# **CHAPTER 10** - Classification and transfer of skills

# Exam style questions - text book page 135

I) If you were watching a number of performers in sport, what characteristics would you expect the movements of a skilled performer to have?

4 marks

#### Answer:

- Movement seems effortless.
- There are many correct movements consistently performed.
- The movement follows a technical model.
- The movement is aesthetically pleasing.
- The movement is controlled and well co-ordinated.
- 2) By using examples from sport, explain what is meant by fundamental psychomotor skills and why they are so important.

4 marks

#### Answer:

- Jumping, catching, throwing etc.
- Basis for the development of other skills.
- Learned through early experiences usually via play.
- Important because can draw on them for lifetime sports or healthy lifestyles.
- Helps personal development and self-esteem.
- 3) a) Why is the shot put often regarded as a closed skill?

2 marks

#### **Answer:**

- Tends to be an habitual response.
- · Little reference to the environment.
- There is a definite beginning and end.
- More self-paced than externally-paced.
  - b) Using passing skills in a team game, explain what is meant by an open skill.

4 marks

#### Answer:

- When passing a soccer ball you need to take into account any challenge from your opponents.
- You need to refer to where your team mate is when passing a netball.
- You need to process a great deal of information regarding speed of passing the ball in hockey and the direction of the pass.
- When passing the ball in rugby the speed at which you pass is often dictated by how quickly you are being closed-down.
  - c) Give one example from sport of each of the following and state why you have chosen your example: continuous skills, serial skills, discrete skills.

    3 marks

#### Answer:

- Continuous skill: cycling because the subroutines of the pedalling action are not easily separated.
- Serial skill: triple jump because there are a number of discrete elements linked together to make up the whole skill.
- Discrete skill: forward roll because there is a definite beginning and a definite end to the skill.

# CLASSIFICATION AND TRANSFER OF SKILLS

- 4) The diagram in figure 10.10 shows a profile for the racing start in swimming scaled across four different continua representing the skill characteristics of the movement.
  - a) Referring to the profile, describe the
     swim racing start in terms of each of the four
     characteristics shown.
     4 marks

### Answer:

- Continuity: the start is shown as being discrete, it has a distinct beginning and end.
- Muscular involvement: the start is shown as having gross muscle actions using large muscle groups violently with little fine control.
- Pacing: the start is shown as being externally paced, the swimmer has to react to the external stimulus of the gun or hooter.
- Environmental conditions: the start is shown as a closed skill, although the swimmer reacts to an external signal, no interpretation of that stimulus is required, and only the one response (movement from the start box) is relevant.

closed

fine

continuo us

b) Using this same profile chart, sketch a profile which would describe the characteristics of a table tennis serve.

3 marks

open

discrete

gross

external

#### Answer:

- See figure 10.11
  - c) Explain why you have chosen your particular characteristic for muscular involvement and environmental conditions. 4 marks

#### Answer:

#### Muscular involvement:

 The table tennis serve is a very delicate movement requiring very fine control of the small muscles in the hands and forearms.

# closed CONTINUITY ciscrete Closed CONTINUITY discrete MUSCULAR INVOLVEMENT gross self PACING external

figure 10.10 - continuum profile for swimming race start

**ENVIRONMENTAL INFLUENCE** 

MUSCULAR INVOLVEMENT

CONTI

## **Environmental conditions:**

- The serve is a fairly closed skill, then player uses a well-learned technique.
- However, a player must be able to use more than one movement pattern in order to be able to respond to the opponent variation
  in positioning, and his or her strength at returning different types of serve, and hence choose appropriately.
- And to vary the spin and direction of the ball.
- So, each variation of serve will be a closed skill and be part of a well-learned repertoire of serves.
  - d) Explain how your profile for the table tennis serve might assist a coach in planning practices for players learning this skill.

5 marks

#### Answer:

• The coach should look at the position of the skill in each continuum to see if it will tell him or her something about how to organise the practices.

#### Continuity:

- Because the skill is discrete, it can be practised in isolation from other aspects of the game.
- It should be practised sufficiently to enable accuracy and consistency to develop.

## Pacing:

- Because the skill is internally paced, the coach should encourage beginners to take their own time in executing the skill.
- And to adopt a set routine or mental set for the technique.

## Environmental influence:

- Although the serve is relatively 'closed', it can be affected by temperature of the playing hall, and pressure of the of the event.
- Which means that the player should be exposed to practice in this variety of environmental conditions in order to be best prepared for him or her in the competitive situation.

# **QUESTIONS AND ANSWERS**

5) Explain four different types of transfer of learning.

#### 4 marks

#### Answer:

# Any four from:

- Positive transfer is one skill helping the learning or performance of another.
- Negative transfer is one skill hindering the learning or performance of another skill.
- Bi-lateral transfer is the transfer of learning or performance from limb to limb.
- Retroactive transfer is the influence of a skill being learned on a previously learned skill.
- Proactive transfer is the influence of a skill being learned on future skills, a skill learned in the past has an influence on a present skill.
- 6) a) Using a practical example, explain what is meant by the term 'transfer' in skill learning. How can transfer be detrimental to performance? Give a practical example.

5 marks

#### Answer:

# Transfer in skill learning:

- The influence of the learning or performance of one skill on the learning or performance of another skill.
- If you perform one skill and then perform another, the second may well be affected by the first.
- For example, you perform a push pass in hockey and then you perform a flick, the actions of the first skill may help that of the second (positive transfer).

#### Detrimental to performance:

- The performance of one skill may well hinder the performance of another.
- Because there may well be inappropriate movements or information processing which could confuse the performer.
- For example, a badminton player may play tennis immediately after playing badminton and the forehand in tennis may be far too 'wristy' because of the confusion in the response.
  - b) How can a teacher or a coach ensure that as much positive transfer takes place as possible in a training session?

    5 marks

## Answer:

#### 5 marks for 5 of:

- The coach uses as many different practices as possible in training drills are varied.
- Emphasise the transferable elements of the skills.
- Tell performers about transfer to heighten awareness.
- To ensure the building of schema.
- Make sure training is relevant to the 'real' game.
- Environmental conditions need to be similar.
- Tactics, strategies and information processing elements need to be similar.
- Avoid confusing practices to avoid negative transfer.
- Ensure that skills are thoroughly learned before moving on to other skills.
- Give distributed practice sessions in which there are rest intervals for mental assimilation.
- Positive previous experiences or values assist transfer.