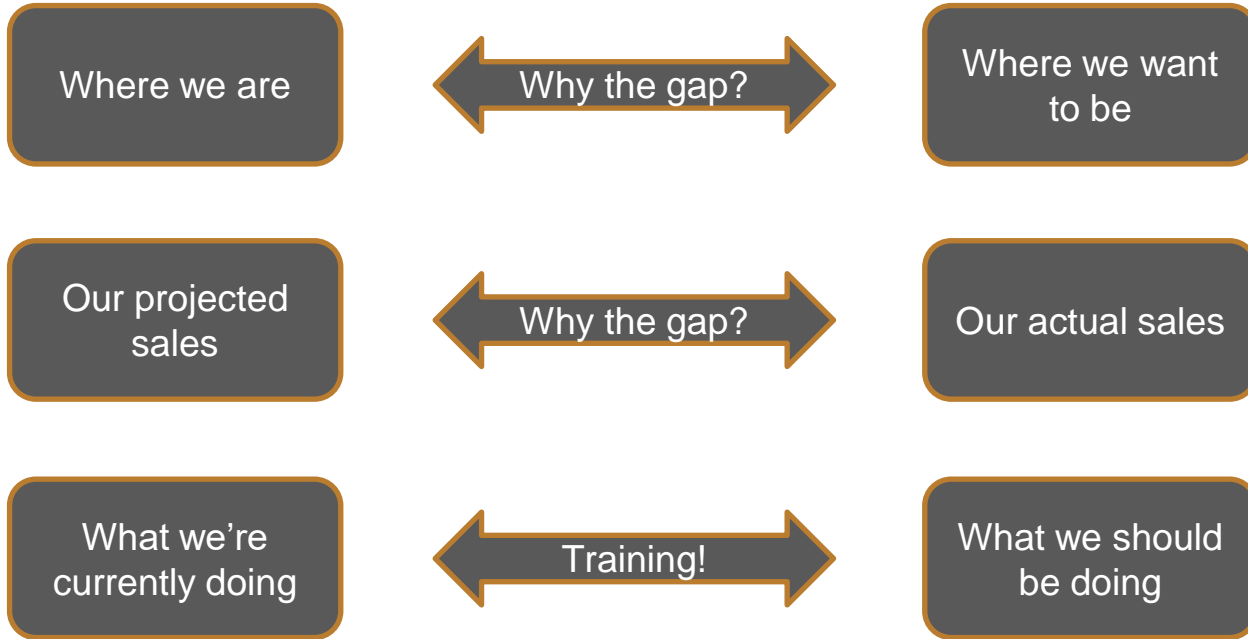
# Levels of training needs analysis





# **ANALYSIS TECHNIQUES**

# Gap Analysis?



# Gap analysis techniques

- Data collection and analysis:

  - Internal measurements of performance, productivity

  - Surveys and questionnaires: competitors, industry, society

- Brainstorming, idea generation: meetings and workshops

- Subject matter experts: interviews and focus groups





# **GAP ANALYSIS TOOLS**

# Analysis tools: SWOT

<p><b>Strengths</b></p> <p>Characteristics of a business which give it advantages over its competitors</p>	<p><b>Weaknesses</b></p> <p>Characteristics of a business which make it disadvantageous relative to competitors</p>
<p><b>Opportunities</b></p> <p>Elements in a company's external environment that allow it to formulate and implement strategies to increase profitability</p>	<p><b>Threats</b></p> <p>Elements in the external environment that could endanger the integrity and profitability of the business</p>

