

# GCE PHYSICAL EDUCATION

## PE2 UNIT GUIDE

*Content Title: Learning Processes*

### Key points

- Observational learning
- Stages of learning
- Transfer of learning

**OBSERVATIONAL LEARNING AND DEMONSTRATION** – Social learning theorists believe that we learn by observing other people. This is known as observational learning. The person who is being observed is known as the ‘model’ and the process is called **modelling**. Teachers and coaches who use this theory use demonstration as the main learning tool. Demonstration is the application of modelling. One problem of observational learning is that coaches and teachers cannot always control what is being observed – boys often pick up bad habits through modelling their behaviour on professional sportsmen e.g. questioning referees’ decisions because they see it on TV. Bandura (1977) suggests that there are four processes in observational learning:

ATTENTION PROCESSES	To be able to imitate a demonstration, the learner must pay attention to the demonstration using selective attention to pick out the relevant cues. A teacher/coach should highlight the relevant cues.
RETENTION PROCESSES	The observer must remember the model’s performance. They therefore need to create a mental picture. Retention can therefore be improved through repeated demonstrations and mental rehearsal.
MOTOR REPRODUCTION	This refers to the attempt by the learner at the modelled skill i.e. copying the performance. Demonstrations should be matched to the capabilities of the learner. The learner’s performance can be improved by practice and through the use of both intrinsic and extrinsic feedback.
MOTIVATIONAL PROCESSES	Learners tend to imitate what they are interested in, so this relates to why a learner would copy the model’s performance. The status of the model can affect motivation (this is why top footballers’ behaviour is imitated so much!). External reinforcement of the model will increase the motivation to imitate it.

## STAGES OF LEARNING – Fitts and Posner (1967) describe 3 phases of learning:

- **COGNITIVE** – This is the beginner phase. In this phase demonstrations are important, together with clear verbal explanations. The visual demonstrations give the learner a mental picture of the movement. Verbal cues can be used to ensure the correct sequencing of the movement. In this phase the learner has limited attention capacity so instructions should be brief and to the point. Manual guidance might also be used in this stage to guide the learner through the movement. This phase is characterised by lots of mistakes. Extrinsic feedback, especially positive reinforcement of correct responses, is needed to help the learner progress to the associative phase.
- **ASSOCIATIVE** – In this stage the learner has a mental picture of what is required but still makes mistakes. Movement patterns are more fluent, and the learner now begins to refine skills that are well learned. The learner begins to know the ‘feel’ of the movement and so can begin to use kinaesthetic feedback. However, they still need extrinsic feedback from the teacher/coach especially highlighting correct technique and timing. Faults need to be corrected at this stage to stop the learner developing bad habits.
- **AUTONOMOUS** – Movement patterns are now well learned and are performed competently and they have become automatic. This means that the learner does not have to concentrate on performance so will have spare attention capacity, enabling them to concentrate on other things. The learner will make greater use of kinaesthetic information but will also still benefit from more complicated technical feedback from their teacher/coach.

**TRANSFER OF LEARNING** – This refers to the effect that learning one task has on the learning of another. It is important to note that not all transfer enhances learning. Transfer is a complex concept and can take many forms:

- **POSITIVE TRANSFER** – this occurs when prior learning promotes present learning e.g. there might be positive transfer from throwing a ball to executing the overhead clear in badminton.
- **NEGATIVE TRANSFER** – this occurs when prior learning has an inhibiting effect on the learning of a new task e.g. there could be negative transfer for an experienced basketball player beginning to play netball as the different weight of the ball could cause the player to overshoot/overthrow.
- **ZERO TRANSFER** – in this case prior learning has no effect on present learning e.g. skills learned in football would have no impact when learning to swim.
- **BI-LATERAL TRANSFER** – this is transfer between limbs.
- **PROACTIVE TRANSFER** – the effect that learning a skill has on a skill that has not yet been learned – this could be positive, negative or zero.
- **RETROACTIVE TRANSFER** – the effect that learning a skill has on a previously learned skill, again the effect could be positive, negative or zero.

### Top Tips:

Stages of learning are very closely linked to information processing – processing becomes very much more efficient as you move through the learning phases.



## *Exam Style Questions*

1. Using examples, explain how transfer of learning has affected your sporting performance.

[3]

