

FFA 2008 National Coaching Conference

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SKILL ACQUISITION IN FOOTBALL

- WHAT IS SKILL ?
 - ACQUIRING SKILL
 - CONSTRAINTS-LED APPROACH
- COACHING & INSTRUCTIONAL ISSUES
 - LEARNING STYLES
 - INSTRUCTION & FEEDBACK
 - IMPLICIT LEARNING
- MAXIMISING SKILL PRACTICE
 - PRACTICE DESIGN
 - PRACTICE STRUCTURE-ORGANISATION





Australian Government
Australian Sports Commission



AUSTRALIAN
INSTITUTE OF SPORT

WHAT IS SKILL ?



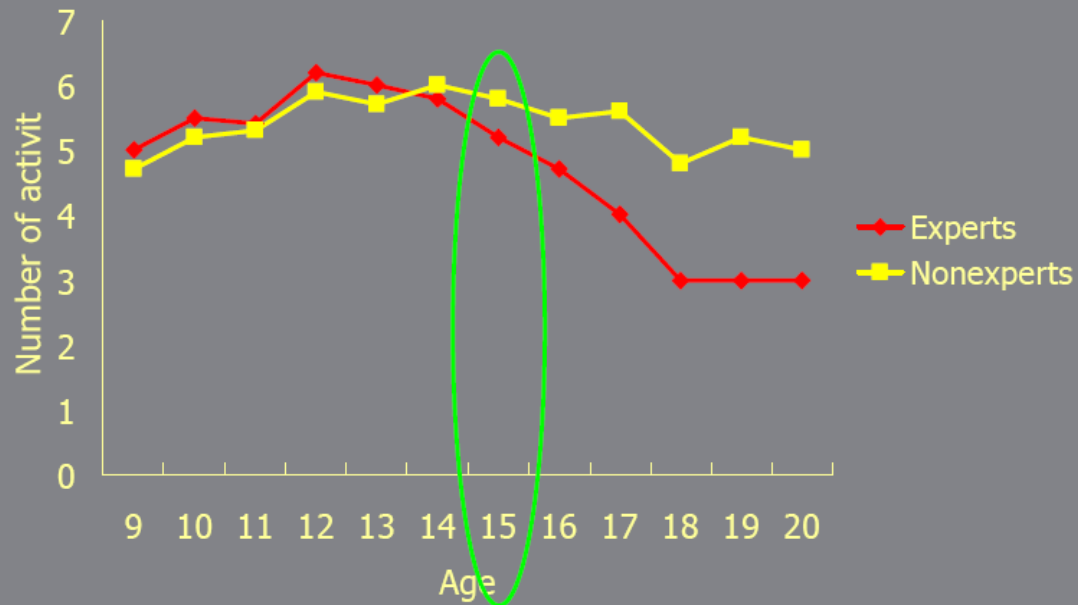
SKILLED PLAYERS

- REACTION TIME & VISION - *NO DIFFERENCE*
- SPORT SPECIFIC KNOWLEDGE – *SIGNIFICANT DIFFERENCE*
- DIVERSIFIED EXPERIENCES - *‘TRANSFER’*
- TIMING, SMOOTH & EFFORTLESS **‘COORDINATION & CONTROL’**
- RECOGNISE PATTERNS & READS PLAY **‘ANTICIPATION’**
- TAKES THE BEST OPTION **‘EFFECTIVE’**
- ACHIEVES GOAL IN UNIQUE & ROBUST WAYS **‘ADAPTABLE’**





Investment in other activities



WHAT IS SKILL ?

MOVEMENT PATTERN
(TECHNIQUE IN ISOLATION)



PERFORMED UNDER PRESSURE
(TIME & SPACE)

SKILL
(CONTEXTUALISED)



LEARNING STAGES

COORDINATION – CONTROL - SKILL

⚽ COORDINATION

ASSEMBLY OF A FUNCTIONAL MOVEMENT PATTERN

RELATIONS FORM BETWEEN COMPONENTS (JOINTS & PLAYERS)

EXPLORATORY TYPE MOVEMENT DISCOVERING NEW SOLUTIONS



FREEZING



LEARNING STAGES

COORDINATION – CONTROL - SKILL

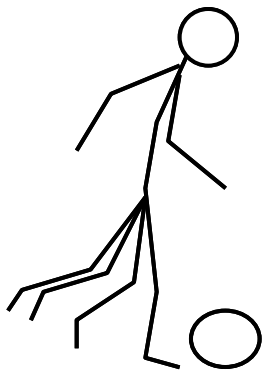
● CONTROL

CONTROL THE COORDINATION PATTERN

SCALING IT TO THE ENVIRONMENT (TEAM-MATES & OPPONENTS)

ADAPTING COORDINATION SOLUTION TO RANGE OF SITUATIONS

Proximal to Distal Releasing



FREEZING



UNFREEZING

VARY MOVEMENT CONTROL PARAMETERS

EG, TIME-FORCE-DIRECTION



LEARNING STAGES

COORDINATION – CONTROL - SKILL

● SKILL

ACTIONS ARE FINELY TUNED TO INFORMATION

HIGHLY ADAPTABLE MOVEMENTS TO CHANGING SITUATIONS

VARIABLE MOVEMENTS USING DECEPTION & DISGUISE

EXPLOIT SUDDEN CHANGES CAUSED BY OWN MOVEMENTS

Co-adaptive

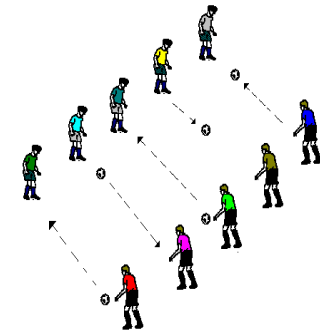


COMPENSATORY



PRACTICE DESIGN

- SKILL–TACTICS V’S TACTICS–SKILL
- SKILL & TACTICS (E.G., TGFU OR GAMES SENSE OR SSG)
 - INTERGRATED APPROACH IS SUPPORTED
 - SKILL & FATIGUE
 - SKILLS CONTEXTUALISED ‘TRANSFER’
 - SKILL DETERMINED BY SITUATION
 - BALL TOUCHES & VARIED SITUATIONS
- CONSIDER QUALITY AS WELL AS QUANTITY
- EFFECTS OF SPACE & NUMBERS ON DECISIONS & SKILLS