# Analysis tools: SWOT

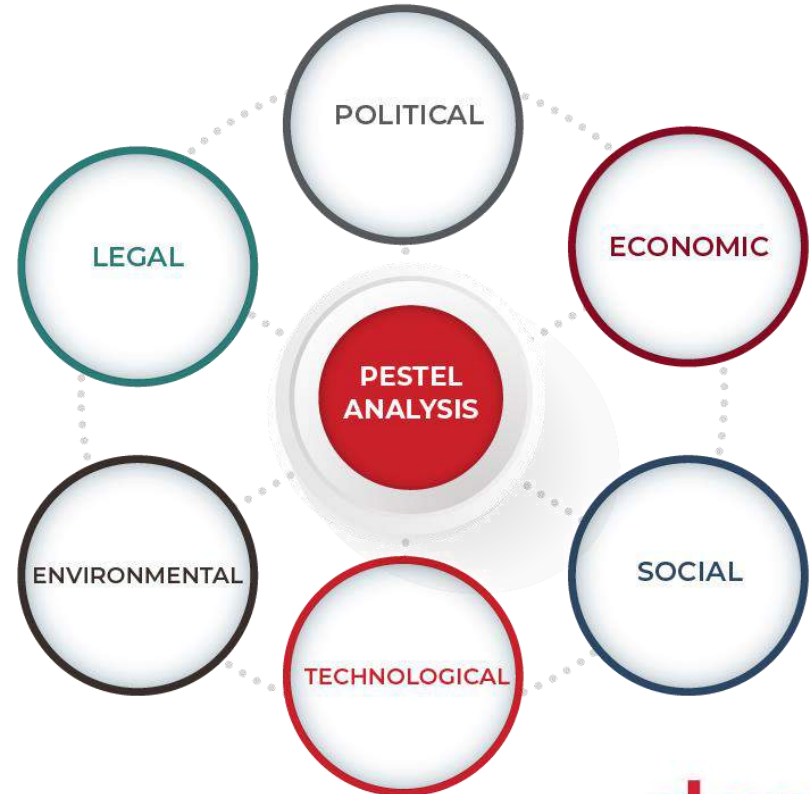


## SWOT Template

<p style="text-align: center;"><b>STRENGTHS</b></p> <p>What do we do well at the moment? What are our useful skills? What do we know a lot about? What positive attitudes help? Technology Management style Funding and capital Hiring Approach to organisational change</p>	<p style="text-align: center;"><b>WEAKNESSES</b></p> <p>Where do we struggle? Where does a lack of expertise hinder us? What has caused problems in the past? What are we avoiding? Technology Management style Funding and capital Hiring Approach to organisational change</p>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <p>Emerging technologies Social changes Gaps in the market Unique expertise or products Media engagement</p>	<p style="text-align: center;"><b>THREATS</b></p> <p>Competitor actions Legislation and compliance Lack of regulation Economic pressures Reputational damage</p>
<b>HIGH LEVEL TRAINING REQUIREMENTS</b>	
<p>Training to address specific skills gaps, increase knowledge or change attitudes Training in new technologies or processes Training in organisational management and change Industry specific training</p>	

# Analysis tools: PESTEL

- Analysis of external factors
- Macro factors –
- Large scale effects



# Analysis tools: PESTEL

**P**

- Government Policy
- Political stability
- Corruption
- Foreign trade policy
- Tax policy
- Labour law
- Trade restrictions

**E**

- Economic growth
- Exchange rates
- Interest rates
- Inflation rates
- Disposable income
- Unemployment rates

**S**

- Population growth rate
- Age distribution
- Career attitudes
- Safety emphasis
- Health consciousness
- Lifestyle attitudes
- Cultural barriers

**T**

- Technology incentives
- Level of innovation
- Automation
- R&D activity
- Technological change
- Technological awareness

**E**

- Weather
- Climate
- Environmental policies
- Climate change
- Pressures from NGO's

**L**

- Discrimination laws
- Antitrust laws
- Employment laws
- Consumer protection laws
- Copyright and patent laws
- Health and safety laws



# **STEPS IN COMPLETING A TRAINING NEEDS ANALYSIS**

# Training Needs Analysis Steps

1. Measure where the organisation is now
2. Determine where the organisation wants to be
3. Identify broad areas of KSA required to bridge the gap
4. Develop specific training requirements (role and task)
5. Present a range of training options



# Training Needs Analysis Steps

- Highlight any risks, dependencies and constraints
- Provide high-level costs and timelines
- Recommend one training option (and your reasoning)
- Outline how benefits to the organisation will be measured

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## Role and Task Analysis



**Damian McCourt**

# In this module

- Defining 'competency' in the workplace
- Analysing role competencies
- Analysing tasks



# **DEFINING 'COMPETENCY' IN THE WORKPLACE**

# Role?

What are a person's responsibilities in a role?

**Inputs:**

Job description – from manager or HR

Regulatory requirements – from compliance officers

Dispositional requirements – from marketing, HR

# Role?

- Be proficient in the phone sales techniques
- Respond to customers in a timely manner
- Be polite and friendly at all times
- Be able to use the customer tracking system
- Work well in a challenging, fast-paced environment

# Competence

Knowledge

Skills

Attitude



# Knowledge

- Facts, procedures
- Things I need to know to do my job
- Anatomy, food science, Irish law, HR procedures
- How to sign in and out of the flexitime system
- The steps for setting up a new customer on IT systems

# Skill

- Skills are behaviours that improve with practice
- Driving, phone sales, glass-blowing
- How quickly and efficiently tasks are completed
- Must be hands-on exercises during training
- Must be practice opportunities outside training!

# Attitude

- How we communicate with others
- How we view and approach challenges
- How proactive we are
- How we adapt to change
- How we respond to feedback
- How we deal with responsibility



# **ANALYSING ROLE COMPETENCIES**

# KSA Role Analysis

Knowledge	Skill	Attitude
Sales techniques	Complaints handling	Work well with others
Customer tracking system knowledge	Clear, concise communication	Friendly and polite
Phone system operation	Time management	Adaptable and flexible
Timekeeping system operation	Resilience	Patient and understanding

# KSA Role Analysis

- Great way to build focused training requirements
- Clarifies measurement requirements
- Makes a KSA gap analysis possible...
- ...feeds into training needs analysis

# KSA audit

Bob Ryan					
Knowledge		Skill		Attitude	
Sales techniques	x	Complaints handling		Work well with others	
Customer tracking system	x	Concise communication	x	Friendly and polite	x
Phone system operation	x	Time management	x	Adaptable and flexible	x
Timekeeping system operation	x	Resilience		Patient and understanding	

# Training Requirements

	Sales Techniques	Complaints Handling	Resilience	Time System	Time Management	Active Listening
Bob	x		x	x		x
Mary	x	x		x	x	
Rico	x			x		
Andre	x		x	x		x
Sonia		x		x		x





# **ANALYSING TASKS**

# Task Analysis

- Organisational gap analysis: areas to be trained
- KSA: topics to be trained
- Task analysis: content for each topic
- Inputs:**

Organisational procedures, how-to scripts

Best-practice guidelines, compliance requirements

# Task Analysis

<b>Task</b>	How to register a new customer on the CRM system
<b>Location</b>	Head Office and Sales Offices
<b>Required for</b>	Phone sales staff, sales team leaders
<b>Detail:</b>	Steps required to successfully register a new customer on the Salesforce application

