

Introduction to Learning, Training and Development

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7/12/21



Session Outline

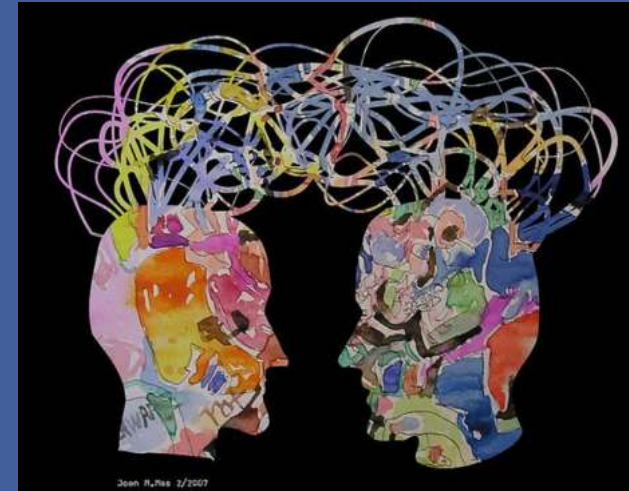
- Ice Breaker
- Theories of Learning
 - Classical Conditioning
 - Operant Conditioning
 - Cognitive Theories
- Training





Ice Breaker

- A person is to provide a description of the image presented to the group.
- Rules
 - No questions are to be asked
 - No gestures are to be made
 - No feedback is to be provided



Ice Breaker

- Now let us repeat the exercise but with the possibility of the audience to ask questions and provide feedback.



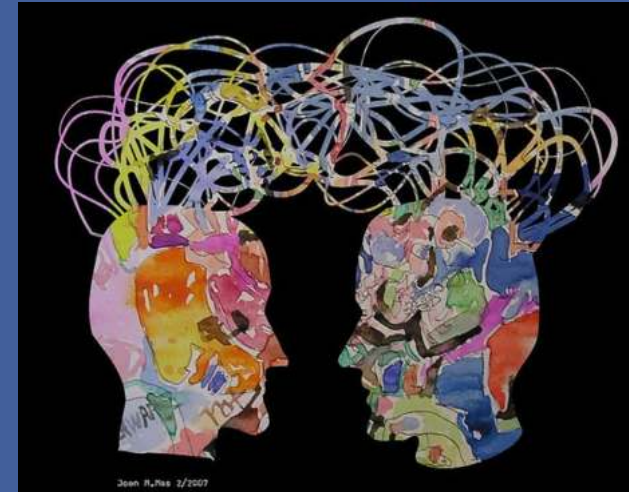
Ice Breaker

- Learning Outcomes
- Did the constraints in the first task impact performance?
- How did the communicators feel in the exercise in the different situations?
- How did the recipients of the information feel?



Ice Breaker

- Learning Outcomes
- Linking this to learning and development, what weight is to be given to non-verbal communication when compared with verbal communication?
- What is the importance of two-way communication?



