Chapter 01 - Learning

Answers to end of chapter questions

1. Describe the differences between classical and operant conditioning.
   - Classical conditioning is about a stimulus and a response.
   - The original reflex is composed of an unconditioned stimulus (UCS) and an unconditioned response (UCR).
   - There is also a conditioned component called the conditioned response (CR).
   - It is a basic learning process.
   - Conditioning can provide us with what are termed patterns. These are conditioned thoughts, feelings or behaviours which are fairly fixed and come to characterize the way we respond to certain events or people.
   - Operant conditioning is also about stimulus and response.
   - Operant is a unit of behaviour e.g. eating a meal, placing a bet.
   - Main difference when compared to Classical conditioning is that the most powerful shaping mechanism is believed to be reinforcement.
   - Operant conditioning is concerned primarily with what happens after a response. This reinforcement can operate positively or negatively.

2. What are schedules of reinforcement; which are more effective and why?
   - Fixed ratio schedule
   - Variable ratio schedule
   - Fixed interval schedule
   - Variable interval schedule
   - The most effective one is the variable-ratio schedule as it is the most effective in terms of effort-reward ratio. Since a variable ratio makes it difficult to know when a reward will be given, standards are often maintained.

3. List some everyday examples of each of the reinforcement schedules.
   - **Fixed ratio schedule**: examples include production of garments and shoes, assembly of electronic, plastic and metal components, many kinds of packing work, data processing and sewing and assembling toys.
   - **Variable ratio schedule**: selling double glazing, door to door fundraising, street fundraising, telephone sales.
• **Fixed interval schedule**: Hourly, monthly or weekly paid jobs.

• **Variable interval schedule**: Waiting for a train, bus or someone to arrive.

4. **What relevance do operant and classical conditioning have to the explanation of workplace behaviour?**

• Behaviour modification appears to offer a powerful way of understanding workplace behaviour by making explicit the connections between stimulus, response, and contingencies.

• It is important to understand the type of behaviour the job requires and then set the reinforcement schedules to produce the desired behaviours.

5. **To what extent can there be a ‘technology of behaviour’?**

• The idea of a technology of behaviour is based on the ability of those in organizations to apply stimulus-response theories to the workplace.

• It is acknowledged, however, that behaviour modification is an elaborate process and in reality its application is complex and problematic.

• The extent to which the key behaviours can be straightforwardly observed is central to the application of the process.

• The next stage is to try to assess the rates at which these critical behaviours normally occur. Identifying base rates enables the impact of the programme to be assessed at a later stage.

• The third stage, termed *functional analysis* involves careful observation of what normally precedes and follows various types of work behaviour. For example, a functional analysis may reveal that customers are normally greeted only if they approach a member of the sales staff.

• After the functional analysis has been completed an *intervention strategy* is devised. This makes reward contingent on critical behaviour. For example, sales staff may be rewarded with pay, free package holidays, or time off for demonstrating these behaviours.

• Finally, there is a *systematic evaluation* of the intervention strategy. Do the critical behaviours now occur at a level above the original base rate?

• However, this type of organizational behaviour modification requires managers to acquire a new ‘mental set.’ In more practical terms this ‘mental set’ means managers need to learn how to identify critical behaviours, observe them, establish
base rates for them, determine what reinforcers are supporting unwanted behaviours and estimate what stimulus will reinforce the desired behaviour(s). The observation needs to be charted with tally sheets before, during and after the intervention. In addition it may also involve questionnaires and some trial and error pilot runs. In short, whilst there is some evidence that interventions may work in a range of workplace settings, implementing the technique takes a good deal of commitment and skill to make it practicable.

6. Why is learning theory important to modern economies?

• It is increasingly important for people within organizations and organizations themselves functioning in our current climate to function as learning organizations.

• The need for organizations to understand and adapt to their chosen markets is a significant one.

• Learning theory helps us firstly to understand the ways in which people learn and adapt within organizations, and so in turn learning theories can explain how people initially acquire competence.

• This might also in turn help explain what differentiates excellent from merely competent individuals, and ultimately organizations, which are of course a collection of individuals.

7. In reality, workplace learning is a mixture of both cognitive and behavioural learning—discuss.

• There is evidence that mental activity may occur when individuals learn. What seems to happen is that people actively develop models of the systems they are interacting with. In other words, individuals do not respond directly to the environment, as stimulus–response theories assume, but to the models they construct of it. So in effect, over time individuals develop and aggregate sense of their environment through experience and training.

8. How can the transfer of training be encouraged?

• Courses need to be perceived as relevant and useful.

• A course needs to be based on a mixture of both cognitive and stimulus–response learning. Both forms of learning are involved in acquiring complex behaviours.

• Attention needs to be paid to the extent to which individuals have an expectation of valued outcomes from the training. The perception of a link between participation and valued outcomes increases ‘training motivation’ in individuals.
9. **What are learning strategies and how might they help the design of training programmes?**

- The idea of a learning strategy has been suggested by Warr and Gardner (1998). They suggest that the key difference in learners is in the effectiveness of the learning strategy they adopt. These strategies are not thought to be fixed and can be adjusted.

- Two basic primary strategies exist: *cognitive* and *behavioural*.

- Cognitive strategies involve rehearsal (repetition and copying), organization (identifying key issues and creating structures which group and inter-relate material), and elaboration (making mental connections and examining the implications of what is being learnt).

- Behavioural strategies involve interpersonal help seeking (getting others to check and reinforce learning), seeking help from written material (obtaining information from written documents), and practical application (testing learning through practical activities).

- Alongside these primary strategies other secondary strategies come into play, which enable individuals to regulate their anxiety and motivation.

- The practical implications of learning strategies research are immense. Learning how to choose the correct strategy for a particular activity can increase confidence in our learning abilities. What is termed ‘learning self-efficacy’—fundamental and sometimes disabling feelings individuals have about their ability to learn—can be improved.