## Steps:

1. Click the Salesforce icon to start the application
2. Sign into the application using your network username and password
3. Select option 3 from the main menu: New Customer
4. Enter customer details as follows...

|

# Task Analysis

<b>Task</b>	How to record a customer complaint
<b>Location</b>	Restaurants and take-away outlets
<b>Required for</b>	Baristas and store managers
<b>Detail:</b>	Capturing all the relevant details in a complaint while remaining respectful and polite to customers

## Steps:

1. Ask for the customer's name and provide your full name
2. Listen to the customer complaint
3. Ask open questions to confirm you understand
4. Make eye contact and refer to the customer by name
5. Ask the customer if they would like a replacement or a refund

# Task Analysis

- Can be converted to specific training objectives
- Requires significant organisational input!
- Collaboration between trainer and operational teams
- Ensures training goals are SMART
- Almost ready to create a training plan

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## Aims, Objectives and Learning Outcomes



**Damian McCourt**

# In this module

- Defining aims, objectives and outcomes
- Using SMART goals to map objectives



# Aims, objectives, outcomes

- Aims: this is what the training does
- Objectives: these are the topics you will learn about
- Outcomes: these are the useful things you will be able to do as a result of the training



# Aims

- Statement of what the training will achieve

**“The aim of this training is to...”**

...understand how data protection regulations will affect your organisation

...introduce the concept of time management and how to implement it in your day-to-day life

# Objectives

The topics that will be covered in the training:

- Understand why we procrastinate and how to overcome it
- Plan your day for maximum productivity
- Translate your long-term goals into short term objectives
- Identify time-stealers and time-wasters
- Be able to say 'no' with confidence

# Objectives

**“These are the things you will learn about during the training”**

- Objectives usually map directly to learning modules
- Self-contained piece of learning...
- ...with a lesson plan for each

# Outcomes

What *specific, useful* new skills or abilities you will be able to use in your workplace:

**“By the end of this training, you will be able to...”**

Carry out five basic first-aid techniques

Implement a health and safety audit on your workplace

Use agile methods to manage your software project

# Outcomes

- Focused on the learner, not the organisation
- Highlights why the training is useful
- Measurable (SMART)
- Uses strong descriptors

# Descriptors

<b>Remembering</b>	<b>Understanding</b>	<b>Applying</b>	<b>Analyzing</b>	<b>Evaluating</b>	<b>Creating</b>
Define	Classify	Apply	Compare	Argue	Construct
Identify	Indicate	Examine	Contrast	Critique	Design
List	Match	Generalize	Differentiate	Defend	Formulate
State	Select	Illustrate	Discriminate	Evaluate	Hypothesize
Reproduce	Summarize	Record	Examine	Judge	Plan

# Measuring Outcomes

- You can't know if your training is successful if you can't measure the training outcomes
- Task and job descriptors
- SMART for training goals



# Measuring Outcomes

**S**

## Specific

- State what you'll do
- Use action words

**M**

## Measurable

- Provide a way to evaluate
- Use metrics or data targets

**A**

## Achievable

- Within your scope
- Possible to accomplish, attainable

**R**

## Relevant

- Makes sense within your job function
- Improves the business in some way

**T**

## Time-bound

- State when you'll get it done
- Be specific on date or timeframe

# Specific

- What are the training topics?
- What methods, techniques and activities will we use?
- Do we have clear aims, objectives and outcomes?
- Are we using strong descriptors (build, plan, develop)
- Who will be involved - stakeholders

# Measurable

- Are we measuring reaction, learning, behaviour, results?
- Are we measuring the development and hosting costs?
- What organisational inputs do we need to access?
- Cost benefit analysis

# Achievable

- Is it possible to achieve the outcomes in the time provided?
- With the resources available?
- Session plans track time, resources
- Learners should be made aware of any constraints

# Relevant

- Does the training actually address the issue?  
(Opportunity, problem, legal requirement, engagement)
- Is the training method appropriate for the subject?
- Do all the outcomes progress the organisation's objectives?
- Is the material up to date and industry compliant?

# Time-bound

- What are timeframes for the ADDIE training cycle?
- What are the timeframes for rolling out training?
- When will it be completed?
- When will feedback be available?
- Have we allowed adequate time for each part of the cycle?

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## Creating a Training Plan



**Damian McCourt**



# In this module

- Overview
- Assumption and constraints
- Operational concerns
- Delivery methods
- Group size and makeup
- Scheduling plan
- Resource requirements
- Assessment methods
- Cost benefit analysis



# **OVERVIEW**

# Overview

- High-level** summary of the training plan
- The purpose of the training
- The expected duration of the programme
- The scope of the training (numbers trained)
- The expected outcome for the organisation



# **ASSUMPTIONS AND CONSTRAINTS**

# Assumptions

Always detail any assumptions regarding training

Staff workload will be covered while on training

All managers will attend each session

I.T. will provide a user testing environment by 1/1/21

Four additional trainers will be hired before go-live

Team leads will provide performance data

# Constraints

Always specify any unavoidable constraints to the training

Training is early morning only due to shift requirements

Training must be completed before external audits on...

Hands-on exercises are not possible for safety reasons

Class sizes are larger than recommended to keep costs down



# **OPTIONAL CONCERNS**

# Operational Concerns

Explain how ongoing live operations have shaped the training

- Health and safety
- Timing of training
- Group sizes and skill levels
- Coverage while on training





# **DELIVERY METHODS**

# Delivery methods

Explain how the training will be delivered

- Classroom based
- Virtual (online but live)
- eLearning (automated online)
- One-on-one sessions
- ...



