Section IV: Evidence for Meeting Assessment 2
Skill and Concept Development
Fall 2010

1. Description of the Assessment

a. This assessment provides evidence of how well Teacher Candidates (TC) perform motor skills in game context and their aptitude for selecting and executing tactical concepts while participating in a variety of game types. TC are required to take PED 207: Motor Skill Development for Life: Wellness I (Team Activities). The TC are introduced to and given time to practice a wide variety of team activities then are evaluated on their performance in game situations. PED 207 is a team activity class that is taught using the Tactical Games Model (TGM). The TGM is an approach developed by Steve Mitchell, Judy Oslin and Linda Griffin based on Teaching Games for Understanding by David Butler and Rod Thorpe. Tactical awareness is developed throughout the semester by having the TC explore the why, when and where they move not just the how (skill). This is done by taking part in lessons that emphasize solving tactical problems (e.g. creating space, defending an opponent, setting up the attack). One of the course assignments is a performance based tactical assessment. TC are evaluated as they play modified versions of Territorial Games (e.g. Lacrosse, Football, Ultimate Frisbee); Net/Wall Games (e.g. Volleyball, Tennis, Racquetball); and Striking/Fielding Games (Softball, Wiffleball, Cricket).

TCs' tactical awareness is evaluated using the Game Performance Assessment Instrument (GPAI) developed by Mitchell, Oslin and Griffin. The instrument can be administered as a rubric style tool (Territorial Games) or a tally style tool (Net/Wall and Striking/Fielding Games). The rubric style scoring utilized in territorial games gives the performer a one to five score for the selected indicators. The tally style utilized in Net/Wall and Striking/Fielding games allows the calculation of an index score for each indicator (zero to one) using the Game Performance formula (Appropriate Actions divided by Appropriate Actions plus Inappropriate Actions).
This authentic assessment tool allows the instructor to select on-the-ball or off-the- ball indicators based on the emphasis of the class. The tool always measures skills and tactics while being performed within game context. TC are evaluated for competence in motor skill performance during the Net/Wall and Striking/Fielding game play and off-the-ball tactics during the Territorial game play. TC are evaluated at mid semester then again at the end of the semester. Tactical performance is 10% of the TCs' overall grade in PED 207.

Oslin, Mitchell and Griffin (1998) as well as Auld (2006) have established initial inter-observer reliability and validity of the GPAI. The PED 207 tactical assessment is administered as a peer assessment tool. One peer is constantly watching one performer during the game play. The TC are introduced to the instrument components during class and trained in what the indicators are measuring. They are given practice sessions to become familiar with the instrument prior to scoring a peer through video analysis and group discussion about how the performers were scored.

b. Alignment with the NASPE Standards:

- NASPE 1.1: TC apply physiological and biomechanical concepts related to skillful movement and physical activity to perform skills appropriately during game play.
- NASPE 1.2: TC apply motor learning and psychological/behavioral theory related to skillful movement and physical activity to perform skills appropriately during game play.
- NASPE 1.3: TC apply motor development theory and principles related to skillful movement and physical activity to perform skills appropriately during game play.
- NASPE 1.5: TC select and execute appropriate skills/concepts due to their ability to analyze and correct critical elements of motor skills and performance concepts.
- NASPE 2.1: TC demonstrate competence in motor skill performance within game context.

- NASPE 2.3: TC demonstrate tactical awareness by selecting and executing an appropriate off-the-ball movement while participating in physical activity.

c. Brief Analysis of the Data Findings: Three different game types were assessed to show proficiency in a variety of skills (Net/Wall games) and concepts (Territorial games).

Skill Development:. A total of 100% (13) of the TC in the Spring Semester of 2010 achieved Exceed or Target status in Striking/Fielding game skills (70% of the TC were in the Exceed category, 4 of the TC scored .89 or better). A total of 77% (10) of the TC achieved Exceed or Target status in Net/Wall game skills. After reviewing the data, the faculty have determined that TC are very successful in executing skills in game context for Striking/Fielding games (Skill Execution Index Mean = .85) and most TC also were successful in Net/Wall games (Skill Execution Index Mean = .74). Faculty has concluded from the scores that TC can properly perform various skills, which will serve them well in their teaching careers.

