Evaluating Decision Making Through Game Play

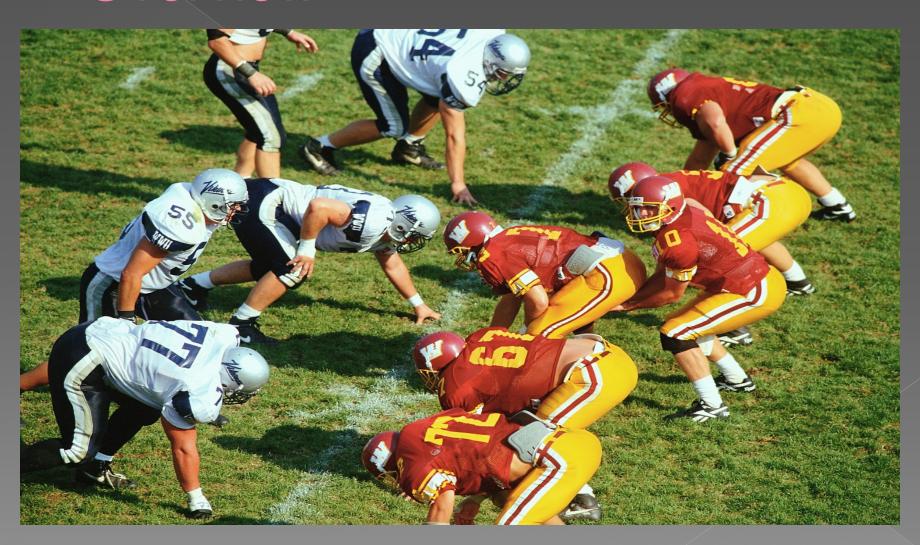
Robin Kirkwood Auld, Ph.D. Rhode Island College AAHPERD 2013 – Charlotte, N.C.

Why Evaluate?

- For Sport:
 - > Statistics for skills and tactics
 - > Practice planning
 - > Peer/Instructor

- For Teaching:
 - Accountability to demonstrate learning
 - Evaluating game play (curriculum emphasis)

Evaluating Game Play: Overview



Effective Games Players

 "Sport performance is a complex product of cognitive knowledge about the current situation and past events combined with the players' ability to produce the sport skill(s) required."

McPherson (1994)

Effective Games Players

"A successful games player is someone who possesses the knowledge to make decisions in a timely and effective way."

Turner & Martinek (1995)

"Skillfulness having a direct relationship with game performance is not always true."

Thomas (1994)

Effective Games Players

- "Our aim in teaching children to play games, is to encourage them to perform intelligently
 - beyond collection of facts
 - draw connections
 - to understand (accommodating the unfamiliar with the familiar)
 - one who performs intelligently has understood." Kirk (1983)

Formula for Developing Good Decision Makers

- Put players in position to think
 - > Allow them to think
 - "Tell me, I forget...Show me, I understand...Involve me, I remember" (unknown)
- Set up scenarios (situated learning) learn in game context
- Let them try experiment (trial and error)

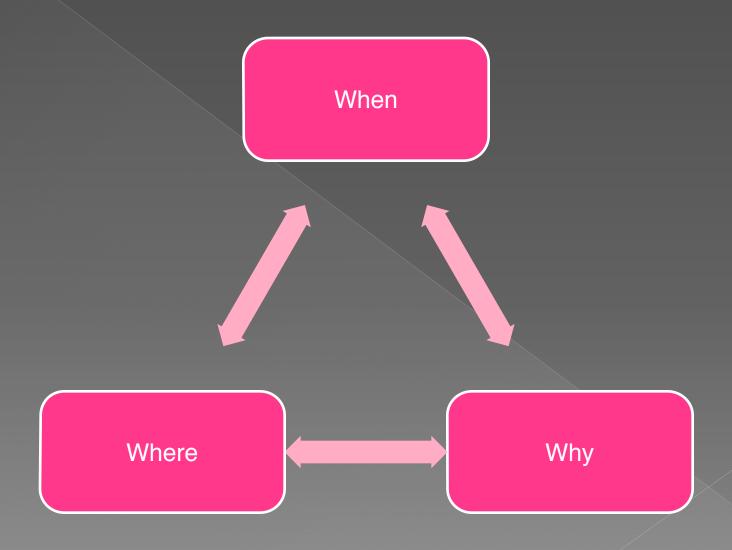
Tactical Games Model



Information Processing



NOT JUST THE HOW



Tactics

- What a player does during the game to get an advantage over an opponent.
 - > Player must decide:
 - Do I pass or shoot?
 - What side of the pin do I aim at to knock both pins down?
 - Where do I move to help the person with the Frisbee?
 - When should I try to take the ball away?
 - Where do I hit the ball so the base runner can get to the next base?