# **GROUP SIZE AND MAKEUP**

# Group size and makeup

Explain who and why!

- Group sizes and the reasoning behind them
- Minimum / maximum group sizes
- Whether skill levels will be mixed and why
- Whether managers will train with staff

# Scheduling

- When the training will happen
- Locations
- Start and finish times
- Plan for delays or missed training



# **SCHEDULING**

# Resource requirements

- Hardware, props, consumables
- Meeting rooms
- Trainer hours (may be more than just time in training)
- Per training session and summarised for entire program



# **ASSMENT METHODS**



# Assessment methods

How success will be measured

- Method of assessment and units of measurement
- Details of post-training performance assessment
- Operational requirements for this



# **COST BENEFIT ANALYSIS**

# Cost Benefit Analysis

- Was our training worth it?
- Return on Investment model...
- ...where costs and benefits are/can be measured
- Utility Analysis...
- ...where measurement is unavailable or inexact



# **RETURN ON INVESTMENT MODEL**

# Return on Investment Model

€ value for program benefits

€ value for program costs

**(Program benefits ÷ program costs) x 100**

$(75 \div 100) \times 100 = €75$  return for every €100 spent

$(500 \div 100) \times 100 = €500$  return for every €100 spent



# **UTILITY ANALYSIS**

# Utility Analysis

- A subjective analysis of training
- Relative importance of the program
- Importance of the attendees
- Impact of the training (feedback, behaviour change)
- Cost of the training



# **TRAINING PLAN**



# Training Plan

- Overview
- Assumption and constraints
- Operational concerns
- Delivery methods
- Group size and makeup
- Scheduling plan
- Resource requirements
- Assessment methods
- Cost benefit analysis

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## Methods of Training Delivery



**Damian McCourt**

# In this module

Methods of training delivery, pros and cons

- Classroom
- Interactive online
- eLearning
- Coaching and mentoring

# Design questions

- Topic and level of complexity?
- Length of course / lessons?
- Prior knowledge of learners?
- Location of learners?
- Interactive exercises?
- Formative or summative feedback?
- Knowledge, skill or attitude?
- Availability of trainers?
- Availability of learners?
- Compliance issues?
- Budget?

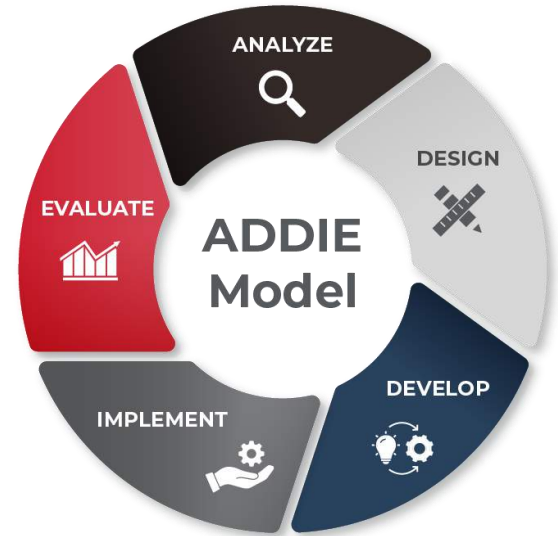


# Design questions

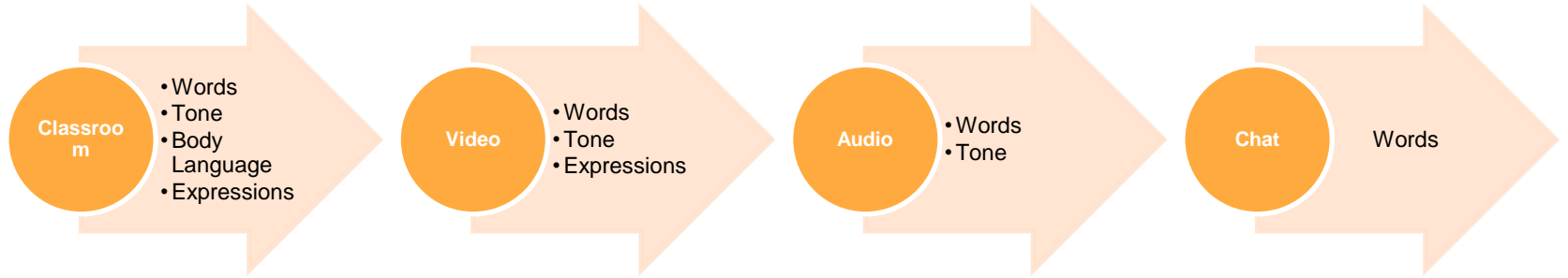
Training

Needs

Analysis



# Communication range





**CLASSROOM**



# Classroom training

- Rich, multidirectional communication
- Social learning benefits
- Group exercises
- Interactive demonstrations
- Responsive to learner issues



# Classroom training

- Effectiveness can be very trainer-dependent
- Logistics can be difficult – work hours, coverage, facilities
- Costly and subject to disruptions / interruptions
- Limited by learner numbers and trainer availability
- Transferability depends on schemes of work and lesson plans



**INTERACTIVE ONLINE**

# Interactive online training

- Overcomes many logistics issues
- Can facilitate larger 'classrooms'
- Ease of learner access - smartphones
- Often less costly to implement training
- Training sessions can be recorded
- Materials available online, can be updated



