Teaching PETE Students to Discriminate Performance Through Skill Analysis Courses

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PETE Program Coordinator
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Why develop skill analysis courses?

- Research Consortium (session #378 – AAHPERD 2009) focused on *Re-examining Content Knowledge for Physical Education – Implications for Teacher Preparation*.

- Dr. Shiri Ayvazo recommended the following:
  - More depth of CK (Content Knowledge) & progressions for teaching the subject matter &
  - Skill analysis classes for developing ability to discriminate performance.
PETE Skill Analysis Courses

- **Skill Analysis 1 (3 cr hr)**
  - fundamental motor skills, movement concepts, fundamental sport skills, FitnessGram

- **Skill Analysis 2 (3 cr hr)**
  - Individual & dual sports

- **Skill Analysis 3 (3 cr hr)**
  - Team sports

- **Skill Analysis 4 (1 cr hr)**
  - Pass off anything that student did not pass off during above courses
Assessments

- Rubrics scored 0-5 points for each skill
- Rubrics come from several sources
  - Developed by faculty
  - PE Metrics, South Carolina, and EPEC used as is, or modified
Assessment Scoring

0 = did not attempt
1, 2, 3 = based on number of critical elements performed
4 = target
5 = exceptional

- Students must pass every skill with a 4 or 5
- Skills not passed must be passed in Skill Analysis 4
For each area, UVU PETE majors analyze skill performance in:

- Peers (during class)
- Children (using video)
- Focus on critical elements, cues, & transfer of learning to similar sports/games
Skill Analysis 1
Teach & Assess the following areas:

- Jump rope
- Frisbee/disc
- Rackets & Paddles
- Locomotor Skills
- Manipulative skills
- Rhythmic Activities
- Miscellaneous skills
- Fitnessgram
- Floor hockey
Locomotor Skills

- Walk
- Run
- Hop
- Skip
- Gallop

- Slide
- Leap
- Vertical jump
- Horizontal jump
## Sample Locomotor Skills Rubric

### Critical Elements for Horizontal Jump

<table>
<thead>
<tr>
<th>Cues*</th>
<th>Criteria*</th>
<th>McGhie cues</th>
</tr>
</thead>
</table>
| 1. Crouch, Point back, Head up | Preparation Phase  
- Stand with feet parallel, nearly shoulder-width apart  
- Flex knees 70-90 degrees in preparation for the jump – simultaneously flex hips  
- Simultaneously swings arms back  
- Extend the neck & focus the eyes forward in the direction of the jump | Crouch |
| 2. Reach up, Straighten | Action Phase  
- **Swing arms** forcefully forward & upward  
- Forcefully `extends` ankles, knees & hips in unison with a full arm extension, so the take-off angle (ankles, hips, shoulders, arms) is 45-60 degrees from horizontal & the body forms a straight line at the moment of take-off | Swing arms forward & upward  
- Extend |
| 3. Land two  
4. Reach forward, Finish softly | Completion Phase  
3. Lands simultaneously on both feet at a spot well ahead of the center of gravity  
4. Reaches arms forward & flex knees to **absorb the impact of landing**  
5. Maintains balance  
- Jumps directly forward | Land softly |

| Performance Target = 5 points | Scoring: Elements mastered with performance  
0/5 or 1/5 = 1  
2/5 = 2  
3/5 = 3  
4/5 = 4  
5/5 = 5 | Demonstrate mature form for all phases of the horizontal jump correctly, starting from a standing position. |

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* Taken from EPEC (Exemplary Physical Education Curriculum) Grades K-5, 2006 Michigan Fitness Foundation

### Cues for Fall 2009 Final Exam: (1) Crouch; (2) Swing Arms; (3) Extend; (4) Two Feet (take-off & landing); (5) Land Softly
Manipulative Skills

- Overhand throw
- Underhand throw
- Throw football
- Catch football
- Catch fly ball
- Catch ground ball
- Kick stationary ball
- Punt
- Bat off tee
# Overhand Throw Critical Elements

