AS Physical Education. Skill Acquisition Coursework Task One.

Review the classifications of skills to include the differences between individual, co-active and interactive skills.

The aim of this coursework is to review the various classifications of skill. Within it I will outline the differences between Individual, co-active and interactive skills. These are all used in team games, racket games and individual activities, in which case I will provide examples highlighting when and where they take place.

'Skill' can be defined as:

"The learned ability to bring about predetermined results with maximum certainty often with the minimum outlay of time of energy or both" (Guthrie, 1956)

- A skill is learned and requires practice and results from experience. It can be improved with practice.
- A skill always brings about an end result and has a goal to be aimed for.
- A skilled performer can achieve their goals consistently, in an efficient movement. It is well co-ordinated and precise.

Skill = Ability + Technique.

- In order to perform a skill efficiently, we must learn the required technique.
- In order to learn a technique fully, we must have the necessary abilities.

For a performance to be skilful it requires:

- Consistency
- Accuracy
- Control
- An intension
- Fluidity

Skills can be classified on a sliding scale depending on their requirements these are called continuums. Continuums demonstrate the need for a flexible and analytical approach.

An Individual skill is when a performer performs alone with no interaction with others. On the other hand, co-active skills are those in which competitors are performing at the same time as others but where they are physically separate and one competitor cannot inhabit the performance of another, for example a swimming race, in lanes, in this people are in separate lanes and competing individually however all at the same time, if a performer enters the lane of another performer then they are penalised. An interactive skill involves the performer interacting with the environment or other performers, in these the performance can be controlled by the opposition. How well you play is

dependent on how well your opponent allows you to play. Examples of all three of these will be shown on different continuums throughout this coursework.

Open/Closed Continuum.

Barbara Knapp recognised two basic classifications of skill, these are either open skills or closed skills.

Open skills are those in which the environment is unpredictable and affects the skill. The form of action has to be varied according to what is happening around the performer. This means that the skill will require adapting each time it is performed. Many conditions can affect this such as, the weather, the pitch conditions, the speed on a ball, the opponent, the positioning, etc.

Closed skills are skills which are not affected by the environment. They are prelearned patterns of movement that can be followed with little reference to what is going on around them. They are performed the same every time.

Both open and closed skills need to be practised differently, in which case it is important that performers, teachers and coaches recognise where on the continuum a skill lies.

Open Skills		Closed Skills	
•	Cycling	•	Shot putt
•	Passing in football	•	A penalty shot
•	Retrieving a smash	•	A serve in tennis
	in badminton		

Open and closed skills can be used to describe individual, co-active and interactive skills, in a process of grouping similar skills together and giving them a general label. In preparing a performer for competition, coaches need to consider the nature of the interactions between competitors and the extent to which the opposition can affect the player's performance. To do this an interaction continuum is used:

Individual Skills	Co-active Skills	Interactive Skills	
• A somersault in gymnastics	• A 100M sprint in athletics	• Wrestling	
• The triple jump in athletics	• A relay race in athletics	A doubles match in badminton	
• Serving in badminton	A free throw in basketball	Tackling in football	

Self-paced/Externally paced Skills.

The Pacing continuum is concerned with the extent to which the performer has control over the timing of the action. Actions are either, 'self paced' of 'externally paced'. This is, who controls the timing of the skill, it may be the performer or an outside factor, such as a referee.

Self-paced skills are those that are instigated by the performer. They can take as much time or as little time as they wish. An example of this would be a badminton serve, the performer is not told to take the serve at a particular time. It tends to be a closed skill because the performer is in control of most factors.

Externally paced skills are those in which the timing of the performance is not controlled by the performer, but by an outside factor. This may be the weather, for example in sailing, or an official or it could be another performer, such as a service return in badminton. It tends to be an open skill because it is dependent on the surrounding environment.

A pacing continuum is shown below which links open and closed individual, co-active and interactive skills to self paced and externally paced skills.

	Self Paced Skills	Externally Paced Skills
Open Individual		 White water rafting
Closed Individual	Serving in tennis	
Open Co-active		
Closed Co-active	A throw in, in football	A relay- receiving the baton
Open Interactive		 Intersecting a players pass in netball
Closed Interactive		 Taking a shot in football

Discrete, Serial and Continuous Skills.

This is another method of skill classification, it relies on an obvious beginning or end to a skill. The skill may be a separate aspect of a sport which can be practised alone, or it could be an element of a skill which cannot be identified as having an obvious beginning or end.

Discrete skills have a clear beginning and end, which means that it can be repeated and practised on its own to be improved. The skill is a separate element, for example, a free throw in a game of basketball.

Serial skills are those which are made up of a number of discrete or continuous skills. Both a Stimulus and a response are put together to produce an integrated movement. They can make up a routine or a sequence, such as, a gymnastics floor routine.

Continuous skills are those which have no obvious beginning or end. This means that the end of one cycle of the skill becomes the beginning of the next. A good example of this is running, a runner may continue for as long as they want to.

A Continuity continuum is drawn below; it shows examples of open and closed individual, co-active and interactive activities at the three different extremes.

	Discrete Skills	Serial Skills	Continuous Skills
Open Individual			A marathon
			run
Closed Individual	 Hop in the 	• The whole	 Continuous
	triple jump	triple jump	relay
Open Co-active		 A drop shot 	• A tennis
		in badminton	rally
Closed Co-active	 Jumping 	• 110M hurdle	 Swimming
	over hurdles in athletics	race	
Open Interactive	Kicking the	Dribbling	Running
	ball	the ball then	with the ball
		shooting in	in rugby
		football	
Closed Interactive			

Body Involvement Skills.

Body involvement skills are made up of gross and fine skills.

Gross skills involve large muscle groups and movement of the whole body; they have a margin of error in terms of accuracy. These are skills such as, walking, running, etc.

Fine skills are those which involve small movements of specific body parts. In most cases, these need much control and a high level of accuracy. These are skills such as writing, darts or playing the piano.

Coaches and players must consider the movements in between the two extremes, they must be analysed and practiced in order to improve.

The continuum below shows the two extremes of gross and fine skills, with examples from each of an open and closed individual activity, a co-active sport and an interactive sport.

	Fine Skills	Gross Skills
Open Individual		
Closed Individual	 Bowling in cricket 	 Putting a shot put
Open Co-active	 Throwing a line out ball in rugby 	
Closed Co-active		
Open Interactive		Shooting in football
Closed Interactive		

In conclusion, from the continuums above, I realize that continuums are very important in classifying skills correctly. A skill can be categorized by placing it along a continuum, this will help to break them down which again makes skills easier to learn or teach as it allows people to analysis each task. Once a skill is learnt it can then be transferred from one sport to another.

A disadvantage to the continuums is that you cannot place a skill defiantly in one category or the other, which means that there may be some uncertainty among the classification of skill. This leads to people having different ideas about what skill is.

Bibliography.

- R.J Davis, C.R Bull, J.V Roscoe, D.A Roscoe Physical Education and the study of sport.
- Edexcel-Advanced PE for Edexcel.
- GCSE OCR Revision- (Skill definition)