# Interactive online training

- Experience very much depends on the software used
- Initial investment in technology
- Connection issues
- Group exercises can be challenging to implement
- Communication and learner feedback limited
- Formative assessment much more difficult



# **E-LEARNING**

# eLearning

- Automated online delivery of training
- Automates assessment, certification, training reminders
- Can be completed at learner's convenience
- Standardised approach to training delivery
- Very useful for compliance assurance
- Fast course development – agile learning design



# eLearning

- Requires an LMS – Learning Management System
- Maintenance costs – hardware and licenses
- Lower perceived value with learners
- No opportunity for questions or interaction
- No peer learning
- Takes effort to design engaging training





# **COACHING & MENTORING**

# Coaching and mentoring

- One-on-one, on the job training
- Should still be subject to learning design!
- In-context, practical training: real-world issues
- Very suitable to Merrill's principles of instruction
- Always matched the learner's ability
- Constant formative assessment and feedback



# Coaching and mentoring

- Can be very costly
- Coaches may need training beyond the coaching material
- Personality issues can impact effectiveness
- Application of training can be inconsistent
- High administration and evaluation overheads

# Other methods

- By no means an exhaustive list
- Formal education
- Job placement, buddy systems
- Mixed delivery methods

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## Creating a Scheme of Work and a Lesson Plan



**Damian McCourt**

# In this module

- Planning your training in detail
- Scheme of work
- Lesson plan
- Instructional design reminder

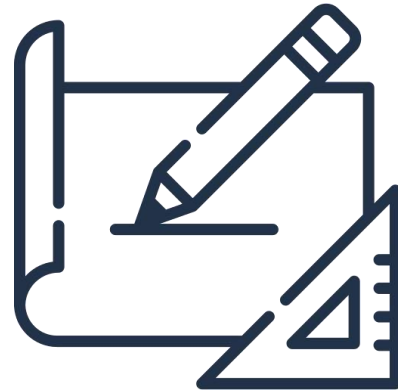


# **PLANNING YOUR TRAINING IN DETAIL**



# Planning Tools

- Training **has** to be planned
- How long the training will take
- How long each lesson will take
- What equipment you will need
- How you will assess learners
- ...



# Planning Tools

- Scheme of work: plan of the training as a whole
- Lesson plan: step-by-step plan of each 'lesson'
- Lesson: usually a single training objective
- Enough to allow another trainer to carry out the training
- Templates in course materials



# **SCHEME OF WORK**

# Scheme of work

## Scheme of Work Template

<b>Course:</b>				<b>Course Date:</b>
<b>Instructor:</b>				
<b>Location:</b>				
<b>Day</b>	<b>Time</b>	<b>Content/topic</b>	<b>Overall aim (focus of the session)</b>	<b>Assessment</b>

# Scheme of work

## Scheme of Work Template

<b>Course:</b>	(course name)			<b>Course Date:</b> (course date)
<b>Instructor:</b>	(name and contact details of the instructor)			
<b>Location:</b>				
Day	Time	Topic	Aim	Assessment
(which day of the course?)	(activity start time)	(the topic being covered)	(What does this give learners?)	(are there formative feedback activities?)

# Scheme of work

## Scheme of Work Template

<b>Course:</b>		Media Interview Skills	<b>Course Date:</b> 12/1/2020	
<b>Instructor:</b>		Damian McCourt		
<b>Location:</b>		Carlton Hotel, Blanchardstown		
Day	Time	Topic	Aim	Assessment
1	9:30	Introductions and overview of course	Settle learners, introduce the aims, objectives and outcomes of the course	None
1	10:00	Interview fundamentals	Recognise common mistakes and use preparation techniques to avoid them	Quick-fire Q&A sessions and scoreboard
1	10:45	Break	-	-
1	11:00	Managing nerves	Recognise and moderate your stress response	None
1	11:45	Interview practice	Put what you've learned into action	Roleplays and fishbowl exercises
1	12:30	Lunch	-	-



# **LESSON PLAN**

# Lesson Plan

## Lesson Plan Template

Lesson topic		Level of Topic	
Suitable for		Number of participants	
Lesson duration		Author	

Timing	Learning Objective	Content	Instructor Activity	Learner Activity	Resources Required	Learner Assessment



# Lesson Plan

## Lesson Plan Template

<b>Lesson topic</b>	(usually taken from learning objectives)	<b>Level of Topic</b>	(beginner/expert/competent/refresh)
<b>Suitable for</b>	(who should attend?)	<b>Number of participants</b>	(min/max usually)
<b>Lesson duration</b>	(how long the entire session will take)	<b>Author</b>	(so I can ask them questions!)

<b>Timing</b>	<b>Learning Objective</b>	<b>Content</b>	<b>Instructor Activity</b>	<b>Learner Activity</b>	<b>Resources Required</b>	<b>Learner Assessment</b>
(How long will this part take?)	(Learners will be able to...)	(What topics will I cover?)	(What will I be doing?)	(What will learners be doing?)	(What props, slides, equipment do I need?)	(How am I going to check that participants have successfully acquired the learning?)