<table>
<thead>
<tr>
<th>Cue*</th>
<th>Criteria*</th>
<th>McGhie cues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparatory Phase:</strong></td>
<td></td>
<td>• Arm way back</td>
</tr>
<tr>
<td>1. Turn to T Position</td>
<td>1. Pivots on back foot (throwing side foot) so the hips &amp; shoulders are</td>
<td></td>
</tr>
<tr>
<td></td>
<td>parallel to the direction of the throw &amp; the weight is on that</td>
<td></td>
</tr>
<tr>
<td></td>
<td>same foot.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Extends arms out to side. Extend the throwing arm (so the elbow is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>160-180 degrees) back from the target while pivoting, keeping the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>throwing hand above the ball (so the palm is facing the floor), with the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>throwing elbow in direct line with both shoulders.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Step directly toward the target with the foot opposite the throwing arm.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(front foot)</td>
<td></td>
</tr>
<tr>
<td><strong>Action Phase:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Twist;</td>
<td>2. Twist the hips, followed by the trunk &amp; shoulders, toward the target</td>
<td>• Long step with opposite foot</td>
</tr>
<tr>
<td>Bend Elbow</td>
<td>with the shoulders passing well beyond square to the target. (Rotates</td>
<td>• Uncoil</td>
</tr>
<tr>
<td>3. Straighten Elbow;</td>
<td>toward target)</td>
<td>• Elbow to ear</td>
</tr>
<tr>
<td>Let Go</td>
<td>- Bends the elbow of the throwing arm, leading the lower portion of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>arm with the elbow during the first half of the arm action. (Elbow leads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hand)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Extend the elbow of the throwing arm as it aligns with the shoulders;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- release the ball after the hand passes the shoulders. (extends elbow,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>releases ball out front)</td>
<td></td>
</tr>
<tr>
<td><strong>Completion Phase:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Finish</td>
<td>4. Follow through with the throwing shoulder well beyond square to the</td>
<td>• Follow through toward receiver</td>
</tr>
<tr>
<td></td>
<td>target &amp; the throwing arm traveling to a point below the waist &amp; to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>side opposite the throwing arm.</td>
<td></td>
</tr>
<tr>
<td>5. Performance</td>
<td>5. Ball travels 30 feet in air (K-2 criteria) Scoring: Elements mastered</td>
<td>• Ball travels 100 feet in air (PETE</td>
</tr>
<tr>
<td>Target = 5 points</td>
<td>with performance</td>
<td>majors))</td>
</tr>
<tr>
<td></td>
<td>0/5 or 1/5 = 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2/5 = 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/5 = 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4/5 = 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5/5 = 5</td>
<td></td>
</tr>
</tbody>
</table>

* Taken from EPEC (Exemplary Physical Education Curriculum) Grades K-5, 2006 Michigan Fitness Foundation
# Rubrics for Jump Rope Skills

## Individual Jump Rope Skills
Do entire skill at least 5 x for credit
*Complete 3 basic skills*

- Single sideswing with jump
- Skier
- Side straddle
- Front straddle
- X-to-Straddle
- Heel exchange
- Toe exchange
- Jogging step
- Any skill approved by instructor

*Complete 2 intermediate skills*

- Irish fling
- Front cross
- Wounded duck
- Front kicks
- Double under
- Leg over
- Leg over cross
- Any skill approved by instructor

Advanced skills can be substituted for basic or intermediate skills

## Partner Jumping - 1 rope/2 people
- One person turns while 2 people jump over the same rope

## Partner Jumping - The Wheel (2 ropes/2 people)
- Each person has one hand turning own rope and other hand turning partner's rope.
- Ropes are turned opposite each other - one rope down, other rope up.

## Single Long Rope - front door
Jump in front door - jump 5 x - jump out other side without missing

## Single Long Rope - back door
Jump in back door - jump 5 x - jump out other side without missing

## Double Dutch jumping
Jump in - jump 5 x - jump out without missing

## Double Dutch turning
Be one of the rope turners when someone else completes the Double Dutch jumping sequence

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Perfect, extraordinary</td>
</tr>
<tr>
<td>4</td>
<td>In - 5-6 jumps - out cleanly</td>
</tr>
<tr>
<td>3</td>
<td>In - 5-6 jumps - trouble getting out (or too many jumps)</td>
</tr>
<tr>
<td>2</td>
<td>In - 2-4 jumps &amp; miss</td>
</tr>
<tr>
<td>1</td>
<td>Attempted skill</td>
</tr>
<tr>
<td>0</td>
<td>No attempt</td>
</tr>
</tbody>
</table>