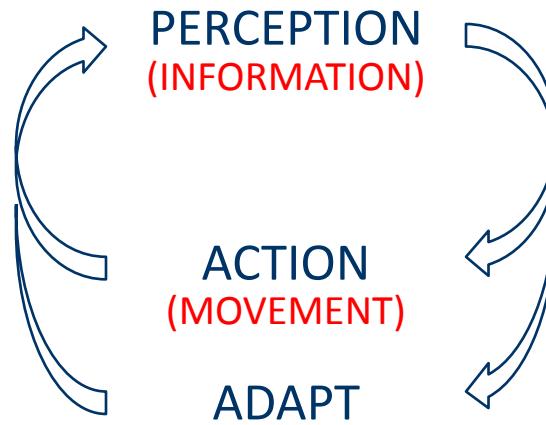


PRACTICE DESIGN

- PERCEPTION (INFORMATION) - ACTION (MOVEMENT)
- COUPLED MOVEMENTS BECOME STRONGER
- SKILLS ARE EXTERNALLY TIMED
- Comment on Brazilian style of play, "These guys are very difficult to read because they never do the same thing twice. All their moves are based on their opponent's initial response to their first movements." (Roger Spry, 2007).



PRACTICE DESIGN



PRACTICE DESIGN

⚽ BALANCE & TRANSITION BETWEEN:

STRUCTURE & VARIABILITY
(ORDER-SEQUENCED) (CREATIVITY-FLAIR)

BENEFITS & LIMITATIONS?

STRUCTURE:
RIGID
PREDICTABLE
SLOW TO ADAPT

VARIABILITY OR CREATIVITY:
UNCERTAINTY IN OPPONENTS
MORE OPTIONS
EXPLOIT OPPONENTS DEFICIENCIES

CREATES CERTAINTY
CONFIDENCE IN PLAYERS

CHAOTIC
LACK OF FOCUS

KEY IS TO MANIPULATE CHAOS IN ENVIRONMENT

1. ON BALL CREATIVITY
2. OFF BALL CREATIVITY
3. IN SILENCE



PRACTICE DESIGN

⚽ BALANCE BETWEEN:

STRUCTURE & VARIABILITY
(ORDER-SEQUENCED) (CREATIVITY-FLAIR)

MANIPULATING THE ENVIRONMENT (PLAYERS, OPPONENTS, TASK GOAL, RULES, PLAYER ROLES, EQUIPMENT, PLAYER TIME-OUTS, POINTS PER COLOURED BALL, TIME ALLOWED, MAXIMUM PASSES, SHOOT ON 5TH)



INSTRUCTION-FEEDBACK-OBSERVATION

● IMPLICIT LEARNING

LEARNING SKILLS WITHOUT VERBALISING
(PROCEDURAL KNOWLEDGE)

EXTERNAL FOCUS OF ATTENTION (MOVEMENT EFFECTS)

ANALOGIES, METAPHORS, RELEVANCE

● EXPLICIT LEARNING

LEARNING BY ACQUIRING COGNITIVE KNOWLEDGE
(DECLARITIVE KNOWLEDGE)

TACTICS, GAME PLANS, STRATEGIES



INSTRUCTION-**FEEDBACK**-OBSERVATION

- FREQUENCY '**SUMMARY, BANDWIDTH & SELF-GUIDED**'
 - 33% OR USE AS GUIDANCE (BANDWIDTH) OR SELF-GUIDED
- TIMING '**REAL-TIME, DELAYED OR POST**'
- TYPE '**MOVEMENT (PROCESS), MOVEMENT EFFECT OR OUTCOME**'
 - MOVEMENT EFFECT ON DESIRABLE TRIALS
 - REINFORCE INTRINSIC FEEDBACK AFTER 10 SECS
 - ALLOW PLAYERS TO LOOK, FEEL, TOUCH & SELF-REVIEW
- MEDIUM '**VARK**'
 - GROUP & INDIVIDUAL PREFERENCES
 - AERIAL V'S PLAYER VIDEO ANALYSIS



INSTRUCTION-FEEDBACK-OBSERVATION



INSTRUCTION-FEEDBACK-OBSERVATION

- RELATIVE MOTION 'SPATIAL AND TIMING INFORMATION'
- COORDINATION BETWEEN PLAYERS 'PATTERN RECOGNITION'
- BETWEEN PLAYERS 'INTERPERSONAL DISTANCE & VELOCITY'



INSTRUCTION-FEEDBACK-OBSERVATION

⚽ PLAYER SEARCH PATTERNS

AERIAL PREFERRED SLIGHTLY OVER PLAYER VIEW

AERIAL VIEW BETTER FOR DECISION MAKING

BETTER DECISION MAKERS SCAN OUT-IN vs IN-OUT

PERIPHERAL CRITICAL WHILE ANCHORING FOCUS

LESS SACADES & FEWER BUT BETTER OPTIONS

NEED FOR DEPTH TRAINING

TRAIN OUT-IN SCANNING

EG, BALL RELEASE FROM CITY TO COUNTRY



Thanks !

