Stages of Skill Acquisition

1. Examine the stages of skill acquisition displayed by the athletes in a major sporting performance, and provide performance examples to support your answer.

Soccer World Cup

Cognitive

The cognitive stage is the first stage in skill acquisition. It is also known as the understanding stage, and it involves much thought in order to execute skills correctly. This stage involves little practice but instead cognitive thought. Improvements in this stage can be quite rapid, but also very inconsistent and with little success. When athletes perform the skill here, it will appear disjointed and erratic. There is a lot of information at this time and coaches need to make the message as simple as possible without overloading the athlete with information. Coaches must also maximise feedback when they observe something good that will help the athlete in their learning process, as athletes are often unable to self correct their errors at this stage. In order to aid learning at this point, coaches could utilise demonstrations or use video footage to display correct movements and techniques. Practice should also be closed, to allow the learners sufficient time to master individual skills before performing them together, and quality should be emphasised over speed.

Examples:

A corner routine: The corner should be broken down into three stages, concerning the type of contact with the ball, the runs of the players in the box, and the type of finish desired. The coach should sit down with the team before practice and watch successful corners on video, to provide them with some positive stimuli before they practice. The athletes should then practice the three components on their own to perfect their individual parts. There will be many errors at this point and perhaps 1-3 goals out of 10 will be scored, however, the coach will use feedback after each corner to help the players improve.

Pattern of play: In order to learn a totally new system for their national team, the coach would need to communicate to the players what he wants from them in the form of a whiteboard session. The practice should start from the defenders and work its way up to the strikers with a shot on goal, being fairly closed with no opposition; to perfect the pattern. The build up will be very slow at this point and the play may look unnatural, but the athletes will learn from the coach's feedback on their performance after each shot on goal.

Associative

The associative phase is the second and longest stage in skill acquisition, where athletes now understand how to perform a skill they are learning. This stage is characterised by fine-tuning the skills through practice, and is where the athletes have more success in their performance. Accuracy is also improved, with errors becoming less frequent. Other variables are brought in the practice session, as the learners continue to improve, and the sessions become more open-based. A kinaesthetic sense may be experienced at this stage, and enable athletes to self correct their errors. Mass practice can begin to be used here.

Examples:

A corner routine: The team could now practice the corners against a small number of defenders, to put pressure on the learners, and resemble the conditions of the competition.



The team can practice the corners in a continuous fashion until they finish it off with a goal on a regular basis. The execution will begin to look smoother and their performance may improve to 4-7 goals out of 10 corners. After around 10 goals are scored, the coach will evaluate the good and bad points of the corners, and tell the players how to improve on their performance.

Pattern of play: When the team is practicing its set moves, they could now encounter a full opposition, to mimic a game situation. The performance of the drill may begin to become faster, and more goals may be scored. The athletes will still be inconsistent to a degree, but they may have an intrinsic feel of what went wrong and can self-correct, by making the right passes and shots the next time. This drill can be performed repeatedly, with the coach providing feedback after 15-20 runs through.

Autonomous

The autonomous stage is the final stage of learning, where skills become largely automatic in their execution with consistency. The skills have progressed from a jigsaw of minor skills, to being combined into set game situations committed to the long term memory of the athletes. The athletes do not have to worry as much about external feedback, as they would have developed a strong kinaesthetic awareness and can now easily access their performance. Athletes must maintain this level consistently and look for ways to improve, with practice involving a variety of variables and skills. The skills should be able to be adapted to different environments and contexts, to further develop them.

Examples:

A corner routine: The corner practice should be as game-like as possible, and a full number of defenders should be added to put increased pressure on the attackers. The corner taker should be automatic in putting the ball in the right areas of the box, and he should be able to master his deliveries each time. The attackers should also be very proficient at making the right runs and finishing the cross off with a goal.

Pattern of play: The players would now be able to run through their set plays with consistency and speed, and the athletes should become automatic in their movements on and off the ball. The trainings should become an opportunity for the team to practice against different styles of play. If their opposition has a set way of playing, the team could adapt. For example if, a team plays a high pressing style, the coach could set the training up so that the opposition also presses the team high up the pitch to add as much game pressure as possible.

2. Describe how the characteristics of the learner can influence skill acquisition and their performance in your nominated sport.

Soccer

Personality

A personality is a set of ideas that can influence a person's behaviour or motivation. In order to achieve high levels of performance in soccer, the learner should exert a personality that suits the game. Soccer is a sport that demands quick thinking, meaning that an individual inclined to a high amount of trait anxiety may not learn and perform skills effectively. When trying to learn skills relevant to soccer in the cognitive phase, such as passing a ball or shooting, the athlete needs to have a high level of intrinsic motivation in order to effectively understand what is being taught, and to accept the advice being given.

This means that individuals with a commitment to training and a high internal motivation level are in the desired personality when learning skills for soccer.



Prior experience

Prior experience is the experience a learner brings with them. By having some idea of how soccer skills should be executed, the learner is at an advantage, and may be able to learn the aspects of the game quicker in the cognitive stage, with fewer errors. Having any sort of prior experience with balls games can be advantageous for learners in soccer; as seen by people in 3rd world countries using any round objects like oranges, to play the game, therefore improving their coordination and gaining experience in a related manner. For example, in Brazil, young children play a modified game of soccer, called futsal, until the age of 10. When they start playing soccer, they bring with them prior knowledge of the basic skills, such as dribbling, and hence learn the more advanced moves quicker and more effectively than others.

Confidence

Confidence is the belief in oneself and their abilities to complete a skill. The confidence level of the learner can directly affect how well soccer skills are learnt. As soccer is a team sport with many variables, mistakes are a big part of the game and learners must understand this. A high level of confidence is needed, therefore, for learners to deal with their mistakes, and bounce back, persisting with their learning, regardless of errors made in the cognitive and associative phases. Confidence also directly affects how skills are performed, and learners with high confidence may experiment with different techniques in matches and achieve better performance than those with low levels of confidence.

Heredity

Heredity is seen as the transfer from one generation to the next, of a set of genetic characteristics. There are many facets of soccer where heredity factors can give learners an advantage, and maximise potential. Different positions lend themselves to different body and muscle types, as a striker's desired somatotype would involve a high percentage of fast-twitch fibres, in order to run at defenders for short periods of time. A central midfielder however, would require a higher percentage of slow-twitch muscle fibres to aid the constant running from one end of the pitch to the other. Also, leg strength can be a big advantage in soccer. This would directly relate to heading, so individuals that are tall or have a good vertical jump would be useful for set piece situations, due to their heading ability. Individuals with good foot-eye coordination will also improve their rate of skill acquisition for soccer, as they would have an increased feel and touch of the ball.

Ability

The ability to learn is described as the way individuals understand new skills when exposed to them. How quickly this occurs, and the intelligence of the learner has a direct effect on learning and performance in soccer. If the learner has a high level of ability and can grasp the basic skills, such as shooting and tackling, they are much more likely to move on to the autonomous phase quicker than those with low ability. For example, if athletes have a high level of intelligence, they will make better decisions on the field, such as picking the right pass or shot, and hence experience better performance. Having a high level of ability in soccer will also help athletes learn tactical skills concerning different formations and systems, and this will accelerate their learning of the game and give them increased performance.

