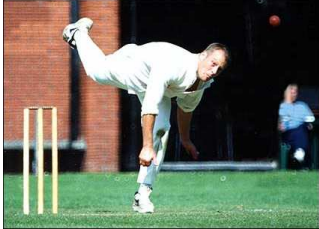


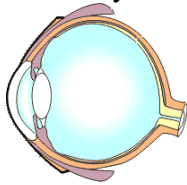
Acquisition of Skill

What is Skill?

Physical education evolves around skill. It is important that you don't get skill and ability mixed up. Skill can be learned and improved if practised. Ability is also known as 'natural ability' it something that you are born with and cannot be learned. An example of skill is a cricket bowl you learn how to bowl if practised your bowling will be more consistently on target.



A good example of ability is being born with good eye coordination mean you have the ability to focus on an object quicker than most people.



Skill Classification

Some skills are hard to classify as some skills can be classed as more than one category. However classification does helps to understand the nature of the skill and how it is performed. Most skill classification systems are based on the view that motor skills are affected by three factors:

How precise a movement is

Whether the movement has a definite beginning and end

Whether the environment affects the performance of the skill

Continuums

Continuums split is several sections, which categorises the skill on a scale.

From Honeybourne, Moore and Hill 2nd edition: - 'in order to understand fully the nature of a particular skill, we need to analyse it. The traditional way of doing this is by classification but this can be very unsatisfactory and inaccurate because skills have many characteristics, which can change in different situations. For example, catching a frisbie involves large muscle movements and involves the catcher adjusting their movements according to the varied flight of the frisbie. It is very difficult to classify skills neatly, but to make teaching and learning more effective it is essential that we fully understand skills.'

1. The Gross and Fine Continuum

This continuum is concerned with the precision of movement - gross and fine skills



Gross skills: involve large muscle movements, where the major muscle groups are involved. The movements are not very precise, and include many fundamental movement patterns such as individual sports like jumping and running. An example of a team sport would be a cricket bowl and an example for a racket sport could be a return in squash.

Fine skills: involve intricate movements using small muscle groups, tend to be precise and generally involve high levels of hand-eye coordination. A snooker shot or throwing darts are individual sport examples of fine skills. A team sport may be a basketball free throw and an example of a racket sport is a table tennis serve.

2. The Open and Closed Continuum

This continuum is concerned with the effects of the environment on skills - Barbara Knapp's *open and closed skills*.



Open skills: sports such as Netball, Football, and Hockey usually involve open skills. This is because the environment is constantly changing and so movements have to be continually adapted. This includes opponents that may effect the situation. Therefore, skills are predominantly perceptual. The skill is mostly externally paced, for examples in a team sport a pass in football and in a racket sport a tennis return. An example of an individual sport is a long golf shot on a windy day.

Closed skills. These skills take place in a stable, predictable environment and the performer knows exactly what to do and when. Therefore, skills are not affected by the environment and tend to be habitual. Movements follow set patterns and have a clear beginning and end. The skills tend to be self-paced, for example a free throw in Basketball, serving in Squash or Tennis and a snooker shot.

Barbara Knapp suggests 'that skills can fit on a continuum between open and closed'.

3. The External and Internal Faced Continuum

This continuum is concerned with the timing of movements (and is often used with the open-closed continuum) - internal and external paced skills



Internally paced or self-paced skills: the performer controls the rate at which the skill is executed. These skills are usually closed skills. For an example a javelin throw and a discus throw. An example in a team game maybe a set piece in football like a free kick and tennis serve in a racket sport.

Externally paced skills the environment, which may include opponents, controls the rate of performing the skill. The performer must pay attention to external events in order to control his/her rate of movement. These skills involve reaction, and are usually open skills. A good example are ball games the performer must time his actions with the actions of other players and the ball. For a team sport example receiving a Football pass and receiving basketball pass, a racket sport receiving tennis serve and an individual sport would downhill skiing are externally paced skills.

4. The Discrete, Serial and Continuous Continuum

This continuum is concerned with how well defined the beginning and end of the skill are - discrete, serial and continuous skills.



Discrete skills are brief, well-defined actions, which have a clear beginning and end. They are single, specific skills, which make up the actions involved in a variety of sports such as hitting and throwing. A good example of a discrete skill is throwing a dart, a football pass and a table tennis serve.

