

▲ level P.E. Edexcel, unit 2: section ▲: acquiring skill.

Explain how open and closed control of motor skills works in relation to individual, racket, and team activities.

‘Skill is a learnt ability to bring about pre-determined results with maximum certainty, often with the maximum outlay of time or energy or both.’ (Knapp)

▲ number of key qualities are needed in order for a performance to be skilful, they are consistency, accuracy, control, an intention and fluidity. There are different types of skill, they are open skills and closed skills. Open skills are those which are directly influenced by the environment in which they are performed. They are skills which require adaptation each time they are performed e.g. netball and badminton. Closed skills are those that have an outside physical influence acting upon them. They are the same each time they are performed e.g. sports like dancing. (▲Advanced PE for Edexcel) The sports I am going to relate this essay to are dancing for individual, badminton for racket and netball for a team activity. (146)

There is an **open/closed continuum**, it is concerned with the effects of the environment on skill.

Sports such as Netball and badminton usually involve open skills. This is because the environment is constantly changing and so movements have to be continually adapted. Therefore, skills are predominantly perceptual, for example a pass in netball or a shot in badminton. (www.brianmac.demon.co.uk) (▲Advanced PE for Edexcel)

There are different types of skill. **Cognitive skills** are also often known as intellectual skills and involve thought processes. E.g. an official in netball. **Perceptual skills** involve interpretation of stimuli, we may see the same information as someone else but our brains may interpret it differently from them. E.g. how you move to a certain piece of music. **Motor skills** involve the muscular system and concern movement and muscular control. E.g. running up the caught in netball. E.g. running around a badminton court. Performance in sport is an extremely complex process, it does not just involve one type of skill, but several. Most skills are referred to as **perceptual motor skills** as they involve thought, interpretations and movement.

See ----- Interpret ----- Think ----- Move

▲ word which sometimes causes a bit of confusion is **ability**. The words skill and ability are frequently used interchangeably. To clarify the exact meaning, it is useful to think of an ability as something which the learner possesses, an inherited characteristic (innate) e.g. if there were two girls of the same age who both did the same amount of football training but one of the girls was a far better player than the other, one of the girls would have an innate ability unlike the other. **Techniques** are the basic movements of any sport or event we combine a number of techniques into a pattern of movement.

$$\text{SKILL} = \text{▲ABILITY} + \text{TECHNIQUE}$$

(www.brianmac.demon.co.uk)

Command style is where the teacher makes all the decisions and is used when the teacher wants tight control over what the learner is doing, or wants uniformity in a class. This particular style of learning would improve part of each sport, it is a good style to learn a new dance or to show a group of people the correct way to do a new shot or the correct way to do a shot in badminton, it would also be good to teach a group of people the correct way to pass the ball or how to do a specific skill correct in netball. This would be good for open and closed skills. **Reciprocal teaching** is when the pupils work in pairs, one is the 'doer' and the other is the 'observer' the teacher gives instructions and hands over the contact with the learner to the fellow pupils, the teacher helps the observer to help the doer. This would be a good style of teaching to improve the movements and style in dancing, make shots more consistent and accurate in badminton, to make passes more accurate and to improve footwork in netball. This would be good for closed skills. There is a **problem solving style**, this is where the teacher focuses on how – to learn, a task is set which the pupils have to solve in their own way. (Physical education and the study of sport)

Individual skills are those performed in isolation. These are skills where we are the only performer at the particular time e.g. in an individual dance competition, we perform alone and are followed by another competitor. **Coactive skills** are those performed at the same time as others but without direct confrontation e.g. 100 metre race, we perform alongside but cannot physically influence other runners.

Interactive skills are those where other performers are directly involved. There is a direct influence on skilful performance in the form of active opposition. E.g. netball, the skills are involved in accurate passing with avoidance/dodging skills on the part of an opponent, badminton is also an interactive skill but it uses skills of outwitting the opponent by a range of different shots.

There are different types of practice. **Fixed practice** involves repetition of an activity. This allows the skill to become 'over learned' or

automatic to the learner. This would be a good type of practice for perfecting the style of dance, to become better at a certain shot in badminton or being more accurate with passing in netball. **Variable practice** involves a variety of activities/situations. The learner applies the skill to different environments in practice, allowing both the skill and ability to adapt the skill to a range of possible situations. This would apply when practicing how to respond to an opponent whilst in a game situation in badminton or netball. **Distributed practice** involves the division of a practice session into sections. The overall session involves breaks between each session during which the activity may be changed, feedback given, performers given a rest and the next activity explained. This type of training would be good in dance, badminton and netball, it would allow time to perfect certain parts that you are weaker on and allow feedback to be given so that the skills can be developed further. This would be good for open skills. **Massed practice** involves a continuous session with no breaks, it tends to be used for experienced performers who have high levels of fitness and is most suited to fixed practice. The performer will work constantly allowing the skill to be tested under fatigue conditions as in a game situation. This would be good in practicing dance because you can be dancing for long periods of time so stamina is essential. In badminton and netball, games can be long and physical, so it is important to get used to playing under fatigue conditions. (▲Advanced PE for Edexcel)

In summery I think that dance is a mainly closed skill because it is a coactive/individual skill and not often affected by the environment, badminton is in the middle of the open/closed continuum because it is affected by the opponent(s) but not by the weather and netball is a mainly open skill because it is affected by opponents and possibly the weather but it is a non-contact game. Taking in account that not all individual, racket and team activities have the same rating on the open/closed continuum or the same level of motor skill. Badminton, dance and netball are all motor skills and perceptual motor skills. It would suit most teaching styles and types of practice depending on what you want to achieve, e.g. if you are a young beginner or professional.

In final conclusion I think that you cannot group activities as individual, racket and team activities when relation it to open/closed control of motor skills because there is too much variation in the groups.

Bibliography

- ▲Advanced PE for Edexcel, ▲Author – Frank Galligan et al, 2000
- www.brianmac.demon.co.uk

- Physical education and the study of sport (Second edition) J R Davis et al, 1994
- ▲Acquiring skill in sport – bob Sharp.