Tactical Concepts: Faculty determined that 77% (10) of the TC in the Spring Semester of 2010 earned an Exceed or Target status for consistently selecting and executing game concepts in Territorial games. Faculty determined a total of 77% (10) of the TC earned a 4.0 or better when all seven of the criteria were averaged together for Decision Making, Support and Adjust. The faculty also determined that the TC scored highest on recognizing they were not in an open passing lane (Mean = 4.5) and coming to meet the pass (Mean = 4.3). After reviewing the data, the Faculty have determined that TC were very successful in knowing they have to move in the game setting, however their choice of movement may not always coincide with their teammates' movement – cutting into a vacated space or synchronized movement with teammate (Mean = 3.9) or trying to get away from a defender (Mean = 3.9). The faculty recognizes this higher level tactical response needs to be addressed.

d. Evidence of Meeting the Standards: The GPAI serves as an authentic evaluation of how TC utilize skills and tactics in game context. The majority of TC scored in the Exceeds or Target category for the components' (Decision Making, Support, Adjust and Skill Execution) criteria. The faculty interpreted the data and the TC are meeting NASPE Standard 1: Scientific and Theoretical Knowledge and NASPE Standard 2: Skill and Fitness Based Competence. It is not enough for our TC to perform isolated techniques, they must demonstrate competency by performing the appropriate skills while in game play as they adjust to the flow of the game.

References:

Oslin, J., Mitchell, S., & Griffin, L. (1998). The game performance assessment instrument (GPAI): Development and preliminary validation. *Journal of Teaching in Physical Education, 17*, 231-243.

Auld, R.K. (2006). The relationship between tactical knowledge and tactical performance for varying levels of expertise. *Dissertation Abstracts International,* 67 (07), 2509A. (UMI No. 3225311)

2. Assessment Documentation

e. Assessment Tool:

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

Purpose: It is important for physical education teachers to have motor skill competence in a variety of motor skills. The skills cannot just be evaluated in isolation (i.e. skill test) as it is essential to apply the motor skill in game context in order to be an effective games player. The tactical assessment requirement in PED 207; Motor Skill Development for Life: Wellness I (Team Activities) will serve to evaluate your execution of various volleyball skills, body position prior to, and after a contact and the decisions made all within game context. You will complete this tactical assessment after being introduced to and given a chance to participate in tactical progressions for volleyball. A second purpose for the tactical assessment requirement is to train you in the administration of an authentic assessment tool for game performance.

Process: You will take on two roles during this tactical assessment. At times, you will be a performer who is playing a four on four volleyball match and when not playing, you will be evaluating a peer (who is a performer) using the Game Performance Assessment Tool (GPAI), which you became familiar with during classroom lectures and practiced using through video analysis. Prior to playing, you will be given a 15 minute warm up period to practice volleyball skills (e.g. set, forearm pass and serve). You will then play a modified four on four game, the volleyball net is regulation height and the boundaries are the official volleyball dimensions. The game will be self officiated by the players. A change of service and rotation of teams will occur after each point. The game will last for 10 minutes.

Each evaluator will be assigned to watch the game play of one performer. Prior to the game starting, the instructor will review and demonstrate the criteria to be assessed. Afterwards, the evaluators will watch each point played and make a tally mark in the correct column(s) to indicate the action the performer took during the 10 minute game. At the end of the 10 minute game the roles will be reversed, the new performers will be given a 15 minute warm up and the evaluators will become familiar with the criteria. After everyone has played, the peer partners will summarize the results of the GPAI observation with each other for formative evaluation.

Product: The GPAI for volleyball will assess Decision Making - how appropriately the performer selects a skill to execute; Adjust – how appropriately the performer moves depending on the flow of the game; and Skill Execution – how appropriately the performer completes the chosen skill. The evaluator will determine if the criterion was achieved (e.g. the performer has the proper body and arm placement for a forearm pass to the front row and reaches the target player); if it was a tally mark is placed in the Skill Execution Appropriate column. If the criterion was not achieved (e.g. the performer sends the ball out of bounds or unintentionally over the net) a tally mark is placed in the Inappropriate column.