Serial Skills are a group of discrete skills strung together to make a new and complex movement. A good example is the sequence of skills for the triple jump, a cricket bowl and tennis serve.

Continuous skills have no obvious beginning or end. The end of one cycle of movements is the beginning of the next, and the skill is repeated like a cycle. These skills could be stopped at any moment during the performance of the skill. Examples of continuous skills are Swimming, Running, Cycling and basketball dribble.

5. Individual, Coactive and Interactive skills

Individual skills are those performed in isolation. There is no participation of other people in the sport.

Coactive skills are those performed at the same time as others but without direct confrontation.

Interactive skills are those performed where other performers are directly involved.
Self and Externally paced skills

Self-paced skills are those that are instigated by the performer and externally paced skills are those where the timing of the performance of the skill is not controlled by the performer, but by an outside instigator.

Applying to a Practical Example

As an example football it fits into the following categories: -

- Mainly a gross skill probably 95% towards gross on the continuum scale
- It is an open skill where the environment plays a major part of the sport
- Mainly an external skill again about 95% on the continuum scale
- Involves a combination of discrete, serial and continuous skills like discrete skill would be a pass, a serial would be an aerial kick like bicycle kick and continuous would be dribbling
- Mainly Interactive although it can be co-active as well

Guidance

Guidance can be applied to improve acquisition of skill. Guidance is the transmittance of knowledge necessary for effective performance. It can be used when a teacher or coach is presenting a new skill to a student. It can be used when a coach or teacher is looking to develop the existing skills of an experienced performer. There are four main types of guidance in relation to coaching sport. These are verbal, visual, manual and mechanical. The choice of guidance depends upon the subject's personality as different people respond better to methods of guidance. The motivation is a factor if the motivation level is low then manual and mechanical will be probably better and for a subject that is very motivated then more verbal would be suitable. Guidance can depend on the subject's ability if he or she has a natural ability then he or she will need less mechanical, manual and visual and probably more verbal guidance. For someone with little ability they require more mechanical, manual and visual guidance. The choice of guidance may vary according to the activity. For example a runner every one knows how to run so there is no need for mechanical, manual and visual guidance but probably a bit of verbal guidance. If the activity were performing a handstand then mechanical, manual and visual would be more suitable.

Guidance applied to a Continuum

If I was a teacher or a coach and I was teaching a gross skill (involves large muscle movement and not very precise). I wouldn't use mechanical or manual because a gross skill involves lot of muscle movement and are too complex to use those methods of guidance. Probably verbal will be the most effective and a visual demonstration will probably help. An example of an activity where I can teach a gross skill using guidance is teaching someone how to do a triple jump.

If was teaching a fine skill (involves intricate movements and tend to be precise and generally involve high levels of hand-eye coordination). I could use four methods, as all four would be useful. Probably visual and mechanical guidance would the most

effective. The activity doesn't involve much muscle movement and quite simple to perform. A good example of an activity where I can teach a fine skill using guidance is teaching someone how to throw a dart.

Task Analysis

From Honeybourne, Moore and Hill 2nd edition: - Task Analysis ' SUB-ROUTINES
The elements, or separate movements, that make up a particular skill. For example striking a ball in hockey involves grip, stance, back lift, forward swing, strike and follow through.'

Task involves the analysis of a skill to help understand the specific process and abilities to perform the skill. These process and abilities can be broken down into sub-routines.

Example – Tennis Smash

1. Grip racket handle firmly with your preferred hand
2. Move your feet until they are about one foot apart
3. Turn sideways so that your preferred hand is behind you
4. Take racket back
5. Get into back scratch position.
6. Bring racket over your head
7. Hit the ball
8. Follow through

These can be applied to any skill although it is more suited to other skills better than others e.g. a gross skill such a cricket bowl. There is an alternative to subroutines, which are the whole method, part method and progressive part method. Using the whole method the skill is taught without breaking it down into subroutines. The player can experience the feel of the whole skill and can execute the skill and appreciate the components of the movement and how they interact. The part method involves splitting the skill in a sub-routine or Fundamental Movement Pattern, which is useful for an inexperienced performer. As well for low ability performers or dangerous, complex, new or unfamiliar skills. It can improve the morale of the performer as he or she can feel success. It can help to understand the mechanics of the techniques involved in the skill especially serial skills. Progressive part method is either part method or whole method. The skill is broken down into sub routines that are like links in a chain then these links are than chained or joined together.