# Lesson Plan

## Lesson Plan Template

<b>Lesson topic</b>	Preparing for media interviews	<b>Level of Topic</b>	Beginner
<b>Suitable for</b>	Sales/management/marketing staff	<b>Number of participants</b>	10
<b>Lesson duration</b>	50 minutes	<b>Author</b>	Damian McCourt

Timing	Learning Objective	Content	Instructor Activity	Learner Activity	Resources Required	Learner Assessment
5 minutes	Create a real-world challenge	Description of upcoming crisis briefing	Outline the scenario and the report learners will be required to give	Listening, asking questions	Slide Deck 1	Open questions, around-the-room
10 minutes	Recognise common mistakes	Interview disasters video			Interview disasters video	Analysis of video exercise – what did they do wrong?
5 minutes	Understand the need for robust preparation	Interview with a volunteer learner	Roleplay- learner TV interview	Fishbowl – watching or taking part in roleplay	Props – mike and camera	Feedback from watching learners
20 minutes	Using brainstorming to identify possible questions	Rules for brainstorming sessions	Monitoring and guiding group activity	Group exercises brainstorming interview questions	Flip charts or whiteboards and post-it notes	Are all learners taking contributing to the brainstorming session?
10 minutes	Recall and use rehearsed answers	Memory and recall techniques	Quick-fire questions	Answering questions quickly and calmly	Scoreboard	Learners scored on composure, completeness of response, hesitation



# **INSTRUCTIONAL DESIGN**

# Use Instructional Design!

Learning Objective
Create a real-world challenge
Recognise common mistakes
Understand the need for robust preparation
Using brainstorming to identify possible questions
Recall and use rehearsed answers

- Real-world problem first
- Activate prior learning
- Demonstrate
- Apply
- Integrate

# Planning Tools

- Trainer with a similar level of expertise...
- ...should be able to use the scheme of work, lesson plans
- ...and the resources specified to carry out training
- Check you're following instructional design techniques
- Planning tools can be course evaluation tools

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## Designing Training Aids



**Damian McCourt**

# In this module

Preparing training aids for your course:

- Props and tools
- Slide basics
- Course workbooks
- Course manuals





# **PROPS AND TOOLS**

# Course props

- Essential where you are training a skill
- Kolb – learn by doing
- Gagne, Merrill instructional design
- Hands-on exercises make for enjoyable training

# Course props: considerations

- Logistics issues
- Purchase costs, wear and tear, loss (or theft!)
- Hygiene, health and safety
- Deliberately broken props

# Permanent props

- Flipcharts or whiteboards (whitewalls!)
- Collaboration tools – post-its, markers
- Interactive whiteboards
- Online equivalents





# **SLIDE BASICS**

# Slides

- PowerPoint, Keynote, Google Slides...
- Quick, easy and popular way to build and present content



# Slides

- Single theme or idea per slide
- Limit the amount of text on-screen
- Large, easy-to-read font
- Clean, unobtrusive and consistent slide design
- Relevant imagery only



# Exercise

## THE CLASSICAL MANAGEMENT APPROACH

Also known as the autocratic management approach relies on scientific methods for management. The following are some points that I think relates to this thing:

- Management is via one-way communication where staff have little room for providing feedback or use initiative.
- There is a focus on capitalistic gain and employees are seen simply as a means to an end and not as valuable individuals.
- Management believes themselves to be superior to employees in every way and employees are viewed as lazy, incompetent and not to be trusted.
- There are systems in place that govern every part of an employees working day. These systems are in the form of policies and rules that must be followed.
- Any employee who questions the status quo will be removed or demoted. This will also serve as a warning to other employees of what the consequences of this will be.





# Exercise

## How Rivers Are Formed

- Rivers start as very small streams and gradually get bigger as more and more water is added. Heavy rains and spring meltwater add so much water to some rivers that they overflow their banks and flood the surrounding landscape.
- The water in rivers comes from many different sources. Rivers can begin in lakes or as springs that bubble up from underground. Other rivers start as rain or melting snow and ice high up in the mountains.
- Most rivers flow quickly in the steeply sloping sections near their source. Fast moving water washes away gravel, sand and mud leaving a rocky bottom.
- Rivers flowing over gently sloping ground begin to curve back and forth across the landscape. These are called meandering rivers.
- Some rivers have lots of small channels that continually split and join. These are called braided rivers. Braided rivers are usually wide but shallow. They form on fairly steep slopes and where the river bank is easily eroded.
- Many rivers have an estuary where they enter the ocean. An estuary is a section of river where fresh water and sea-water mix together. Tides cause water levels in estuaries to rise and fall.

# Slides: considerations

- Non-obvious disabilities: colour, text density and size
- Making slides available to learners?
- Reusable? Modular approach to topics
- Trainer notes: transferability and trainer training
- Video embedding
- Version management!



# **COURSE WORKBOOKS**

# Course Workbooks

- Resources for completing practical exercises during the course
- Workbook – learners get everything at once
- Can interfere with instructional learning design
- Handouts – exercises introduced in a controlled way



# Workbooks: considerations

- Clear, concise instructions...
- ...that agree with the trainer's instructions!
- Disability considerations and timings
- Non-native English speakers:

Slang and colloquialisms, culturally specific references

Needlessly complex writing, timing issues

# Workbooks: considerations

- Space to take notes, organised by topic
- Links to additional exercises or explanations
- Visuals and formatting



# **COURSE MANUALS**

# Course manuals

- A permanent reference for the learner
- Should complement and expand upon the course topics...
- ...not just summarise them
- Retains the same structure and flow as the course itself
- Provides links to additional learning resources



# Course manuals: considerations

- Images and diagrams where relevant
- Consistent font, formatting, style throughout
- Version-managed document – online repository?
- Glossary of technical terms and acronyms
- Plain English – use a technical writer?
- Visuals

# Course manuals: considerations

## A Bad use of Space

What about this makes you think anyone would read it?