## 90 Second Jump Rope
- Jump for 90 consecutive seconds without a miss
- Any type of jump may be used as long as both feet are jumping over a self-turned rope

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>No misses for 90 seconds or more</td>
</tr>
<tr>
<td>4</td>
<td>75-89 seconds</td>
</tr>
<tr>
<td>3</td>
<td>60-74 seconds</td>
</tr>
<tr>
<td>2</td>
<td>45-59 seconds</td>
</tr>
<tr>
<td>1</td>
<td>Attempted skill</td>
</tr>
<tr>
<td>0</td>
<td>No attempt</td>
</tr>
</tbody>
</table>

Students must pass all skills (except The Wheel) with at least a 4. Students not passing specific skills must practice and retest during PETE 2400.
Jump Rope Video
**Frisbee Skills (Throws & Catches)**

### Backhand Throw
- Handshake grip
- Same leg
- Disc parallel to ground
- Snap wrist
- Follow through toward receiver

### Forehand Throw
- Palm up grip
- Same leg
- Disc parallel to ground
- "flick the ick"
- Follow through toward receiver

### Scoring Guide for Throwing:
Poly spot placed 50 feet from disc golf basket. Student stands on or behind poly spot. Using disc of choice throw five times (5 forehand & 5 backhand).

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Proper form (all 5 cues) and disc hits basket at least 3 times, with other throws very close.</td>
</tr>
<tr>
<td>4</td>
<td>Proper form (all 5 cues) and disc flies accurately, within catchable distance from basket every time.</td>
</tr>
<tr>
<td>3</td>
<td>Inconsistent or poor form - 3-4 cues followed - OR 1-2 throws land far from basket</td>
</tr>
<tr>
<td>2</td>
<td>Inconsistent or poor form - 3-4 cues followed - OR 3-4 throws land far from basket.</td>
</tr>
<tr>
<td>1</td>
<td>Attempted skill</td>
</tr>
<tr>
<td>0</td>
<td>No attempt to pass off skill</td>
</tr>
</tbody>
</table>

### Pancake Catch
- Hands apart - fingers spread
- Disc in front of body, between waist & eyes
- Focus on disc
- Clap hands together with disc between hands

### 2-Hand Rim Catch
- Above shoulders - thumbs under disc
- Below waist - thumbs on top of disc
- Focus on disc
- Use when Pancake Catch is impractical

## Scoring Guide for Catching:
Partners stand 15-20 yards apart - 5 catchable throws in a row

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Proper form (all cues followed) and receiver catches 5 catchable throws in a row</td>
</tr>
<tr>
<td>4</td>
<td>Proper form (all cues followed) and receiver catches 4 of 5 catchable throws</td>
</tr>
<tr>
<td>3</td>
<td>Proper form (all cues followed) and receiver catches 3 of 5 catchable throws in a row</td>
</tr>
<tr>
<td>2</td>
<td>Proper form (all cues followed) and receiver catches 2 of 5 catchable throws in a row</td>
</tr>
<tr>
<td>1</td>
<td>Attempted skill</td>
</tr>
<tr>
<td>0</td>
<td>No attempt to pass off skill</td>
</tr>
</tbody>
</table>

- Disc golf
- Ultimate game play
- Introduce games categories (invasion, field, net & wall, target, tag)
- Written quiz covers critical elements, rules, strategies
Frisbee Video
Rackets & Paddles

- Strike with paddle
- Pickleball
  - Forehand
  - Backhand
  - Serve
  - Appropriate strokes
  - Offensive tactics
  - Defensive tactics
  - Written quiz

- Speedminton
  - Forehand
  - Backhand
  - Serve
  - Appropriate strokes
  - Offensive tactics
  - Defensive tactics
  - Written quiz
Grade 2 Rackets & Paddles Video
(PE Metrics)
Grade 5 Rackets & Paddles Video
(PE Metrics)
Rhythmic Activities

- Tinikling task sheet
- Tinikling routine
  - Steps
  - Sequences
  - Beat of music
  - Clickers
- Folk Dance

- Lummi Sticks task sheet
- Lummi Sticks routine
  - Level changes
  - Stick exchanges
  - Beat of music
Rhythmic Activities Video
Floor Hockey

- Dribble & shoot (PE Metrics)
- Dribble & pass (SC)
- Floor hockey game play
- Written exam
PE Metrics Floor Hockey Video
FitnessGram