Theories of Learning



Theories of Learning

- **A Definition**

- *“Learning is the act or process of acquiring knowledge or skill.”*

- *- from Dictionary.com*



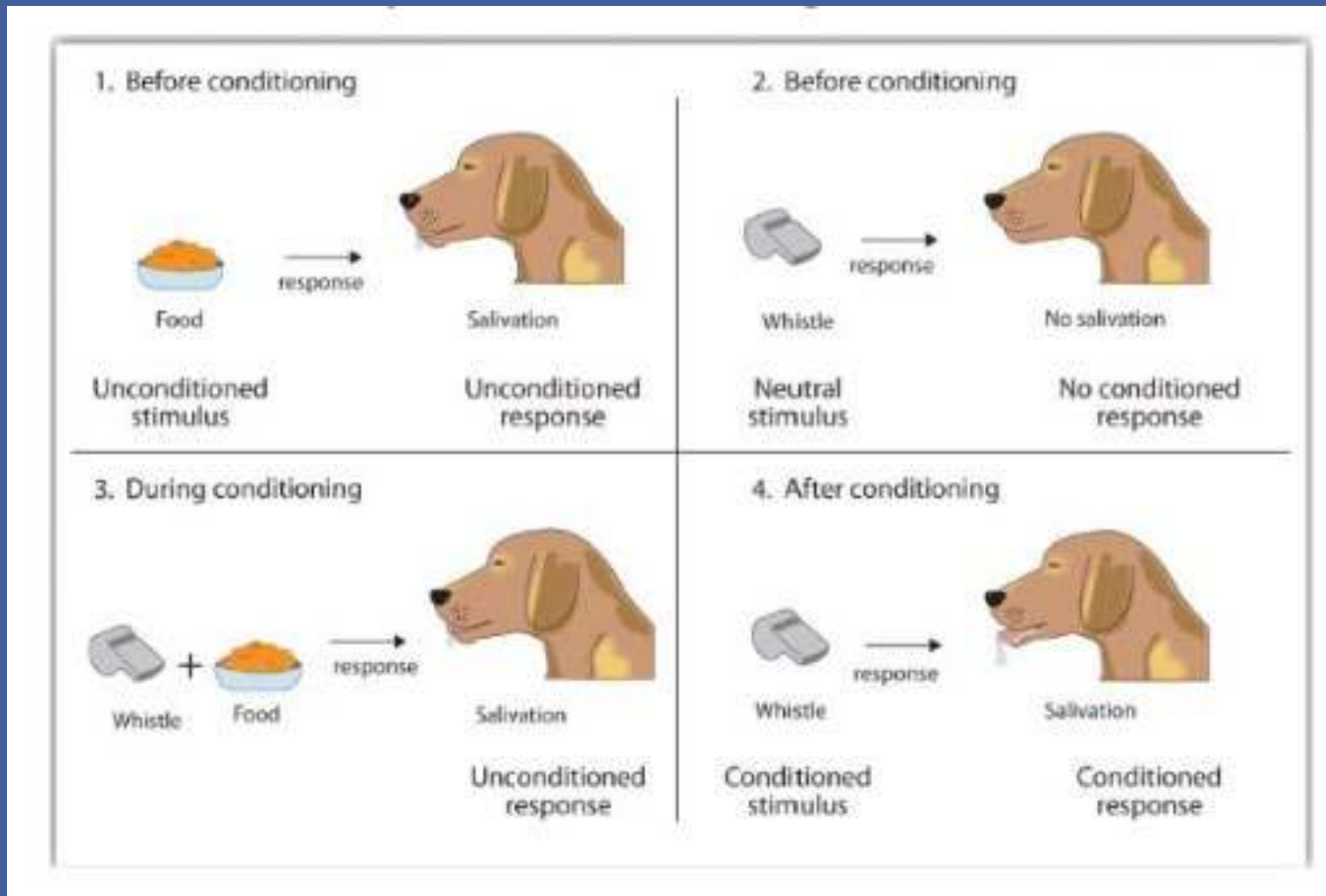
Theories of Learning

- There are different theories of learning, which aim at accounting for the process through which individuals acquire skills and competencies required to perform new tasks.
- Viewpoints include those developed by:
 - Behaviorists (ex. Pavlov, Skinner)
 - Cognitive Theorists (ex. Vygotsky, Seligman, Chomsky)
- In what follows a brief overview will be given to key contributions by theorists in their areas (reading of primary sources for more information is recommended).



Theories of Learning

Classical Conditioning



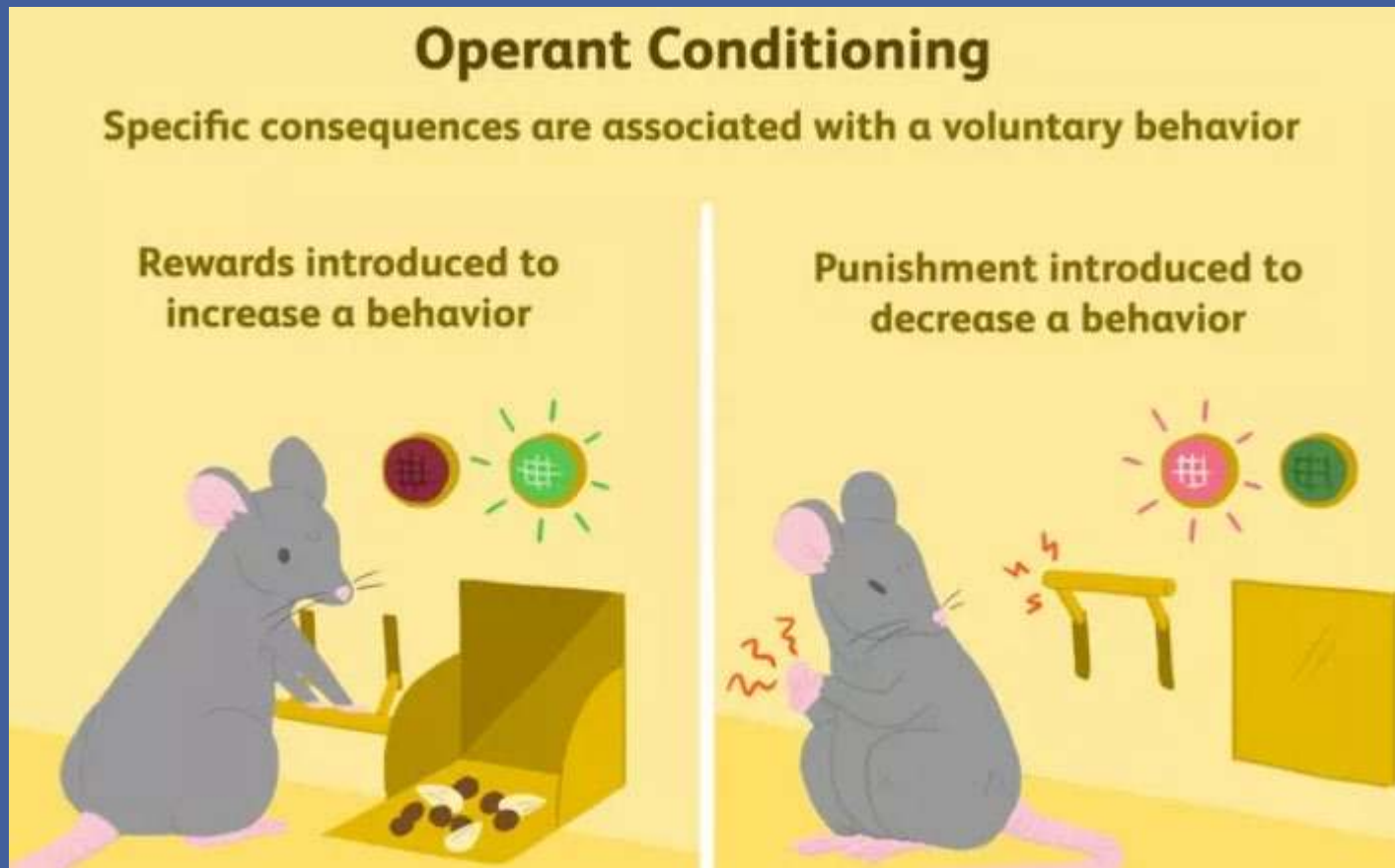
Theories of Learning

Operant Conditioning

Operant Conditioning
Specific consequences are associated with a voluntary behavior

Rewards introduced to increase a behavior

Punishment introduced to decrease a behavior



The diagram is split into two panels. The left panel shows a grey mouse sitting at a wooden lever. Above the lever are two circular icons: a purple one with a grid and a green one with a grid and radiating lines. Below the lever is a wooden box containing several black and white pellets. The right panel shows the same mouse sitting at a wooden lever. Above the lever are two circular icons: a pink one with a grid and radiating lines, and a green one with a grid. Red lightning bolts are shown striking the lever. The mouse has red squiggly lines near its head, indicating discomfort or pain.



