

Classification of skills



UNTAMED
EDUCATION

3.1 Skill acquisition and psychology

Skill

Cognitive Stage

Autonomous Stage

Ability

Closed

Open

Classification of skills

Fine

Complex

Gross

Associative Stage



Classification of skills

1. Skill and ability

Skill is defined as:

“Skill is the learned ability to bring about a pre-determined result with maximum certainty and efficiency”

Ability is defined as:

“Ability is inherited not learnt. It does not change throughout a person’s life. Abilities impact a person’s potential to learn skills.”



2. Skilled performance

A person who has a **high level of ability** in a particular skill will demonstrate certain characteristics.

- ▶ They will perform with **accuracy**.
- ▶ Their motivation is **goal-directed**.
- ▶ They perform with **fluency and consistency**.
- ▶ The performance will be **aesthetically pleasing**.
- ▶ They perform with **coordination**.



3. Stages of learning

There are **three stages** of skill learning:

1. Cognitive stage (understanding phase)

- ▶ This is the **first stage** of learning and relies mainly on visual and verbal input as well as trial and error.



Classification of skills

- ▶ Learners may appear **clumsy** as they transition from understanding the skill to executing it.
- ▶ Performances are **inconsistent**.
- ▶ Correct performances must be reinforced through **external feedback**.
- ▶ Performing the skill requires all the **athlete's attention** and so they rely on the coach for cues

2. Associative stage (verbal motor phase)

- ▶ Through practice, the brain receives sensory information that allows the performer to refine the skill. **Visual cues** are now replaced with **proprioceptor** cues (how it feels).
- ▶ Performances are becoming more **consistent** as motor programmes are being formed.
- ▶ While the **simpler** parts of the skill now look fluent and are well learned, the more **complex** elements require most of the spare attention.
- ▶ The athlete is starting to get a sense of internal '**kinaesthetic**' feedback when they perform the skill well.
- ▶ They are starting to detect and correct their own errors and success rate has risen to 5-7 out of 10.



3. Autonomous stage (motor phase)

- ▶ This is the **final stage of motor skill learning**. The movement requires little thought from the performer and becomes automatic.
- ▶ Performances have become **consistent**, fluid and **aesthetically pleasing**.
- ▶ The **motor programmes** involved are well learned and stored in the long-term memory.
- ▶ There is now **spare attention** which can be focused on opponents and tactics.
- ▶ To retain the new skill at this level, it must be constantly practised to reinforce the motor programmes. (Success is now 9 out of 10.)



Classification of skills

4. Factors affecting various skill levels

1. Age and Maturity

- ▶ The more **experienced** you are at practising a skill the better you become.

2. Motivation

- ▶ If you **enjoy** practising the skill or you have a goal to aim for you are more likely to practise the skill.

3. Anxiety

- ▶ Too much **anxiety** can negatively affect your performance.

4. Arousal Conditions

- ▶ Arousal is your **readiness** to perform. If your arousal levels are at the optimum then your skill performance will be optimum.

5. Facilities

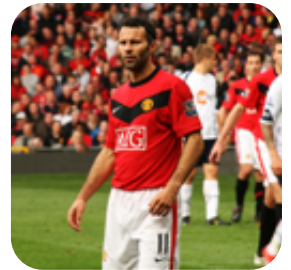
- ▶ Performing on high **quality** surfaces and arenas can positively affect your skill performance. Poor surfaces can hinder performance.

6. Environment

- ▶ Skill performance can be affected by the **environmental** conditions i.e. if it is too hot/cold/windy.

7. Teaching and Coaching

- ▶ A high quality coach or **teacher** will ensure you get the best **feedback** on your skill performance and the best training.

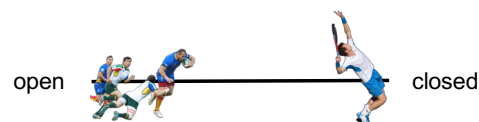




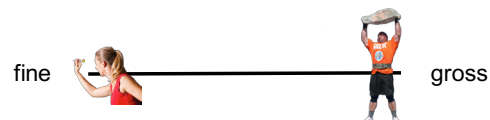
Classification of skills

5. Skill continuums

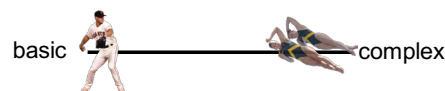
► Open and Closed Skills



► Fine and Gross Skills



► Basic and Complex Skills



6. Open skills

- Some skills need to be constantly **adapted** or modified during play.
- The environment is **not** under the performers control, usually because others are involved.
- Some affecting factors may be, opponents, weather and surface.



7. Closed skills

- These skills are fairly **fixed** and require little adjustment during competition.
- Closed skills are **practised** repeatedly until they become consistent and effective.
- The performer is in **control** of the environmental factors e.g. in a tennis serve the skill is the same every time.
- Some other closed skills do have environmental factors that may require some adaptations for example, the crowd and the goalkeeper when taking a penalty in Football.





Classification of skills

8. Fine skills

- ▶ Use **small muscle** movements.
- ▶ The movement is usually **precise** and intricate.
- ▶ They usually involve good hand-eye co-ordination.



9. Gross skills

- ▶ Involves **large muscle** movements.
- The movement is **not** very **precise**.
- ▶ Weight lifting is a good example of a gross muscle movement.



10. Basic skills

- ▶ This is a **simple** movement.
- ▶ It requires **little** concentration and thought.
- ▶ Movements can include throwing.



11. Complex skills

- ▶ Use large amounts of **concentration**.
- ▶ The movements are extremely complex and need to be **practised** over and over for them to be performed accurately.
- ▶ A synchronised dive is a good example of a complex skill.
- ▶ The speed, rate or pace of the skills is controlled by your **opponent** or the **environment**.