Teaching Tactics

- Learning in Game Context (Situated Learning)
 - Design games that will allow players to explore the solutions to problems that arise in the game.
 - > Stop, show and discuss what options are available (during the game not at the end).
 - Ask a player why he/she chose a certain option.

How to Develop Tactics

- Indirect Teaching Style
 - -student-centered
 - -divergent problem solving
 - -convergent problem solving
 - -question versus telling
 - -guide students in exploring solutions to tactical problems

Tactical Games Model

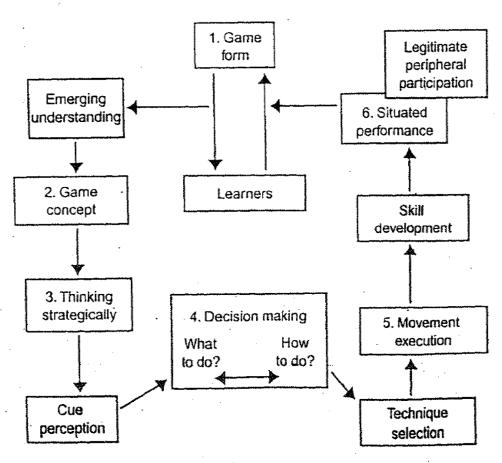


Figure 14.1 Kirk MacPhail revision of the TGfU model.

Tactical Progression

Tactical Problem: Defending an Opponent

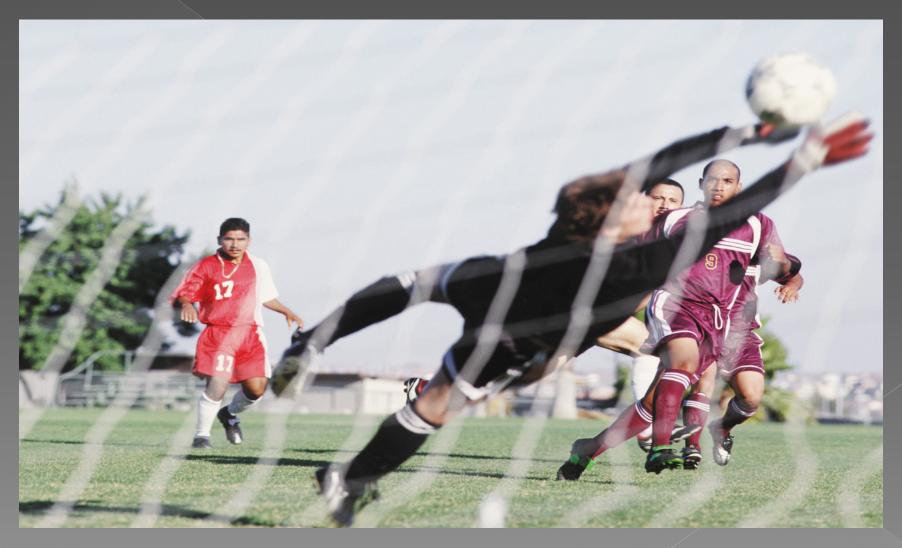
 Tactical Solutions: anticipating a pass, intercepting, peripheral vision, body position, footwork

 Set Induction: We are going to explore how to keep your person from getting the frisbee.

Tactical Progression

- Game 1: Interception
- Drill: 1 v 1 grid drill
- Game 2: 3 v 3 Ultimate Frisbee
- Questions: How do you position your body to make sure your person does not get the disc? What can you do if your person gets behind you? What do you have to be aware of when you are playing the person without the disc?

Developing a Tactical Framework



Developing a Framework

Tactical Problems	Tactical Solutions		
	On-the-Ball	Off-the-Ball	
Offense			

Framework

Tactical Problems	Tactical Solutions	
	On-the-Ball	Off-the-Ball
Defense		

Framework

Tactical Problems	Tactical Solutions	
	On-the-Ball	Off-the-Ball
Re-starts		

Assessment Tools



Assessing Decision Making and Game Play

- Game Performance Assessment Instrument (Mitchell, Oslin, Griffin)
 - Developed by the teacher/coach
 - Assesses what is actually taught
 - Simple to complex
 - Formative data to assist with improvement
 - Rubric style (Territorial Games)
 - Tally style (Target, Net/Wall, Striking/Fielding)

Components of Game Play

- Chosen components depends on the type of game being played
 - Base return to home or recovery position
 - Adjust movement required by flow of game
 - Decision Making appropriate choices
 - Skill Execution efficient performance

Components of Game Play Continued...

