# Unit 2 Skill Acquisition

## Describe 'Fitts and Posner's' phases of learning and explain how you would structure practices to enhance a performance.

Learning is the process of producing relatively permanent changes in behaviour as a result of practice. 'Fitts and Posner' (1967) were interested in this and the detail of the kinds of changes and phases that learners go through when acquiring a skill. They came up with 3 phases of learning that they believed all learners must go through when achieving the mastery of a skill, these phases are known as 'Fitts and Posner's' phases of learning (1967).

The first phase or the 'early phase' that a learner must first pass through is known as cognitive. This is where skill learning has begun, as the learner relies heavily on cognitive processes. During this phase the main concern is what to do and how to do it. For this the beginning learner must understand the task at hand, which often means an attachment of verbal labels to their movement responses. For example a footballer would also verbalise his required performance before an action such as before kicking a ball e.g. how he is going to move his arms and legs in order to strike the ball correctly. The learner must pay attention to the many details of the action. For example a goalkeeper in field hockey would also look at this e.g. where in the goal he should position himself and when receiving a shot how he should move his limbs (either legs or hands) to block the shot. It is also the same with a runner who will look at movements of their arms and legs.

Due to the high cognitive involvement many gross errors are made when executing actions, which is a reason for inconsistency and variable performances. This is because a lot of actions are jerky and uncoordinated. Errors such as those of a badminton player who may miss hit the shuttlecock. A basketball player may dribble the ball but due to their stiff movements and uncoordinated actions they may run in to the ball or miss dribble. A juggler may also have the same problem that due to their lack of coordination will be messy and will not be able to juggle properly causing them to drop the balls.

Although many people may realise their mistakes they often are not aware of how to correct them. This is why a coach is needed to help give advice and correct the problem. They would use lots of models that are really useful in helping the performer to understand techniques and correct errors. A lot of feedback would be given back to the sportsman, which may be visual (demonstrations), verbal (instructions) or manual

(physical guidance). All of this needs high amounts of concentration to help them become more aware of how to correct mistakes.

In order to improve this there are some practices that are best suited for this phase. One of these is interval training that is simple and a good practice for making the player more aware. This type of training includes alternating between fixed periods of exercise and fixed periods of rest for recovery. A rugby player may use this practice by starting off with a 25m sprint, followed by a 30 second rest, another 25m sprint, 30 seconds rest and so on. A runner may do the same and so may a swimmer e.g. 10m breast stroke sprint, 30 second rest, 10m back stroke sprint, 30 second rest an so on. Closed drills are also very important as they have low pressure with a consistent environment, such as in football a player may do shuttles or dribble a ball around a cone but at self paced (very important), a juggler may do catching drills with a partner and a tennis player may also do shuttles whilst running with a racket. Use of a demo from a more skilled person or model may also be used as it is seen as a something to work around and to help you improve.

The next phase a learner must pass through is the 'intermediate' or the 'associative' phase. This is primarily concerned with practicing the newly required skill. At this phase the learner shows a lot more consistency and coordination has improved much more rapidly. Also improvements such as timing are shown. At this phase the learner will also produce basic mechanics of the skill and make associations with previously learned material, allowing a small degree of transfer (taking a previously learner skill and using it in aid of another or in a different sport/ situation) e.g. the skill of a netball shot transferred to be used in a basketball shot. With the use of a role model the learner becomes increasingly better due to the comparing of themselves. The learner may start to recognise and may correct errors that they previously did not know how too. For example a discus thrower may miss throw the disc due to the wrong positioning of their feet, the discus thrower would realise this and improve on it. This is also due to the vitality of detailed feedback which may no longer be visual/ verbal but changed to more reliance on internal/ kinaesthetic. The types of feedback used may include videos. As feedback becomes less rapid it means this phase is much long lasting.

No longer is interval training required at this phase but other practices that are best suited for this phase includes open skills with a realistic environment. This may mean any previously learned skills may be used during a practice in the sports naturally environment such as a cricket team practices on cricket pitch, volleyball doubles practices on a volleyball court and practices of juggling on stage. Links to coaching

points and subroutines are required. One method used is the whole - part-whole method where you play a game, stop play and focus on the error and then improve this area in a match situation again. An example of this would be in a football match if part of the play needs correcting then the game will be stopped and the problem will be focussed on e.g. corners and then will be put back in to the game again. Chaining of the skill is also very important for example in ice hockey linking the skill of saving a goal and then readjusting yourself to clear the ball, or In hurdles mixing running with jumping.

The final phase is the autonomous phase. It is called this because the performer is capable of producing skilled actions automatically with little or no conscious control to movement production.
Movements are smoother and efficient with attention that can be given to relevant cues and signals from the environment, as less mental capacity are needed to carry out the skill itself. The performer also realises their mistakes/errors as they have become more aware and are capable of correcting them themselves with little or no help.

The types of practices used at this phase should be realistic as possible such as competitive games and cups. For example in swimming the Olympics and common wealth games, in rugby the six nations and world cup. The performer should use variable practices such as passing, shooting and movement drills in netball. Also structured feed back is required (with an aid of videos).

In conclusion I have found out that we all learn by passing through different stages. As you progress through each stage you improve in ability, skill and awareness. During these stages to help you improve there are also certain drills and factors such as videos and the use of role models that are so vital in the progression of learning and improvements.