Theories of Learning

Operant Conditioning

- At the workplace, operant conditioning can be a beneficial method of helping staff to develop their skills. Managers can reward employees for behavior that meets their standards or penalize behavior that managers hope to discourage.
- Through this method, employees receive clear guidance on the company's expectations and know what behaviors to repeat or discontinue.



Theories of Learning

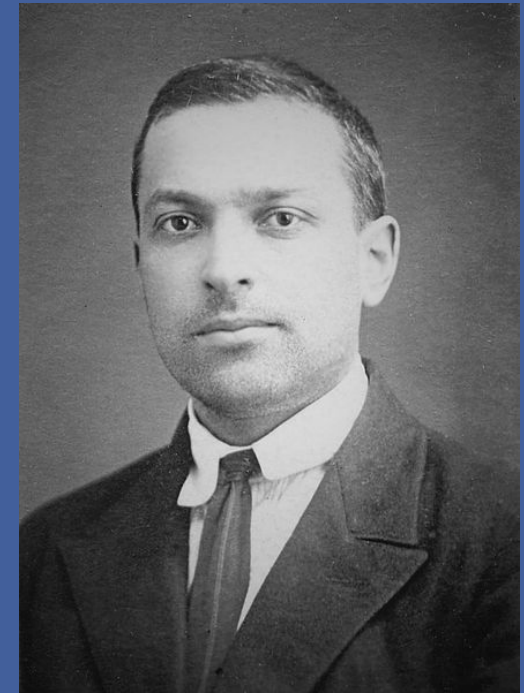
Cognitive Theories

- Cognitive theorists realised that there are limitations in understanding behaviour (human and animal) without reference to cognition (thought processes).
- Seligman in his study on learned helplessness realised that dogs were processing information in their context, going beyond stimulus-response.

Theories of Learning

Cognitive Theories

- Lev Vygotsky (1896-1934) was a Russian psychologist.
- He saw learning and reasoning as emerging from the practical activity in a social environment.
- He died of tuberculosis, aged 37 in Moscow, and struggled in his final years to bring together his views.



Theories of Learning

Cognitive Theories

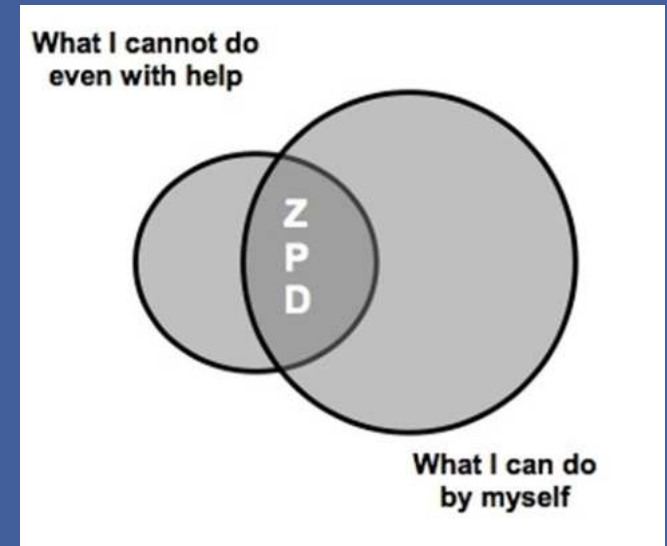
- Vygotsky saw a close link between the use of language and thought processes.
- He saw how children move from external speech to internalization following practice and rehearsal.
- We often go through steps verbally when unsure on how to carry out a task.



Theories of Learning

Cognitive Theories

- An important practical concept from Vygotsky's work is the Zone of Practical Development (ZPD).
- He believed that persons can complete tasks when these are within their ZPD.
- The lower limit of ZPD is the level of skill reached by the child working independently (also referred to as the child's actual developmental level).
- The upper limit is the level of potential skill that the child is able to reach with the assistance of a more capable instructor.