- Support off-the-ball to receive pass
- Cover defensive help or off-the-ball defense
- Guard or Mark defending person with ball

Net/Wall Assessment (GPAI)

PED 207 Game Performance Assessment Instrument for Net/Wall Games Volleyball

- 1. Decision Making Criteria (NASPE 1.1)
 - · Player attempts to use a pass to set up another teammate (back row to front row).
 - · Player attempts to use a pass to set up a scoring attempt.
- 2. Adjust Criteria (NASPE 1.2)
 - · Player moves, either offensively or defensively, as needed by the flow of the game (e.g. cover space, open-up, support the passer).
- Skill Execution Criteria (NASPE 2.1)
 - Player makes proper contact with the ball sending it in the intended direction (forearm pass and set).
 - Server executes a legal serve to the opponent's side of the net.

	Decision Making		Adjust		Skill Execution	
Name	Appropriate	Inappropriate	Appropriate	Inappropriate	Appropriate	Inappropriate
Betty			## ##		144 1111 144 1111	111
Jaek.	TT+L++11++11+	- Salahan III Jalaha	127-114-14	1111- 1111	444	44-11
						-
				_		

Tally GPAI

Calculations (for Betty)

Game Involvement Score:

$$6 + 9 + 17 + 10 + 19 + 3 = 64$$

Game Performance Score

DMI = APP DEC/APP + INAPP = 6/15 = .4

AI = APP ADJ/APP ADJ + INAPP ADJ = 17/27 = .63

SEI = EFF EXEC/EFF EXEC + INEFF EXEC = 19/22 = .86

Game performance Score = DMI + SEI + AI/3 = .63

Territorial GPAI

PED 207 - Game Performance Assessment Instrument for Territorial Games

Scoring Key:

- 5 = Almost Always very few missed opportunities (<10%)
- 4 = Usually consistently takes advantage of the opportunities (61% 90%)
- 3 = Inconsistently takes advantage of, but also often misses the opportunity (40% 60%)
- 2 = Usually Fails misses opportunity more times than not (39% 10%)
- 1 = Almost Always Fails hardly ever takes advantage of the opportunity (<10%)

Components and Criteria

Decision Making: a. Determines they are not in an open passing lane and moves into an open space. (NASPE 1.5) b. Cuts into space vacated by a teammate or moves to another space so a teammate can cut into their space (synchronized movement with teammates). (NASPE 2.3)

Support: a. Comes back or lateral to support the player with the ball when they are in trouble to receive a short possession pass (avoids a 10 second count). b. Moves to open space toward the target area at the appropriate angle. (NASPE 1.5)

Adjust: a. After the player passes, he/she moves into a new space. b. Tries to elude (dodge or fake) the opponent prior to cutting into space. c. Moves to meet the pass. (NASPE 2.3)

Decision Making	Support	Adjust
a.	a.	a.
b.	b.	b.
		C.

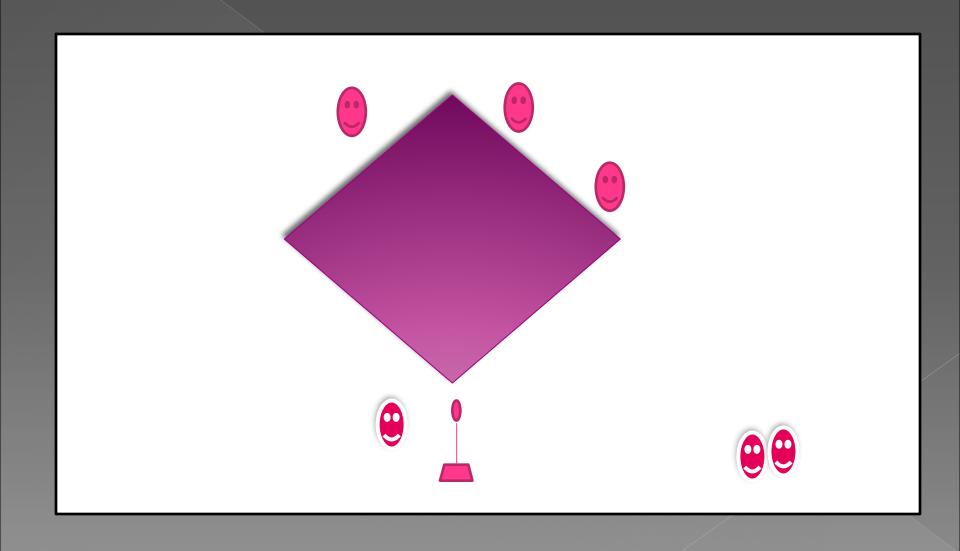
Developing A Game Performance Assessment Instrument (GPAI)



Striking/Fielding Games

- Tactical Problem: Defending Space
- Tactical Solutions:
 - initial position to keep ball in the infield
 - fielding grounders
 - base coverage when ball is hit on the left side/ right side
 - over hand & under hand throws.
 - throws to appropriate base to get the force out

Striking/Fielding Game



3 versus 3

- 3 defenders play short stop, second base and first base on a short field.
- Offensive team must hit a grounder toward short, second or first base. They get three outs (force play to 2nd or 1st, pop fly, outfield hit) or 3 times through the order. Batter runs to first before ball does. Alternate having a runner on 1st and no runner.