- Need to score in the Healthy Fitness Level for the following tests:
  - PACER
  - Curl-up
  - Push-up
  - Trunk lift
  - Shoulder flexibility
  - Body composition
FitnessGram Rubric Criteria

scores for PETE majors
17-25 (older student &
those with disabilities
are modified)

5 = Better than HFZ  2 = Significantly out of HFZ
4 = Meets HFZ        1 = Attempted test
3 = Slightly out of HFZ 0 = Did not attempt test
Miscellaneous Activities

- Juggle 3 scarves
- Juggle 3 balls
- Hula hoop
- Parachute activities
Skill Analysis 2
Teach & Assess the following areas:

- Gymnastics
- Track & Field
- Badminton
- Tennis
- Racquetball
- Bowling
- Golf
- Archery
- Swimming
Begin semester with:

- Group presentations on rules, regulations, strategies (offense, defense), equipment, field, referee signals, history, national & international association names & websites, categorize fundamental skills.
  - Small groups
  - Each group presents information on one of the sports to be covered during semester
Gymnastics

- Forward roll
- Backward roll
- Cartwheel
- Round-off
- Positions (e.g., straddle, pike, candlestick)
# Gymnastics sample rubric
(forward roll)

<table>
<thead>
<tr>
<th>Name</th>
<th>Head Tucked</th>
<th>Knees Together</th>
<th>Hands Pointing in Correct Direction</th>
<th>Smooth Transition back to Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>
Track & Field

- Shot put
- Hurdling
- Sprint
- Relay
- Long jump (future plan)
- High jump (future plan)
T&F video
Hurdling in Stromanotion
Badminton

• Strokes
  – Clears
  – Drops
  – Smash

• Serving

• Rules

• Strategies
Tennis Skills

- Fundamentals
- Forehand
- Backhand
- Rally
- Forehand volley
- Backhand volley
- Serve
- Match play
- Game strategy
Tennis video
Racquetball

- Basic strokes
- Serves
- Shot selection
- Serve return
- Offensive/Defensive strategies
Bowling

- Approach
- Game play
- Scoring
- Etiquette
Golf

- Driving
- Chipping
- Putting
Swimming

• Floating
• Body position
• Kicking (flutter, whip)
• Crawl stroke
• Elementary back stroke
Final exam covers

• Qualitative analysis of human performance/movement
  – Pre-observation (cues, critical elements)
  – Observation
  – Evaluation (judge, why?)
  – Diagnosis (common errors, detect major common errors) (develop strategies to eliminate errors)
  – Intervention (apply, correct errors)

• Critical elements of skills (name of skills, break down skill, sequences of actions)
Skill Analysis 3
Teach & Assess the following areas:

• Basketball
• Volleyball
• Lacrosse
• Flag Football
• Flag Rugby

• Soccer
• Softball
• Floor Hockey (will replace with Team Handball)
PETE Majors Analyze Video for Each Sport Covered in Skill Analysis 3

www.pevideo.org

1. **Stage**: Identify stage of skill that is exhibited (e.g. beginner, intermediate, expert)

2. **Stage Characteristics**: Describe 2-3 features on video characteristic of the stage

3. **What to Change**: Identify & describe most important aspects of skill that need to be changed

4. **Cue Correct**: single most important cue
Recommended Skill Analysis Task Format –

Instructions: Go to website: www.pevideo.org, select assigned skill video clip. Assess skill by answering the following questions:

1. **Stage:** Identify the stage of the skill that is exhibited (e.g. beginner, intermediate, expert).

2. **Stage Characteristics:** Describe 2-3 features of the movement on the video that is characteristic of the stage identified.

3. **What to Change:** Identify and describe the most important aspect of the skill that will need to be changed for the subject to improve. (Technical faults)

4. **Cue Correction:** Write the single most important verbal instructional cue to help the performer improve.