Theories of Learning

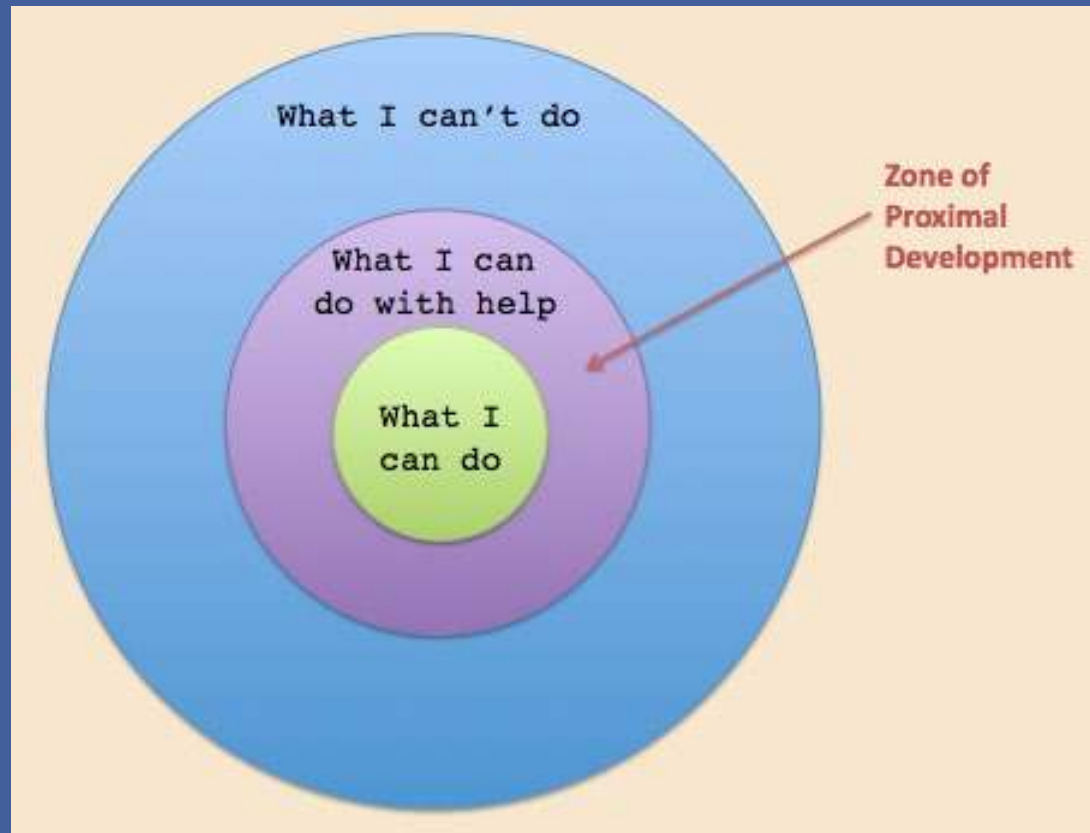
Cognitive Theories

- The upper limit can be compared to learning that can take place when a trainer acts as a 'scaffolding' in the learning process.
- Based on Vygotsky's viewpoint, our objective should be to help learners gradually extend their area of potential learning and this can be achieved through training, instruction and practice.



Theories of Learning

Cognitive Theories



A soccer player in a dark jersey is captured mid-air, performing a bicycle kick. The player's right leg is extended upwards, with the red sole of the shoe visible. A soccer ball is suspended in the air above the player's head. In the background, several other players are visible, some in similar dark jerseys and others in lighter-colored training gear, all appearing to be in a training session on a field. The overall scene is dimly lit, with a hazy, overcast sky.

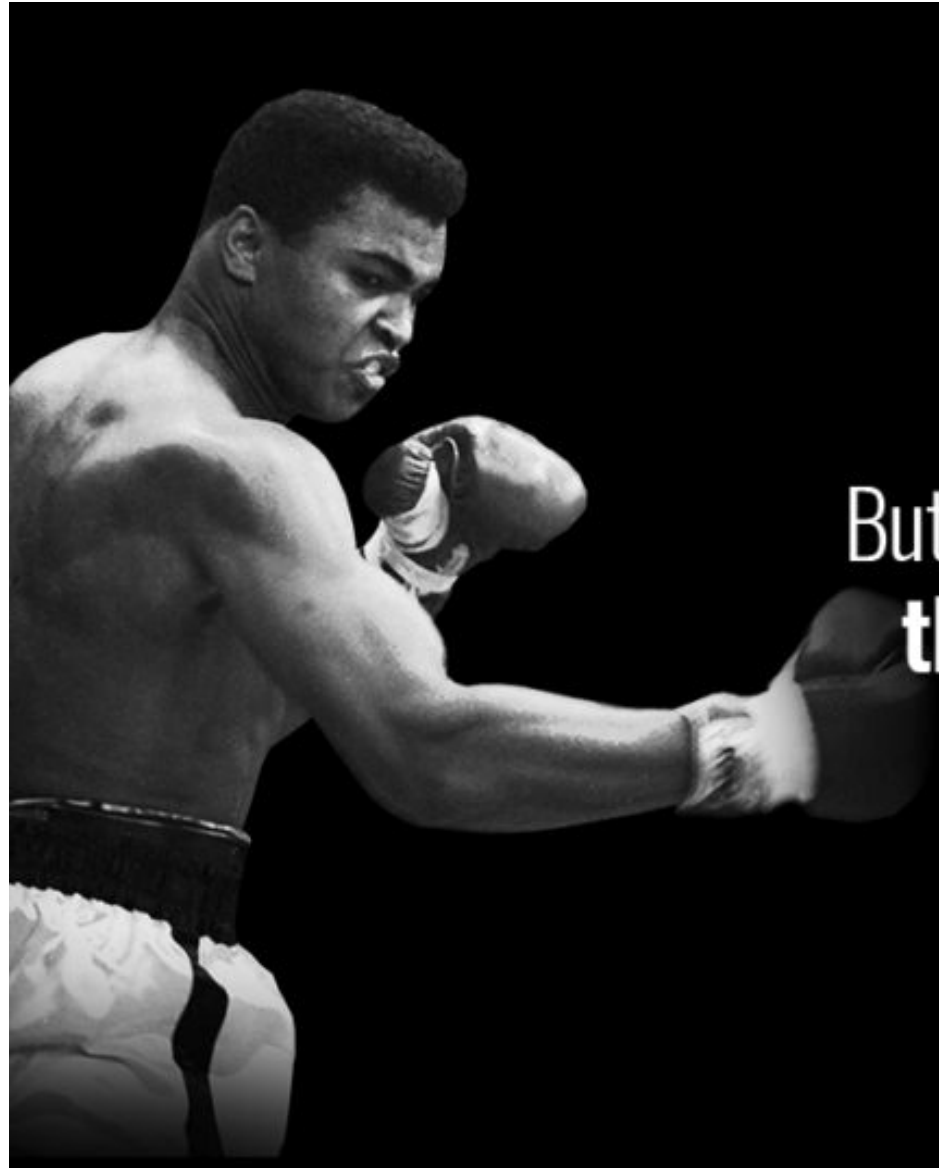
Training

Aristotle



Excellence is an art won by training and habituation. We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence, then, is not an act but a habit.