The Skill Execution Index is calculated by counting the number of tallies for the skill execution columns. The formula is: Appropriate / Appropriate + Inappropriate. Zero is the lowest Skill Execution Index Score and one is the highest possible Skill Execution Index Score.

Tactical Assessments account for a total of 10% of your overall grade in PED 207.

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

1. Decision Making Criteria
   - 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
   - Player moves, either offensively or defensively, as needed by the flow of the game (e.g. cover space, open-up, support the passer).

3. Skill Execution Criteria (NASPE 1.1, 1.2, 1.3, 1.5, 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

PED 207
Game Performance Assessment Instrument for Striking/Fielding Games
Wiffleball

Purpose: It is important for physical education teachers to have motor skill competence in a variety of motor skills. The skills cannot just be evaluated in isolation (i.e. skill test) as it is essential to apply the motor skill in game context in order to be an effective games player. The tactical assessment requirement in PED 207; Motor Skill Development for Life: Wellness I (Team Activities) will serve to evaluate your execution of various Wiffleball/Softball skills, movement to support a teammate and the decisions made all within game context. You will complete this tactical assessment after being introduced to and given a chance to participate in tactical progressions for Wiffleball/Softball. A second purpose for the tactical assessment requirement is to train you in the administration of an authentic assessment tool for game performance.

Process: You will take two roles during this tactical assessment. At times you will be a performer who is playing a modified Wiffleball game and when not playing, you will be evaluating your peers (who are the performers) using the Game Performance Assessment Tool (GPAI), which you became familiar with during classroom lectures and practiced using through video analysis. Prior to playing, you will be given a 15 minute warm up period to practice Wiffleball defensive skills (e.g. throwing, catching and fielding). Also before the game starts, the instructor will review and demonstrate the criteria to be assessed. You will then play a modified Wiffleball game in the gymnasium where the batters will hit off a tee and the distance between bases are 40 feet. The game will be self officiated by the players. Each player will rotate to a different position after each batter (RF, CF, LF, 3rd, SS, 2nd, 1st, P, C, Batter). Before the catcher becomes the batter, the player will take the role of evaluator for two plays (the rotation will allow for two evaluators to work together to record the tally marks).

Players will rotate through the positions for a minimum of five full cycles.

Product: The GPAI for Wiffleball will assess Decision Making - how appropriately the performer selects a skill to execute; Support – how appropriately the performer moves to help a teammate; and Skill Execution – how appropriately the performer completes the chosen skill. The evaluator will determine if the criterion was achieved (e.g. the performer uses the proper components of the overhand throwing technique); if it was a tally mark is placed in the Skill Execution Appropriate column. If the criterion was not achieved (e.g. the performer steps on the wrong foot) a tally mark is placed in the Inappropriate column.

The Skill Execution Index is calculated by counting the number of tallies for the skill execution columns. The formula is: Appropriate / Appropriate + Inappropriate. Zero is the lowest Skill Execution Index Score and one is the highest possible Skill Execution Index Score.

Tactical Assessments account for a total of 10% of your overall grade in PED 207.

PED 207
Game Performance Assessment Instrument for Striking/Fielding Games
Wiffleball

1. Decision Making Criteria

    - Considering the situation, player makes the appropriate defensive play with the ball.

2. Support Criteria

    - Player provides back-up to the player fielding the ball.
    - Player is in an appropriate starting (base) position.

3. Skill Execution Criteria (NASPE 1.1, 1.2, 1.3, 1.5, 2.1)

    - Player fields the ball cleanly (without fumbling).
    - Player throws with the proper overhand throwing technique when appropriate.
    - Player positions his/her hands appropriately for a pop up or ground ball.

PED 207 – GPAI Wiffleball

	Decision Making		Support		Skill Execution	
Name	Appropriate	Inappropriate	Appropriate	Inappropriate	Appropriate	Inappropriate

PED 207
Game Performance Assessment Instrument for Territorial Games
Geoball

Purpose: It is important for physical education teachers to be able to select and demonstrate tactical awareness to be effective when playing a variety of games. Tactical awareness is the "ability to identify problems that arise while a game is in progress and to select the skills necessary to solve these problems" (Mitchell, Griffin, & Oslin, 1994, p. 21). The tactical assessment requirement in PED 207; Motor Skill Development for Life: Wellness I (Team Activities) will serve to evaluate your off-the-ball movement while playing Territorial Games. You will complete this tactical assessment after being introduced to and given a chance to participate in tactical progressions for territorial keep-away games (mid term) or all territorial team activities presented in class (end of semester). A second purpose for the tactical assessment requirement is to train you in the administration of an authentic assessment tool for game performance.

