



## MAGHULL HIGH SCHOOL – CURRICULUM MAP

Unit: 23 Skill Acquisition in Sport	<p style="text-align: center;"><b>Pearson BTEC Level 3 National Extended Diploma in Sport</b></p> <p style="text-align: center;"><b>Learning Aim A: Investigate the nature of skilled performance</b> – The characteristics of skilled performance and the contribution of skills and abilities to its production.</p> <p style="text-align: center;"><b>Learning Aim B: Examine ways that sport performers process information for skilled performance</b> – How information processing models explain the process of the production of skilled performance.</p>						
LESSON TOPIC QUESTION(S)	A1 Learning and performance	A2 Characteristics and classification of skills	A3 Characteristics and classification of abilities	B1 Information processing models	B2 Perception	B3 Decision making and reaction time	B4 Types of feedback
<p><b>Knowledge &amp; Skills development</b></p> <p>The learning process and the difference between learning and performance.</p> <ul style="list-style-type: none"> <li>• Learning and performance:               <ul style="list-style-type: none"> <li>○ measuring learning</li> <li>○ measuring performance plateaus.</li> </ul> </li> <li>• Learning curves:               <ul style="list-style-type: none"> <li>○ linear</li> <li>○ negatively accelerated</li> <li>○ positively accelerated</li> <li>○ S-shaped.</li> </ul> </li> </ul>	<p>The learning process and the difference between learning and performance.</p> <ul style="list-style-type: none"> <li>• Learning and performance:               <ul style="list-style-type: none"> <li>○ measuring learning</li> <li>○ measuring performance plateaus.</li> </ul> </li> <li>• Learning curves:               <ul style="list-style-type: none"> <li>○ linear</li> <li>○ negatively accelerated</li> <li>○ positively accelerated</li> <li>○ S-shaped.</li> </ul> </li> </ul>	<p>Different ways that skills can be classified and what a skilful performance looks like.</p> <ul style="list-style-type: none"> <li>• Qualities of a skilled performance:               <ul style="list-style-type: none"> <li>○ Fluency</li> <li>○ control</li> <li>○ economy and efficiency of movement</li> <li>○ consistency of outcome</li> <li>○ energy expenditure meets demands of task.</li> </ul> </li> <li>• Types of skill in sport: cognitive, perceptual, motor.</li> <li>• Effect of environment on skill</li> </ul>	<p>Different types of abilities and how they contribute to a skilled performance.</p> <ul style="list-style-type: none"> <li>• Differences between abilities and skills:               <ul style="list-style-type: none"> <li>○ natural level of skill</li> <li>○ nature versus nurture</li> <li>○ stable versus unstable</li> <li>○ how abilities contribute to the performance of skills.</li> </ul> </li> <li>• Psychomotor abilities:               <ul style="list-style-type: none"> <li>○ reaction time</li> <li>○ coordination</li> <li>○ balance.</li> </ul> </li> <li>• Gross motor abilities:               <ul style="list-style-type: none"> <li>○ strength</li> <li>○ speed</li> </ul> </li> </ul>	<p>How information is taken from the environment, organised and used to make decisions and produce a response in the form of skilled movement.</p> <ul style="list-style-type: none"> <li>• Simple model:               <ul style="list-style-type: none"> <li>○ input stage</li> <li>○ central stage</li> <li>○ output stage.</li> </ul> </li> <li>• Expanded information processing model:               <ul style="list-style-type: none"> <li>○ Input</li> <li>○ stimulus identification (perception)</li> <li>○ response selection (decision making)</li> <li>○ response programming (action)</li> </ul> </li> </ul>	<p>How the brain receives information from the environment and organises the information.</p> <ul style="list-style-type: none"> <li>• Features of a stimulus that affect perception:               <ul style="list-style-type: none"> <li>○ familiarity of stimulus</li> <li>○ speed</li> <li>○ loudness</li> <li>○ colour and brightness.</li> </ul> </li> <li>• Individual factors impacting on perception:               <ul style="list-style-type: none"> <li>○ attention level</li> <li>○ arousal level</li> <li>○ attentional capacity.</li> </ul> </li> </ul>	<p>Decision making and reaction time are influenced by a range of factors.</p> <ul style="list-style-type: none"> <li>• Factors affecting reaction time and decision making:               <ul style="list-style-type: none"> <li>○ number of stimulus-response alternatives (Hick's law)</li> <li>○ stimulus-response compatibility</li> <li>○ practice</li> <li>○ anticipation</li> <li>○ psychological refractory period.</li> </ul> </li> </ul>	<p>The different types of feedback, the value of each type and when they should be given.</p> <ul style="list-style-type: none"> <li>• Types of feedback:               <ul style="list-style-type: none"> <li>○ knowledge of results (KR)</li> <li>○ knowledge of performance (KP)</li> <li>○ continuous and terminal feedback</li> <li>○ extrinsic and intrinsic feedback</li> <li>○ positive and negative feedback.</li> </ul> </li> </ul>