AZ QUOTES



“I hate every minute of training.
But i said, **don’t quit**. Suffer now and **live**
the rest of your life **as a champion.**”

- Muhammad Ali

The only thing worse than
training your employees and

HAVING THEM LEAVE

is not training them and

HAVING THEM STAY

HENRY FORD



Train people well enough
so they **can leave,**
treat them well enough
so they **don't want to.**

– *Richard Branson*

**“Don’t confuse
schooling with
education.
I didn’t go to
Harvard but
the people that
work for me did.”**

Elon Musk

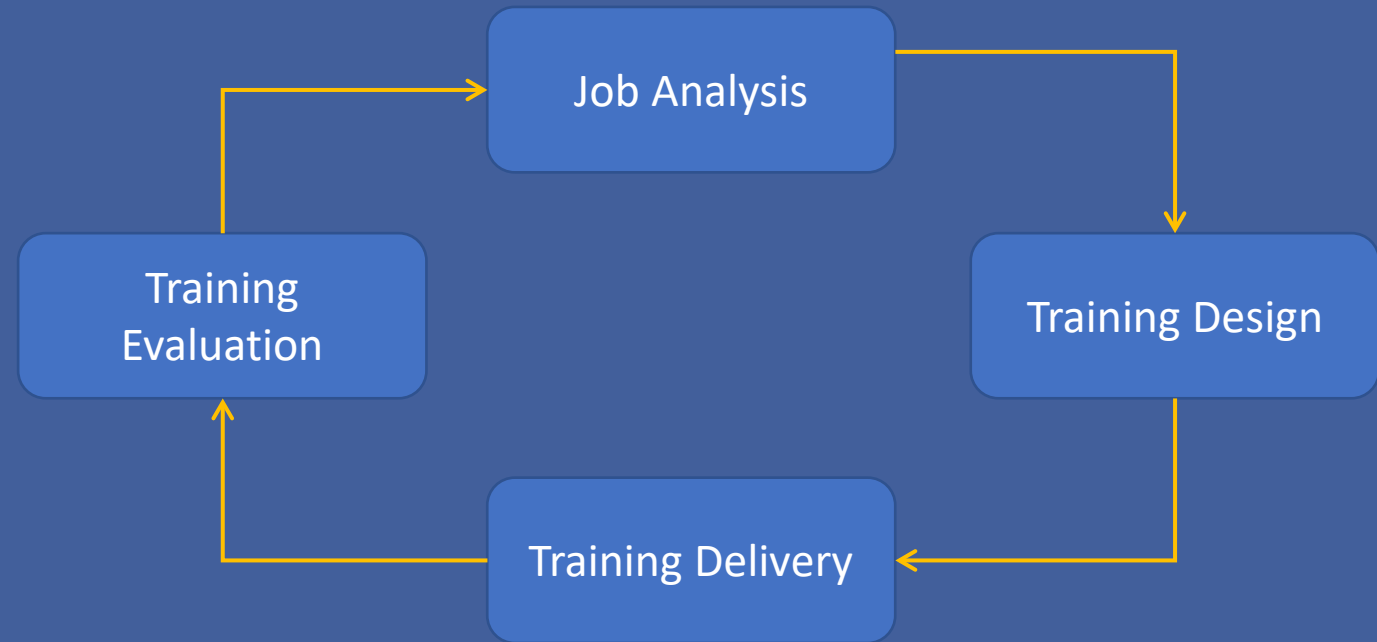


The Training Cycle



The Training Cycle

- The training process can be seen as cyclical in nature, starting with a job analysis, the design and delivery of training materials and the evaluation of learning outcomes, feeding new training needs.



The Training Cycle

- Persons responsible for training need to have the understanding that the content delivered will produce worthwhile results and is therefore necessary for the person attending.
- Training for the sake of training is:
 - costly
 - inefficient
 - will lead to the perception of training as a siloed activity.
- As a result, training initiatives should be preceded by a Training Needs Analysis (TNA).



The Training Cycle

Why is Job Analysis important?

- Allows effective training delivery
- Allows the identification of the best training methods
- Can allow the company to achieve a better relevance for the trainer
- Allows the company understand who should be enrolled in training
- Validation of the training process can be carried out against understanding of the role
- Will provide information for employee development



The Training Cycle

Job Analysis entails Data Collection. Methods for this include:

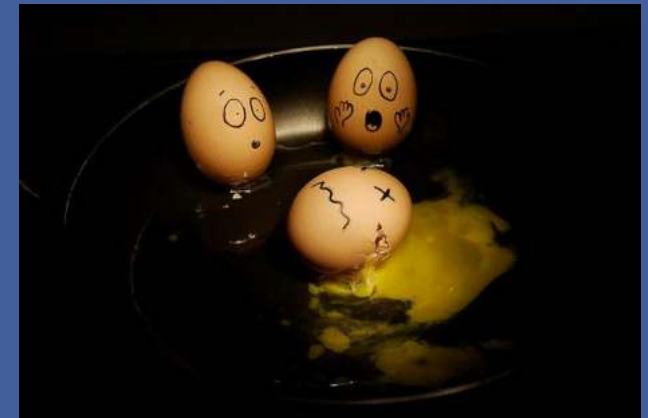
- Filming
- Reviewing of written materials
- Observation
- Questionnaires
- Diaries
- Interviews
- Participation
- Focus Groups