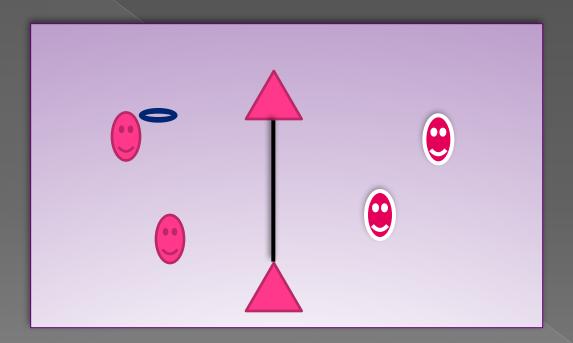
Striking/Fielding GPAI Tally Style

- Component: Decision Making
 - > Criteria:
 - Decides to cover the base when the ball is hit in another direction.
 - Determines what throw is necessary to get the out.
- Component: Base
 - > Criteria:
 - Ready stance: knees bent, back straight arms ready to field a grounder.
 - Initial position helps to minimize spaces for the ball to go through.

Net/Wall

- Tactical Problem: Winning the Point
- Tactical Solutions:
 - Tossing where the opponents are not
 - Faking a toss
 - Force the opponents back, then place toss short;
 vice versa
 - Toss right several times then left; vice versa
 - Passing to a teammate

Net/Wall Game



Deck Ring Doubles

- One team starts with the deck ring, using a backhand side arm toss, teams try to score a point by having the deck ring land in bounds on the other team's side.
- Players cannot move when they have the deck ring.
- Deck ring must fly over the jump rope.

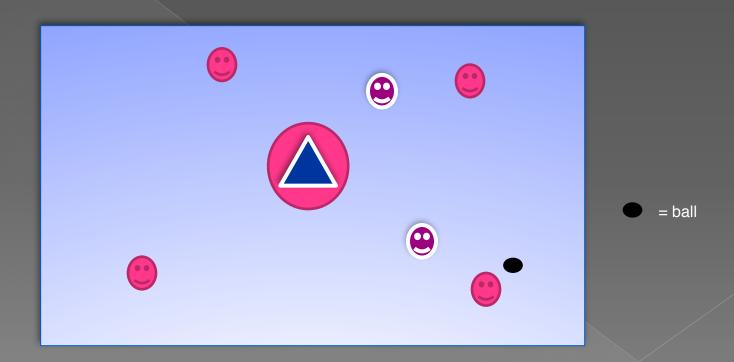
Net/Wall GPAI Tally Style

- Component: Decision Making
 - > Criteria:
 - Takes where the opponent is positioned into account when choosing where to toss.
 - Decides to use multiple tosses to get the opponent away from the chosen attack point.
- Component: Skill Execution
 - Criteria:
 - Tosses with appropriate force to send the deck ring long or short.
 - Makes a catchable toss to teammate.

Territorial Games

- Tactical Problem: Creating Space
- Tactical Solutions:
 - Supporting the player with the ball lateral or behind
 - Moving into an open passing lane
 - Splitting the defense
 - Recognizing where other off-the-ball teammates are

Territorial Games



4 v 2 Central Target Keep-Away

- 4 offensive players versus 2 defensive players. Offense uses under hand passes to move the yarn ball toward the target. A point is scored when the offense hits the target with the ball before it bounces.
- The person with the ball cannot move, the defense may not take the ball out of the offensive player's hands.

Territorial GPAI Rubric Style

- Component: Decision Making
 - Criteria:
 - Recognizes that the ball carrier needs a support beside or behind him/her
 - Recognizes that a penetrating space is a viable option
- Component: Adjust
 - > Criteria:
 - Moves to a space that is not behind a defender.
 - Moves to a new space after passing the ball.

The Final Word(s)

- Empower your athletes to make decisions.
- Be sure they know when, where and why they do what they do in a game.
- Games are played in a dynamic environment, athletes need to be able to "read the play"
- Use assessment tools to determine game play effectiveness and provide formative feedback.

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