		<p>classification: open and closed skills.</p> <ul style="list-style-type: none"> <li>• Precision of movement and skill classification: gross and fine.</li> <li>• Distinctiveness of beginning and ending of movement and skill classification: discrete, continuous, serial.</li> <li>• Timing and pacing of skills and their classification: self-paced and externally-paced.</li> </ul>	<ul style="list-style-type: none"> <li>○ flexibility</li> <li>• Perceptual abilities:</li> <li>○ decision making</li> <li>○ interpreting information</li> </ul>	<ul style="list-style-type: none"> <li>○ output.</li> </ul>			
<p><b>Assessment / Feedback Opportunities</b></p>	<p><b>Formative Assessment</b></p> <ul style="list-style-type: none"> <li>• <b>Interactive Quizzes:</b> Short quizzes after each topic (e.g. skill classification, abilities, feedback types) to check understanding of concepts such as open vs. closed skills, types of feedback, and stages of information processing.</li> <li>• <b>Think-Pair-Share:</b> Students discuss examples of skilled performance or how specific abilities contribute to skill execution.</li> </ul>	<p><b>Summative assessment</b></p> <p><b>Task 1 – Portfolio Part 1: Skilled Performance and Abilities</b></p> <p>Students will create an informative portfolio aimed at sports coaches, using two high-level sports performers to illustrate key concepts. The portfolio should include images and video clips to enhance understanding.</p> <p><b>Key Components:</b></p> <ul style="list-style-type: none"> <li>• <b>Skilled Performance Analysis:</b> <ul style="list-style-type: none"> <li>○ Discuss how each athlete demonstrates qualities of skilled performance (e.g. efficiency, control, consistency).</li> <li>○ Use visual examples to support analysis.</li> </ul> </li> <li>• <b>Skill and Ability Classification:</b> <ul style="list-style-type: none"> <li>○ Explain different types of skills (e.g. cognitive, perceptual, motor) and their classifications (open/closed, gross/fine, etc.).</li> <li>○ Differentiate between skills and abilities.</li> <li>○ Describe types of abilities: perceptual, psychomotor, gross motor.</li> </ul> </li> <li>• <b>Relationship Between Skills and Abilities:</b> <ul style="list-style-type: none"> <li>○ Break down a sport into its component skills.</li> <li>○ For each skill, explain which abilities are required and how they contribute to performance.</li> </ul> </li> </ul>					