The Training Cycle

Critical Incident Technique (CIT)

- Originally established by Flanagan (1954) to determine the requirements for flying airplanes in the military.
- Subject Matter Experts are interviewed and particularly effective or ineffective outcomes on the job are reviewed.
- CIT has five main steps:
 - Determination of aims and objectives of the job
 - Planning and specification for the collection of critical incidents
 - Collection of incidents from SMEs or others
 - Analysis of incidents and development of categories
 - Interpretation of findings linked to effective and ineffective performance



The Training Cycle

The 7-Point Plan

- Was developed by Rodger (1972) and aims at presenting questions related to the job under 7 different categories:
- Physique: The physical demands placed in the job
- Attainments: Qualifications required to fulfil the role
- General Intelligence: General correlate with most aspects of performance
- Special Aptitudes: For example, an outgoing personality in sales
- Interests: For example, an interest in cars for a Car Sales role
- Dispositions: Assessing general personality characteristics
- Circumstances: Certain job may call for specific requirements (ex. Chinese chef for a Chinese restaurant)



The Training Cycle

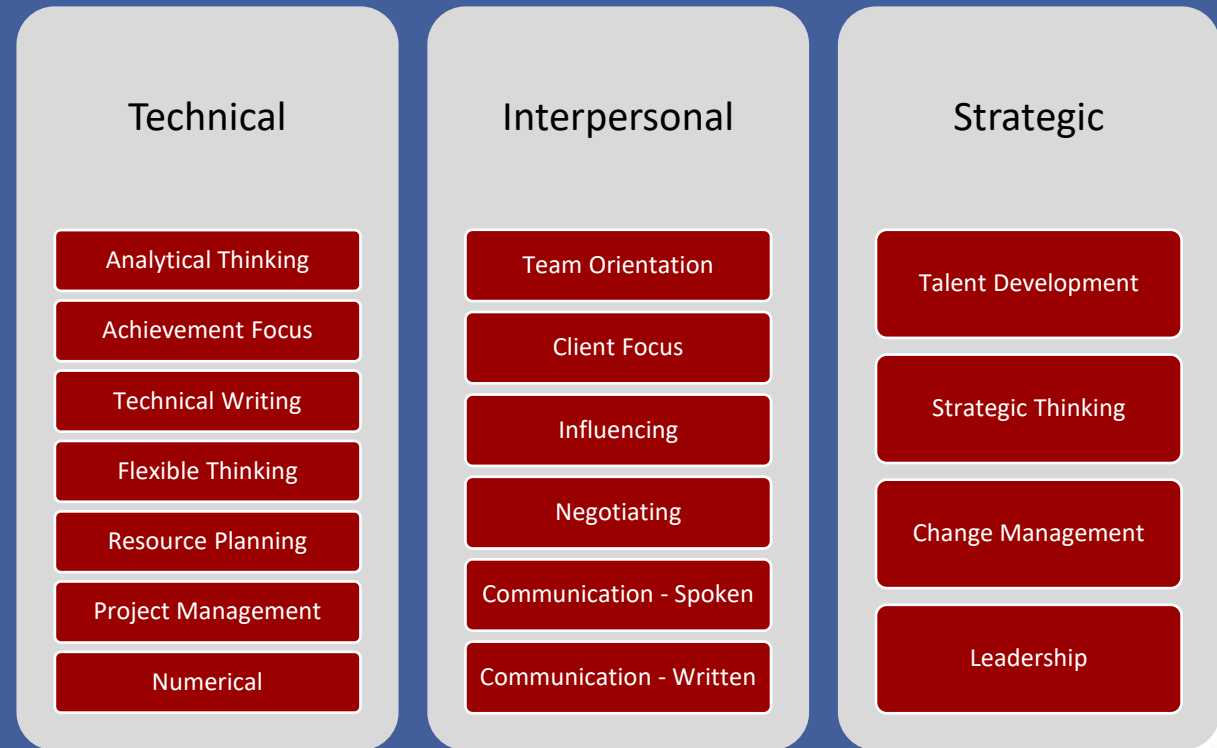
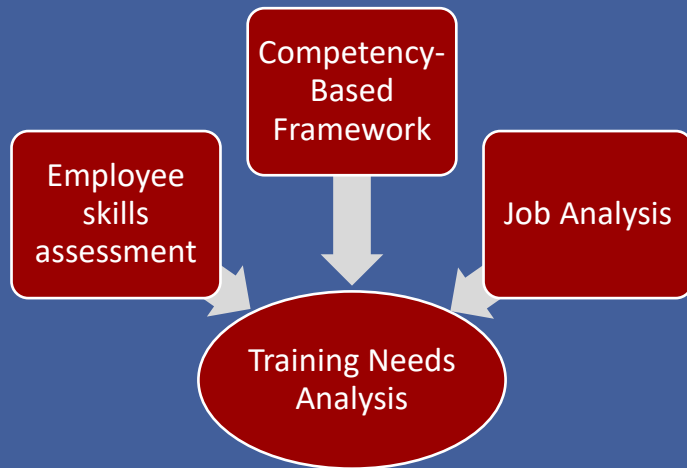
Competency Modeling

- Is generally a multi-source method for collecting data, which places emphasis on the review of behavioural indicators.
- In this method positive indicators and negative indicators are developed in the job analysis.
- These allow for the development of rating or scoring scales which can then be used to identify questions or tools for the selection process.