**Example:** Analyzed Task: KICKING

**Stage:** Beginner

**Characteristics:**
1) kicking motion is carried out with a straight leg and very little flexing at the knee.  
2) concentration on ball (good)  
3) very little movement of arms and trunk  
4) no follow through of the kicking leg  
5) movement toward the ball (good)  
6) no backward movement of kicking leg in preparation of kick

**Change:**
1) stand one step behind the ball in order to step with non kicking leg first then kick on next stride.  
2) bring kicking leg backward and flex at knee before kicking  
3) arms move in opposition to leg  
4) follow through with kicking leg after ball is kicked  
5) kick ball with toe pointed down to contact ball with your shoe laces  
6) use softer ball with beginners

**Cue:** "Bring your kicking leg back and kick THROUGH the ball."
Basketball Skills

• Stationary ball (hand placement, figure 8)
• Control dribble (crossover, reverse pivot)
• Speed dribble (right & left hand)
• Passing (chest, bounce, overhead)
• Shot form (close & free throw)
• Jump shot
• Lay-up (right & left hand)
• Box out
• Rebound & outlet pass
• Pick & roll
Sample Basketball Video
(from PEvideo.org)
Volleyball Skills

- Forearm pass
- Overhead pass
- Offensive hit
- Spike
- Dig
- Underhand serve
- Overhand serve
Sample Volleyball Video
Floor Hockey Skills

- Stance & grips
- Stick handling & dribble
- Forehand pass
- Backhand pass
- Shooting
- Goal tending
- Defense
Lacrosse Skills

- Grip & throwing
- Catching
- Cradling
- Scooping
- Offensive moves (cuts & dodges)
- Defense (mirror, stick & Gslides)
- Goalkeeping
Type your responses to the following questions:

1. Describe the nature or main purpose of the game of Lacrosse.
2. Who, where, when and why ....developed the “women’s or non-contact game of Lacrosse..?
3. Discuss four differences between the men’s game of lacrosse and the women’s game of lacrosse.
4. Describe the two different types of lacrosse sticks and what their purposes are in Women’s Lacrosse.
5. In the men’s game of Lacrosse describe the 4 different types of checks which are allowed.
6. Discuss how the women’s game of Lacrosse begins with a draw and how a goal is scored and how the game is restarted.
7. Describe the 7 on 7 small game of Lacrosse.
Lacrosse Lead-Up Game Assessment

**Sport:** Lacrosse  **Lead-Up game:** 4 on 4 Lacrosse  **Jersey color:** ________

Assess chosen individual on their ability to:
1. Usually uses effective cradling & scooping skills
2. Player initiating effective technique in passing & in receiving passes
3. Usually moves to open space to create a passing lane & uses cuts & dodges on offense
4. Usually moves to intercept ball (scoop up & quickly pass to teammate) or make passing difficult for the offensive players by staying in front of them.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>0</td>
<td>Violates safety procedures and or does not complete the assessment task</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Scoring Terms:**
- 4=**Consistently** =90% or above;
- 3=**Usually** = 89-75%,
- 2=**Sometimes** =74%-50%;
- 1=**Seldom** =below 50%,
- 0=Violates safety procedures and or does not complete the assessment task
## Lacrosse Score Sheet

<table>
<thead>
<tr>
<th></th>
<th>Grip &amp; throwing</th>
<th>Catching</th>
<th>Cradling</th>
<th>Scooping</th>
<th>Offensive moves</th>
<th>Defense</th>
<th>Goalkeeping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

4 = Consistently executes skills- 90% of time. Executes cues with excellent technique.
3 = Usually executes skills-75% of time, Missed one cue with proficient technique. Proficient in skill.
2 = Often executes skills-50% of time, missed several cues & improper technique.
1 = Seldom executes skills missed many cues & poor technique but attempted skill.
0 = No attempt to pass off skill or violated safety procedures
Flag Football Skills

- Throwing technique & thru target
- Catching
- Punt kick
- Handoff & carry ball
- Quarterback drop back & lateral pass
- Receiver routes
- Blocking
Flag Rugby

- Catching
- Passing & shoulder handoff
- Roll ball/half pass
- Scrum
- Loops & wraps
- Cuts
Soccer

- Ball control & dribble
- Passing & receiving
- Chipping
- Long pass
- Trapping
- Kicking/shot
- Heading
- Throw ins
- Goalkeeping
Soccer
Softball

- Throwing
- Fielding fly ball
- Fielding ground ball
- Underhand pitch or windmill pitch
- Baseball overhead pitch
- Hitting baseball & softball
- Bunt
- Catcher technique & throw
- Running & slide
Softball
Thank-you for attending this session.

- Questions?
- Comments?
- Plan to post video on department website http://www.uvu.edu/csh/peandrec/
- Contact info:
  shaunna.mcghie@uvu.edu
  (801) 863-8663