Process: You will take two roles during this tactical assessment. At times you will be a performer who is playing a Directional Keep-Away game and when not playing, you will be evaluating a peer (who is a performer) using the Game Performance Assessment Tool (GPAI), which you became familiar with during classroom lectures and practiced using through video analysis. Prior to playing, you will be given a 15 minute warm up period to warm the muscles by executing fundamental skills (running, dodging, faking) and practice underhand tossing and catching. The game is played in the gymnasium using the basketball court boundaries. An end zone (ten feet) is placed at each end of the court.

You will be playing a modified version of Ultimate Frisbee (Geoball). One team (defensive) will start on one end-line and throw the ball to the opponents (offensive) standing on the opposite end-line. The offensive team will try to score by throwing the ball to a teammate (underhand throws), who has to catch it in the opposite team's end zone. After a score, the offensive team throws off to the opponents after both teams returned to their end-line. Performers can not run with or dribble the ball; they have to maintain a pivot-foot or they lose possession of the ball. Defenders are restricted to playing an arm's length away from their opponent and can only intercept the ball once it leaves the offensive player's hand. If the ball lands out of bounds, the team who did not throw it gets possession and has to throw the ball in from the sideline. When the ball is dropped in the field of play, a change of possession at the spot where the ball fell will occur. Offensive players with the ball are limited to 10 seconds; the defender who played the ball carrier initiates the stall count. If the ball did not leave the offensive player's hands within 10 seconds there is a change of possession at the spot of the infraction. The game will be played for 8 minutes.

The evaluators will be assigned to observe one performer for the duration of the game play. The evaluators are observing a performer's off-the-ball movement when on offense. The instructor will review and demonstrate the criteria to be assessed before the game begins. The evaluators will observe and score their performer on seven criteria (see Components and Criteria below) according to the scoring guide on the scoring sheet (see next page). After everyone has played, the peer partners will summarize the results of the GPAI observation with each other for formative evaluation.

Product: The GPAI for the Directional Keep-Away game will assess the performer's Decision Making - how appropriately the performer selects an action (off-the-ball movement or skill) to execute; Support – how appropriately the performer moves to help a teammate; and Adjust – how the performer moves according to the flow of the game. The evaluator will record a one to five rubric score (see scoring key below) with five being the highest score.

Tactical Assessments account for a total of 10% of your overall grade in PED 207.

Reference:

Mitchell, S., Griffin, L., & Oslin, J. (1994). Tactical awareness as a developmentally appropriate focus for the teaching of games in elementary and secondary physical education. *Physical Educator, 51*(1), 21-28.

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. 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 1.5, 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, 2.3)

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 1.5, 2.3)

Decision Making	Support	Adjust
a.	a.	a.
b.	b.	b.
		c.

f. Assessment Tool Scoring Guide:

Scoring Rubric for Skill Execution

Element	Levels of Performance			
	Exceeds .83 - 1.0	Target .82 - .61	Developing .50 - .60	Weakness > .49
Skill Execution NASPE 1.1, 1.2, 1.3, 1.5, 2.1	The TC performed at the autonomic level for each action. The TC appropriately executed the skill in game context significantly more times than inappropriately executing the skill. The TC was highly successful in executing each component of the skill, due to exceptional application of biomechanics, motor learning, motor development and behavioral theory. Thus the TC was able to complete the action necessary for the game situation resulting in a Skill Execution Index of .83-1.0.	The TC performed at the associative level for most actions. The TC appropriately executed the skill in game context more times than they inappropriately executed the skill. The TC was usually successful in executing most components of the skill, due to sound application of biomechanics, motor learning, motor development and behavioral theory. Thus the TC was able to complete the action necessary for the game situation resulting in a Skill Execution Index of .82-.61.	The TC performed at the associative level for some actions. The TC appropriately executed the skill in game context close to equal the times they inappropriately executed the skill, due to questionable application of biomechanics, motor learning, motor development and behavioral theory. The TC was inconsistent in executing the components of the skill, which hindered the TC in consistently completing the action necessary for the game situation resulting in a Skill Execution Index of .50-.60.	The TC performed at the cognitive level for most actions. The TC appropriately executed the skill in game context less times than they inappropriately executed the skill, due to sporadic application of biomechanics, motor learning, motor development and behavioral theory. The TC very rarely executed the components of the skill correctly, which had a major impact on completing the action necessary for the game situation resulting in a Skill Execution Index below .49.