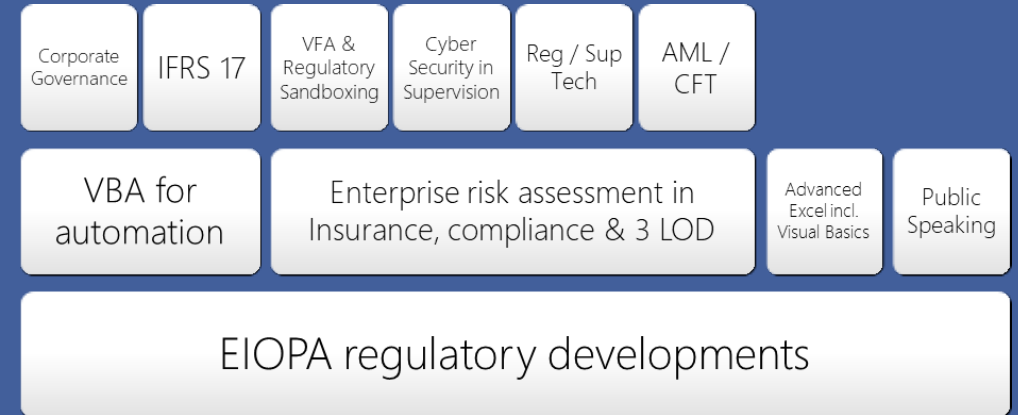
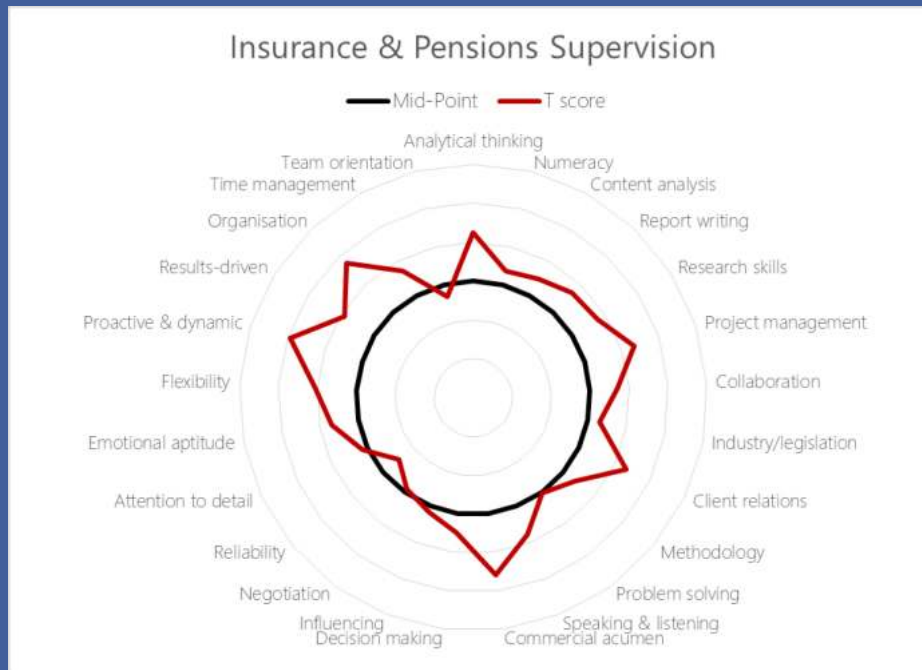
The Training Cycle

- A case study using competency modelling



The Training Cycle

- A case study using competency modelling



The Training Cycle

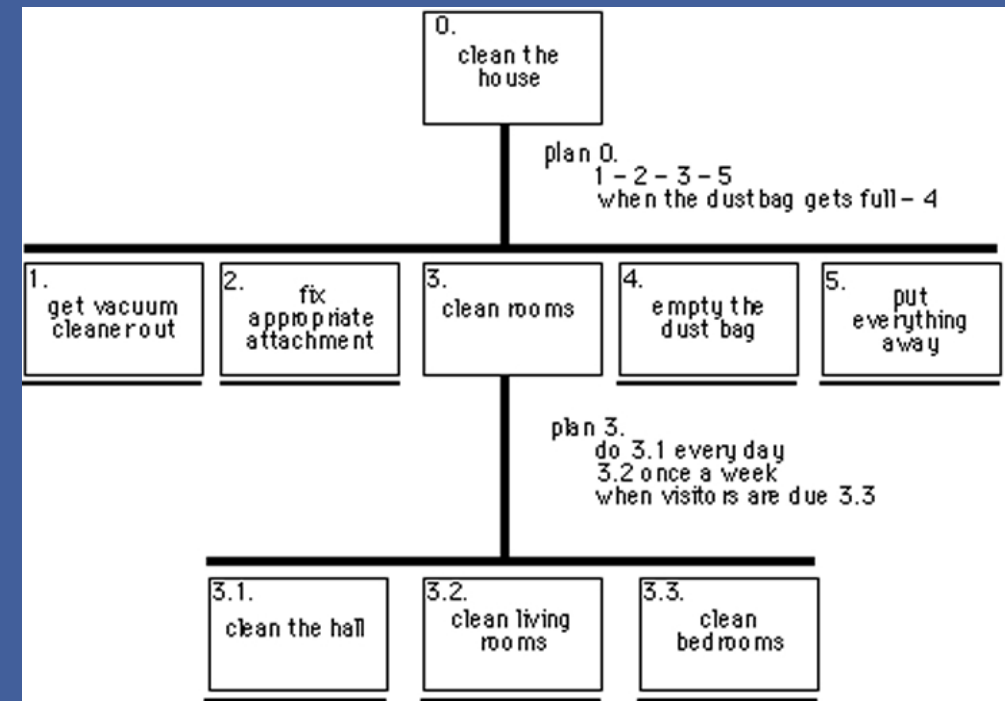
- The TNA should seek to identify what the training needs to achieve or the 'learning outcomes'.
- The more precisely a training need can be specified, the more focused the training can be.
- TNA needs to be carried out at:
 - task level
 - individual level



The Training Cycle

Hierarchical Task Analysis

- In this case one needs to determine what skills and abilities are required to perform this task (knowledge, skills and attitudes).
- Tasks can be analysed and broken down in sub-components through Hierarchical Task Analysis.



