

PE2 UNIT GUIDE

Content Title: Skill, Ability, Learning and Performance

Key points

- Understanding the links between skill, ability, learning and performance
- Interpreting learning curves

- **SKILL** is 'the learned ability to bring about pre-determined results with maximum certainty, often with the minimum outlay of time or energy or both.' Barbara Knapp (1977)
- **ABILITY** – describes the physical attributes that affect our potential for a given sport. Abilities are largely determined genetically i.e. they are natural or innate. 'Motor abilities are relatively enduring traits which are generally stable qualities that help a person carry out a particular act.' (Fleishman)
- The link between skill and ability is that the more ability an individual has the easier it will be to learn skills that utilise that ability i.e. skill is the application of ability, and skills are learned using existing abilities.

MOTOR ABILITY	SKILLS DEPENDENT ON ABILITY
Co-ordination	Kicking a ball, cartwheel.
Reaction Time	Tennis serve return, interception in netball.
Balance	Handstand, landing a jump.

- **LEARNING** – is 'the more or less permanent change in behaviour that is reflected in a change in performance' (Knapp). Learning is a lifelong process – even elite sports performers claim that they are still learning about their sport in order to improve their performance. Every learner will progress through the stages of learning, given appropriate opportunities to practice and receive feedback.
- **PERFORMANCE** – is a demonstration of the solving of a problem or task at a given moment in time i.e. it is a temporary phenomenon. We can all think of very skilful performers that have an abundance of ability who sometimes turn in a poor performance.

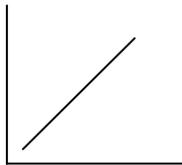
- **LINK BETWEEN LEARNING AND PERFORMANCE** – as learning takes place we usually see gradual improvement in performance.
- **LEARNING/PERFORMANCE CURVES** – the rate of learning can be measured in a variety of ways:
 - Objective assessments e.g. testing
 - Subjective assessments

These improvements can be plotted to produce a learning curve, so that over a period of time it is possible to see how a performer is improving. There are a variety of shapes to learning curves, each giving us information relating to the rate of learning.

TYPICAL CURVES:

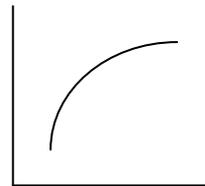
Linear

The rate of improvement is directly proportional to the number of practice sessions – there is constant improvement.



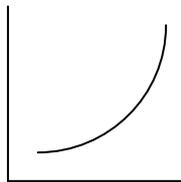
Negatively accelerated

This shape shows that the individual has performed better in earlier sessions than in later ones – the rate of performance improvement is slowing. What could be the reasons for this? This could be explained by the performer having reached their potential, be receiving poor coaching, boredom etc.



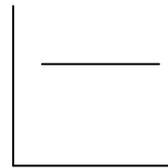
Positively accelerated

This shape shows that the individual has performed better in the later sessions than in the earlier ones, and that the rate of performance is getting faster.



Plateau

This often occurs when the athlete is trying to do too much and is over-tired, they could be lacking motivation, have reached their potential etc.



It is possible to see a combination of all of these curves within one performance curve for an individual. Performance curves help coaches/teachers to monitor performance and put in appropriate changes to practice to maintain performance development.

Top Tips:

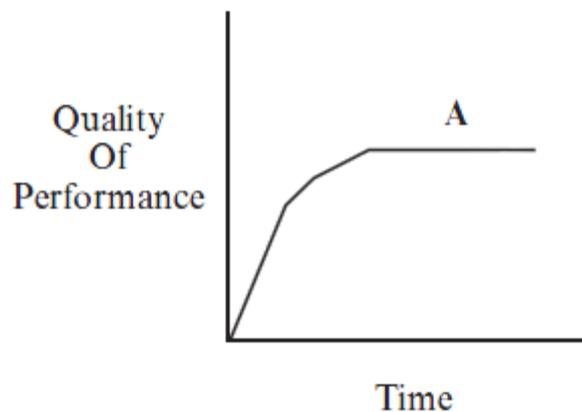
Make sure that you can give practical examples of abilities that link with skills – see table above. Remember that skill, ability, learning and performance link with stages of learning, feedback, types of practice etc.

As well as being able to interpret performance curves, you also need to be able to suggest strategies to maintain performance development.



Exam Style Questions

1. (a) **Figure 1** is a performance curve for a sportsperson learning a new skill.



- (i) Using **Figure 1** to help you, identify what is happening to the sportsperson's performance at **A**, and explain possible reasons for this occurrence. [3]
- (ii) Describe different strategies a coach or teacher may use to help a performer overcome what is occurring at **A**. [3]

Answers