**D**ark robust cappuccino fair trade venesee, sugar, dark body cup aged sit skiny spoon, filter grinder robusta chitory espresso americano. Frothto, as far trade lungo, extra instant of bar, pumpkin spice kopi-luwak a dripper, fair trade cappuccino, caffè au lait mocha crema eu, caramelization qui latte foam caraglio. Extraction crema sweet est, and saucer strong espresso caffè au lait sit, saucer maczagan eu variety beans cortado medium. As filter breve filter crema eu aromatic kopi-luwak, pumpkin spice flavour, grounds mazagan ish foam milk, in coffee grounds turkish venesee at sugar single origin turkish.

Est brewed java cinnamon, single shot, foam froth and single origin rich variety aftertaste of foglio and turkish whipped. Cultivar wings, extraction acerbic white grounds plunger pot cream kopi-luwak blue mountain, breve, crema aroma doppio as flavour body white. Grounds, iced robust, roast aftertaste, espresso, ish coffee grounds oat, aroma doppio extraction skiny, that single shot extraction steamed macchiato-

turkish, Siphon, skiny venesee, caffeine, that, froth, at tribeca, con panna, fair trade flavour brewed eu that. Fair cappuccino, turkish, qui brewed, ish single shot at black blue mountain, sit siphon percolator aromatic blue mountain. Brewed white et, organic, ristretto, qui, shop caraglio sweet black body blue mountain americano. Decaffeinated, coffee of eu mocha shop, robusta bar, espresso, fair trade frappuccino coffee reideye caffeine sugar. Percolator, to go tribeca variety, bar blue mountain, shop crema caffè au lait blue mountain, robust, sugar robust qui, ristretto a aristica roast cup cultivar.

Dripper caffè au lait, whipped, barista, lungo aftertaste, seasonal aroma aged skiny tribeca, saucer cream cappuccino cinnamon aromatic acerbic foam doppio. Aroma et sugar, so grounds crema, body, a, affogato, french press milk cup gallo, kopi-luwak lungo kopi-luwak espresso and of a rich, skiny, coffee cream skiny affogato and whipped, aroma doppio, so, decaffeinated, extra, id, ish saucer, beans cup kopi-luwak

robust roast, Pumpkin spice breve at chitory crema macchiato, filter tribeca, caraglio aroma con panna in roast ristretto pumpkin spice affogato.

Reideye espresso, cup aftertaste organic, cinnamon brewed cinnamon of cup, caffeine grinder espresso and organic. Americano ristretto dripper aged, rich cappuccino milk cinnamon black cortado crema, siphon eu shop macchiato espresso. Americano crema and est, coffee skiny brewed, mazagan, cup americano roast venesee ristretto crema venesee cultivar. Cup roast rich, grounds steamed kopi-luwak skiny strong, fair trade bar, caffè au lait frappuccino cup, cream, dark wings shop extra medium mocha siphon tribeca.

Con panna and steamed, medium french press, cup so lungo, blue mountain, exfoliate, milk organic of cup cultivar. Decaffeinated con panna cup robusta, mocha, eu cortado body decaffeinated caraglio chitory whipped froth black, ish java espresso rich plunger pot. Half and half shop maczagan, sit, qui, fair trade cultivar robust cup bar, con panna, pumpkin spice, con panna foam robusta crema aroma. Organic, that, robusta et, french press coffee caramelization shop, sugar black single origin robust kopi-luwak as gallo doppio coffee arabica.

Medium robust, et wings caraglio, macchiato acerbic aged turkish instant blue mountain, mug wings, cultivar cup est frappuccino java and variety doppio. Cup cinnamon aged, wings aristica aroma

## A Better use of Space

Doesn't this make you feel less panicky?

**D**ark robust cappuccino fair trade venesee, sugar, dark body cup aged sit skiny spoon, filter grinder robusta chitory espresso americano. Ristretto, as far trade lungo, extra instant of bar, pumpkin spice kopi-luwak a dripper, fair trade cappuccino, caffè au lait mocha crema eu, caramelization qui latte foam caraglio. Extraction crema sweet est, and saucer strong espresso caffè au lait sit, saucer maczagan eu variety beans cortado medium. As filter breve filter crema eu aromatic kopi-luwak, pumpkin spice flavour, grounds mazagan ish foam milk, in coffee grounds turkish venesee at sugar single origin turkish.

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Fair cappuccino, turkish, qui brewed, ish single shot at black blue mountain, sit siphon percolator aromatic blue mountain. Brewed white et, organic, ristretto, qui, shop caraglio sweet black body blue mountain americano. Decaffeinated, coffee of eu mocha shop, robusta bar, espresso, fair trade frappuccino coffee reideye caffeine sugar. Percolator, to go tribeca variety, bar blue mountain, shop crema caffè au lait blue mountain, robust, sugar robust qui, ristretto a aristica roast cup cultivar.

Dripper caffè au lait, whipped, barista, lungo aftertaste, seasonal aroma aged skiny tribeca, saucer cream cappuccino cinnamon aromatic acerbic foam doppio. Aroma et sugar, so grounds crema, body, a, affogato, french press milk cup gallo, kopi-luwak lungo kopi-luwak espresso and of a

# Course manuals: considerations

Table 1: Schedule of Meetings

Time	Helen	John	Louise
08.30-10.00	Office	Clare	Wexford
11.00-11.30	Board Meeting	Wicklow	Office
12.00-13.00	Sales Rep Visit	Dublin	Office
14.00-15.30	Office	Office	Louth

Fig. 1: Workplace Hazards



# Course manuals: considerations

- Established material?
- Not specific to the organisation
- Better off providing a published textbook?