Scoring Rubric for Tactical Game Concepts

Element	Levels of Performance			
	Exceeds 4.6 – 5.0	Target 4.0 – 4.5	Developing 3.5 – 3.9	Weakness > 3.4
Tactical Game Concepts NASPE 1.5, 2.3	The TC performed at the autonomic level for each action. The TC almost always selected the appropriate action in all but three indicators where they usually selected the appropriate action resulting in a mean score of 4.6-5.0.	The TC performed at the associative level for most actions. The TC usually or almost always selected the appropriate action in all of the indicators resulting in a mean score of 4.0-4.5.	The TC performed at the associative level for some of the actions. The TC usually selected the appropriate action in some indicators and was inconsistent in selecting the appropriate action in no more than three indicators resulting in a mean score of 3.5-3.9.	The TC performed at the cognitive level for most actions. The TC inconsistently or usually failed to select the appropriate action for all the indicators resulting in a mean score below 3.4.

g. Data Charts:

Assessment # 2
GPAI Net/Wall and Striking/Fielding Games
Skill Execution
NASPE 1.5, 2.1

	Net/Wall Skill Execution				Striking/Fielding Skill Execution		
	Appropriate Action	**Inappropriate Action**	**Skill Execution Index**		**Appropriate Action**	**Inappropriate Action**	**Skill Execution Index**
Candidate 1	7	3	.70		8	1	.89
Candidate 2	8	4	.67		5	2	.71
Candidate 3	8	2	.80		6	1	.86
Candidate 4	10	3	.77		4	2	.67
Candidate 5	11	2	.85		6	2	.75
Candidate 6	8	1	.89		8	2	.80
Candidate 7	12	6	.67		5	1	.83
Candidate 8	12	1	.92		9	1	.90
Candidate 9	4	3	.57		5	1	.83
Candidate 10	7	7	.50		7	1	.88
Candidate 11	6	1	.86		8	0	1.0
Candidate 12	6	4	.60		6	1	.86
Candidate 13	14	2	.88		7	0	1.0
MEAN	8.7	3	.74		6.5	1.2	.85

- Numbers in appropriate action and inappropriate action sections are a total of the tally recorded during observation.
- Exceeds =.83-1.0, Target = .82-.61, Developing = .50-.60, Weakness = .49 or below
- The skill execution index equals appropriate action / appropriate action + inappropriate action.

Assessment # 2
GPAI Territorial Games
Off-the-Ball Movement
NASPE 1.5, 2.3

	Decision Making		Support		Adjust			MEAN
	Open Pass	Synchronized	Back or Lateral	Forward	Pass and Move	Elude Opponent	Meet Pass	
Candidate 1	4	3	4	3	4	3	4	3.8
Candidate 2	5	4	4	4	5	4	4	4.3
Candidate 3	5	4	4	4	4	4	5	4.3
Candidate 4	4	4	4	3	4	3	4	3.7
Candidate 5	4	4	4	5	4	5	4	4.3
Candidate 6	5	3	4	4	5	3	4	4.0
Candidate 7	5	5	5	4	4	4	5	4.6
Candidate 8	5	4	4	4	4	5	5	4.4
Candidate 9	5	4	5	4	5	4	4	4.4
Candidate 10	4	4	4	4	4	3	4	3.9
Candidate 11	5	5	5	5	5	4	4	4.7
Candidate 12	4	3	3	4	4	5	5	4.0
Candidate 13	4	4	5	4	4	3	4	4.0
MEAN	4.5	3.9	4.2	4.0	4.3	3.9	4.3	

- All numbers above are based on the 1-5 score each TC earned on the GPAI territorial game rubric in part E.