Unit 27: Skill Acquisition in Sport

Unit code: F/601/1884
QCF level: 4
Credit value: 15

- **Aim**

The aim of this unit is to develop learners’ knowledge and understanding relating to skill acquisition in sport, enabling them to plan sessions that foster an effective learning environment.

- **Unit abstract**

How many times have you seen Cristiano Ronaldo run at players with the ball at his feet, demonstrating grace, balance and speed throughout his performance? Or Tiger Woods hit his golf ball from the tee with the pinpoint precision that many individuals can only dream of? As sports coaches, tutors and sport and exercise scientists, we have long wondered about how people attain this level of skill and the range of different internal and external factors that can influence skill development. One of the key areas of interest that has helped sports professionals to explain this process is the area of skill acquisition.

Skill acquisition has important applications within sports coaching, sport psychology and talent development as it examines the ways in which people learn, the different ways of presenting information to athletes to foster their skill development and different ways of planning sessions to help develop different types of skill.

Within this unit, theoretical and applied learning contexts are combined to allow the learner to examine traditional areas of skill acquisition through a practical learning environment. Learners will discover how to use essential techniques for skill acquisition in practical and simulated environments through investigating different leadership behaviours and types of skill presentation first hand. This will give learners a greater understanding of the key theories of learning within sport. Alongside this practical learning environment, learners will start to adopt an evidence-based practice approach to their work on session plans to develop an effective learning environment. This will help them to prepare for the continuing rigours within higher education and careers within sports coaching and teaching, child development and elite performance analysis.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Understand the nature of skilled performance in sport
2. Understand information processing models in sport
3. Understand learning theories in sport
4. Be able to create an effective learning environment for leading sports activities.
Unit content

1 **Understand the nature of skilled performance in sport**

*Characteristics of skilled performance:* definitions of skill; skill as an act/task and skill as an indicator of quality performance; learned behaviour; goal-directed; consistency; accuracy; economy

*Classifications of skill:* rationale for classification; cognitive skills; perceptual skills; motor skills; gross-fine; discrete-serial continuous; internally-externally paced; open-closed; implications for coaching

*Motor abilities:* skill and ability differentiation; Fleishman’s (1972) Taxonomy of perceptual motor and physical proficiency abilities; influence of environment and heredity on motor abilities; implications for practice

2 **Understand information processing models in sport**

*Information processing models:* simple information processing model (input, decision making, output, feedback); Whiting’s Model (input data, perceptual mechanisms, translator mechanisms, effector mechanisms, output data, feedback data); Welford’s Model (sensory input, sense receptors, perception, short-term memory, decision making, long-term memory, effector control, effectors, output, feedback); implications for coaches

*Factors influencing reaction time:* Hick’s Law; pre-cueing; psychological refractory period; stimulus response complexity; stimulus response compatibility; age; gender; stimulus intensity; implications for practice

*Memory and selective attention:* short-term sensory store; short-term memory; long-term memory; retention; strategies to enhance retention; selective attention; experience and cue abbreviation; implications for practice

*Feedback:* intrinsic feedback; categories of sensory feedback; knowledge of results; knowledge of performance; timing of augmented feedback; volume of augmented feedback; content of augmented feedback; presentation of augmented feedback; positive reinforcement; negative reinforcement and punishment; implications for coaches

3 **Understand learning theories in sport**

*Learning theories:* definition of learning; definition of performance; drive reduction theory; classical and operant conditioning; Thorndike’s laws; cognitive learning theories; social learning theory; motor programme and control (open loop theory, closed loop theory, Schmidt’s Schema Theory); practical applications of learning theories

*Phases of learning:* Fitts and Posner’s (1977) three-stage model; characteristics of each stage; learning curves; performance plateaus; changes in aspects of performance with learning; implications for practice

*Transfer of learning:* positive and negative transfer; zero transfer; intra-task transfer; inter-task transfer; bilateral transfer; influence of transfer on sequencing skills to be learned; transfer and instructional methods; practical applications
Be able to create an effective learning environment for leading sports activities

Planning sessions: factors in session planning eg goals, nature of the task, environmental factors, individual differences of the learner; learning styles (eg visual, auditory, kinaesthetic, Kolb’s learning styles)

Running a session: leadership behaviours eg Chelladurai’s multi-dimensional model of leadership; Mosston and Ashworth’s spectrum of teaching styles; evaluating progress during sessions; giving correct feedback to participants; following guidelines

Presentation of skills: Whole and part learning methods (eg fractionisation, segmentation, simplification); practice conditions (massed, distributed, fixed, variable); types of guidance (visual, verbal, manual, mechanical); contextual interference

Evaluation of session: strengths and areas for improvement; recommendations for future sessions; use of evidence base to support future recommendations (peer reviewing, empirical evidence)
## Learning outcomes and assessment criteria

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Assessment criteria for pass</th>
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<tbody>
<tr>
<td><strong>On successful completion of this unit a learner will:</strong></td>
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<tr>
<td><strong>LO1 Understand the nature of skilled performance in sport</strong></td>
<td>The learner can:</td>
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<tr>
<td>1.1</td>
<td>discuss the classifications and characteristics of skill in sport</td>
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<tr>
<td>1.2</td>
<td>discuss the classifications and characteristics of abilities in sport</td>
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<td>1.3</td>
<td>explain the difference between skill and ability</td>
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<td>1.4</td>
<td>discuss the implications of the differences between skill and ability for sports performers</td>
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<tr>
<td><strong>LO2 Understand information processing models in sport</strong></td>
<td>2.1</td>
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<tr>
<td>2.2</td>
<td>discuss factors influencing reaction time in sporting contexts</td>
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<tr>
<td>2.3</td>
<td>discuss the role of memory and selective attention in information processing in sporting contexts</td>
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<tr>
<td>2.4</td>
<td>evaluate different methods of giving feedback to sports performers</td>
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<td><strong>LO3 Understand learning theories in sport</strong></td>
<td>3.1</td>
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<tr>
<td>3.2</td>
<td>discuss the phases of learning in sporting contexts</td>
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<tr>
<td>3.3</td>
<td>discuss transfer of learning in sporting contexts</td>
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<tr>
<td><strong>LO4 Be able to create an effective learning environment for leading sports activities</strong></td>
<td>4.1</td>
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<tr>
<td>4.2</td>
<td>demonstrate appropriate leadership behaviours whilst leading a sport session</td>
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<td>4.3</td>
<td>review a sport session with reference to skill acquisition or development</td>
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Guidance

Links
This unit has links to the following units in the BTEC Higher Nationals in Sport and in Sport and Exercise Sciences:

- Unit 2: Sport and Exercise Psychology
- Unit 4: Biomechanics for Sport
- Unit 9: Principles of Sports Coaching
- Unit 10: Applied Sports Coaching
- Unit 28: Sports Coaching
- Unit 36: Applied Sport and Exercise Psychology.

Essential requirements
For this unit, centres need access to practical sport facilities such as a sports hall or sports field and need to have a range of sports equipment that can be used during practical sessions.

Employer engagement and vocational contexts
This unit would benefit from guest speakers in sports coaching.