The Training Cycle

Practical Exercise

- Draw an HTA representation of the process involved in *a simple work task at your workplace*.
- Provide re-descriptions or additional breakdown in hierarchy to the point which you consider necessary for a new person in the department to carry out the function.

The Training Cycle

- Analysis at Person Level
- Individuals present different skills, knowledge and attitude and TNA should consider these characteristics.
- Analysis at person level should be an on-going task, however information can also be obtained from recruitment information as well as reviews/appraisals.



The Training Cycle

Training Design

- There are different methods through which training can be designed and the method utilised should be contingent on the operating context.

1. Case Study

Case studies are suitable for situations when the trainees have the core knowledge but can still benefit from training.

Because this method comes with lower costs, it sees popular application across different fields and domains.

The Training Cycle

Training Design

2. Games-Based Training

Games have been used for many educational purposes, including training. Using games for education is affordable, competitive, and motivational, especially in the digital era, in which many applicants and employees are highly involved with technology.

One of the disadvantages of this method is the inability to determine the components in a game that will contribute to the training itself. Trainers can't really make sure that every learning concept will be accepted by the trainees through game playing.



The Training Cycle

Training Design

3. Internship

Through internships, employers can benefit from the help of employees, while employees can benefit from the guidance of and training by employers.

In situations and environments where the learners have some base knowledge and the employers are supportive and understanding, this is an excellent training method.



The Training Cycle

Training Design

4. Job Shadowing

Job shadowing serves to generate employees' engagement and interest. Trainees get a chance to see their work from another perspective, which is perfect for those who are being considered for a promotion or a role change.



The Training Cycle

Training Design

5. Lecture

Lectures are a commonly used method for training purposes. In recent months, we have seen a significant rise in remote lecturing, which calls for an adjustment in delivery methods, approach and style.

Lectures are a versatile way of transmitting information but care should be taken to ensure achievement of learning objectives.



The Training Cycle

Training Design

6. Mentoring

When companies plan to groom people for promotion and growth, this is the best training method to use.

Trainees can truly benefit from such a personalized learning structure, boost the mentor-trainee relationship, and facilitate their future career.



The Training Cycle

Training Design

7. Online Instruction

Online instruction requires self-discipline, so it is most effective in cases when some straying from the program is not detrimental to the company's success.

Even so, this is an effective and flexible practice, which has grown in popularity in view of good cost efficiency and ROI.



The Training Cycle

Training Design

8. Role-Modeling and Role Play

This is the counterpart of the lecture training method—one that promotes practice on lifelike models.

It is often used in cases when employees need some practice after they see a lecture or a demonstration. In role modelling the trainer demonstrates the target behaviour, while in role play, the trainee gets a try.



The Training Cycle

Training Design

9. Team Training

Team training has a big and important goal: to connect a team. As such, it does not focus on trainees as individuals like the previously discussed methods; rather, this method is used to connect team members and make them more engaged in their training and work.

Teams are not always heterogenous so it is important to ensure that content and activities are appropriate for participants in these instances.

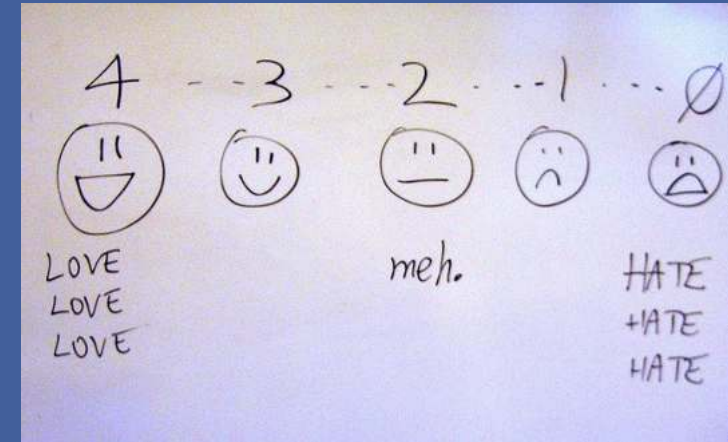


The Training Cycle

Training Evaluation

- Kirkpatrick suggested that training programmes should be evaluated across four different criteria, namely:

1. Reaction: Collecting information relating to the participants' *reactions* to the training session. We are currently doing this through the *Training Evaluation Forms*.



The Training Cycle

Training Evaluation

2. Learning: Relates to the knowledge acquired by the trainees during the training session. To measure this, an actual assessment is needed.



The Training Cycle

Training Evaluation

3. Behaviour: checks whether trainees can actually perform to the appropriate standard.



The Training Cycle

Training Evaluation

4. Results – the extent to which training produces results in the workplace and is often measured through financial impact.
- It is important that the appropriate criteria are used to assess the training content delivered; there is no one right formula for all training programmes.



The Training Cycle

Training Evaluation

- When evaluating training outcomes, we should consider three characteristics:
 - 1.The criterion (target) behaviour – what the trainee should be able to do at the end of the training.
 - 2.The timeframe in which the behaviour should be achieved.
 - 3.The standard of performance required.