	<ul style="list-style-type: none"> <li>• <b>Skill Acquisition Timeline Activity:</b> Students create visual timelines showing how a performer develops skills over time, including learning curves (e.g. linear, positively accelerated) and performance plateaus.</li> <li>• <b>Mini Presentations:</b> Students present on a chosen elite athlete, focusing on their skill set, classification of skills and abilities, and how feedback or information processing models apply to their performance.</li> <li>• <b>Exit Tickets:</b> Quick written reflections at the end of lessons to assess learning and misconceptions.</li> </ul>	<ul style="list-style-type: none"> <li>○ Justify the importance of each ability using examples and visuals.</li> </ul> <p><b>Assessment Criteria Covered:</b></p> <ul style="list-style-type: none"> <li>• <b>A.P1</b> – Discuss the qualities of skilled performers.</li> <li>• <b>A.P2</b> – Explain the characteristics of skills and abilities.</li> <li>• <b>A.M1</b> – Assess how abilities contribute to the production of sports skills.</li> </ul> <p><b>Task 2 – Portfolio Part 2: Information Processing and Feedback</b> This section introduces coaches to theories of information processing and the role of feedback in skill acquisition.</p> <p><b>Key Components:</b></p> <ul style="list-style-type: none"> <li>• <b>Information Processing Models:</b> <ul style="list-style-type: none"> <li>○ Explain both the simple model (input → decision → output) and the expanded model (input → perception → decision making → action → output).</li> <li>○ Describe each stage and how it contributes to skilled performance.</li> <li>○ Evaluate strengths and limitations of each model.</li> <li>○ Use sport-specific examples and visuals to illustrate concepts.</li> </ul> </li> <li>• <b>Feedback in Sport:</b> <ul style="list-style-type: none"> <li>○ Describe different types of feedback: intrinsic, extrinsic, knowledge of results (KR), knowledge of performance (KP), positive, negative, continuous, terminal.</li> <li>○ Discuss when each type is most beneficial.</li> <li>○ Use examples to show how feedback improves performance in different contexts.</li> </ul> </li> </ul> <p><b>Assessment Criteria Covered:</b></p> <ul style="list-style-type: none"> <li>• <b>B.P3</b> – Explain information processing models in sport.</li> <li>• <b>B.P4</b> – Describe types of feedback and their application.</li> <li>• <b>B.M2</b> – Evaluate the usefulness of information processing models.</li> <li>• <b>B.M3</b> – Assess the impact of feedback on skilled performance.</li> </ul>
<b>Key Vocabulary</b>	<ul style="list-style-type: none"> <li>• <b>Learning vs. Performance</b> – understanding the distinction between acquiring a skill and demonstrating it.</li> <li>• <b>Skill</b> – learned ability to bring about pre-determined results with maximum certainty and efficiency.</li> <li>• <b>Ability</b> – innate traits that underpin skill development.</li> <li>• <b>Psychomotor Skills</b> – coordination, balance, reaction time.</li> <li>• <b>Perceptual Skills</b> – interpreting sensory information to make decisions.</li> <li>• <b>Gross/Fine Motor Skills</b> – large vs. precise movements.</li> <li>• <b>Open/Closed Skills</b> – influenced by environment vs. stable conditions.</li> <li>• <b>Serial/Discrete/Continuous Skills</b> – based on movement structure.</li> <li>• <b>Information Processing</b> – input, decision-making, output.</li> <li>• <b>Feedback Types</b> – intrinsic, extrinsic, KR, KP, positive, negative.</li> <li>• <b>Hick’s Law</b> – reaction time increases with number of choices.</li> </ul>	
<b>Literacy/Reading opportunities</b>	<ul style="list-style-type: none"> <li>• <b>Textbook Reading</b> – Pearson BTEC Sport texts on skill acquisition and psychology.</li> <li>• <b>Case Studies</b> – analysis of elite athletes’ skill development and decision-making.</li> <li>• <b>Research Articles</b> – exploring cognitive theories and motor learning.</li> </ul>	

	<ul style="list-style-type: none"> <li>• <b>Glossary Tasks</b> – building understanding of technical terms.</li> <li>• <b>Structured Writing</b> – producing analytical reports and reflective evaluations.</li> <li>• <b>Reading Comprehension</b> – interpreting diagrams and models (e.g., information processing).</li> </ul>
<b>Cross Curricular Themes</b>	<ul style="list-style-type: none"> <li>• <b>Psychology</b> – cognitive processes, perception, attention, arousal.</li> <li>• <b>Biology</b> – muscular and nervous systems involved in movement.</li> <li>• <b>ICT</b> – using performance analysis software and video feedback tools.</li> <li>• <b>Maths</b> – interpreting data from learning curves, reaction time studies.</li> <li>• <b>English</b> – developing written communication through assignments and evaluations.</li> </ul>
<b>Personal Development (Including British Values, RSE, Citizenship)</b>	<ul style="list-style-type: none"> <li>• <b>Resilience and Growth Mindset</b> – managing performance plateaus and setbacks.</li> <li>• <b>Respect and Tolerance</b> – recognising individual differences in learning styles and abilities.</li> <li>• <b>Responsibility and Integrity</b> – applying feedback constructively and ethically.</li> <li>• <b>Teamwork and Fair Play</b> – understanding roles and responsibilities in sport.</li> <li>• <b>Healthy Relationships (RSE)</b> – promoting body confidence and mental wellbeing through sport.</li> <li>• <b>Citizenship</b> – contributing positively to group activities and respecting rules.</li> </ul>
<b>Career Opportunities</b>	<ul style="list-style-type: none"> <li>• Sports coach</li> <li>• Performance analyst</li> <li>• PE teacher</li> <li>• Sports psychologist</li> <li>• Physiotherapist</li> <li>• Talent development officer</li> <li>• Rehabilitation specialist</li> </ul>