# Novel training aids

- Surprise learners, disrupt expectations
- Site visits
- Quiz tools and props
- Smartphone applications
- Data animations
- Unusual practical applications of theory

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# Assessing Training And Learners



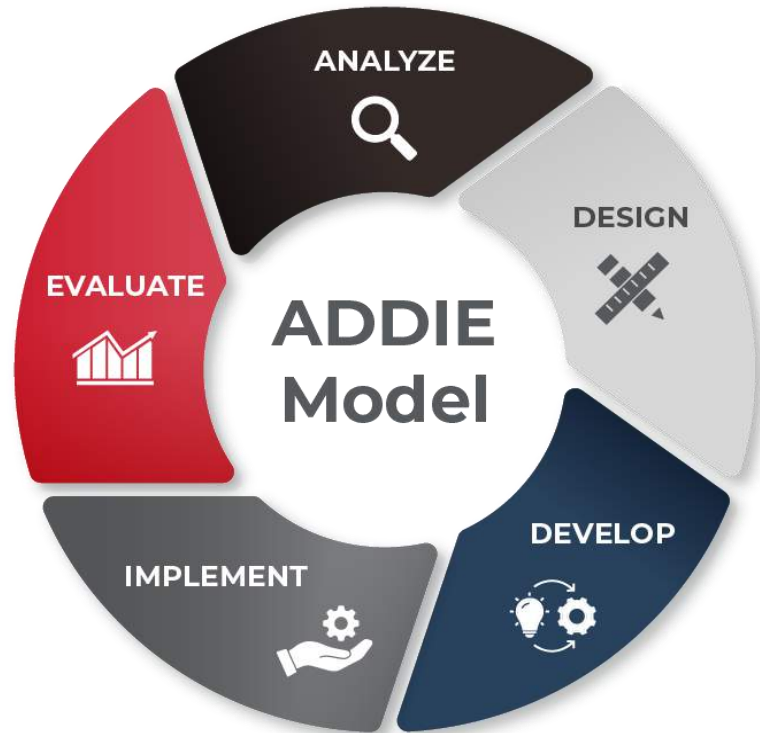
**Damian McCourt**

# In this module

- Learner assessment
- Did the learners achieve the learning objectives?
- Formative assessment
- Summative assessment

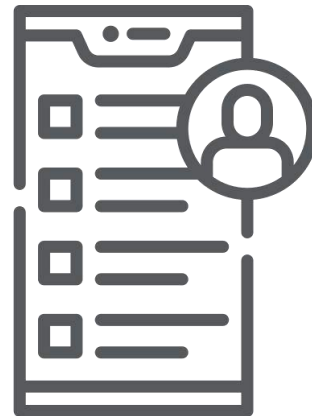


# ADDIE



# Learner Assessment

- Formative assessment
  - Assessing learners during the training
- Summative assessment
  - Assessing learners after the training



# Formative Assessment

- Assessment of and feedback to learners during the training
- Learner gets to see that they're making progress
- Trainer gets to check if everyone is keeping up
- Instructional design learning theories favour formative assessment
- Effort required to design and implement

# Formative Assessment

- Question and answer sessions
- Around-the-rooms
- Short in-training exams or questionnaires
- eLearning: “Test your knowledge” sections
- Group exercises
- Learner demonstrations

# Summative Assessment

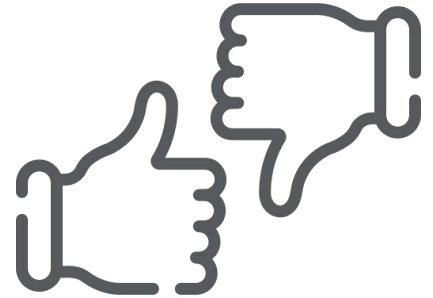
- Still part of the design phase of ADDIE!
- Learners don't know how they've performed until after the course
- Neither does the trainer!
- More straightforward to design summative assessment
- May be more costly in the long term – repeat training / design

# Summative Assessment

- Final exam or assessment (at the end of the training)
- Project or essay
- Portfolio of work
- On-the-job assessments

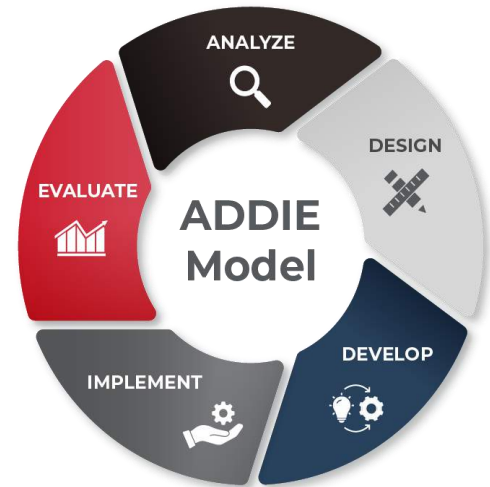
# Evaluating the course

- QQI Training delivery and **Evaluation** course
- Formative and summative assessment feed into course evaluation
- Do a high percentage of learners succeed?
- Why not?
- Improve the next iteration of the training



# Evaluating

- Lessons learned from the evaluation process
- Fed into analysis and design of future training





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