

# Developing Rubrics for Physical Education

**Dr. Tom Parry**

**Northeastern Illinois University**



**@dr\_tomparry**

# Why Rubrics?

- Can a student score well without good technique?
  - HOPEFULLY **NOT!**
- Help teachers be accurate and unbiased in scoring
- Help teachers communicate proficiency to students, parents, administrators
- Provides accurate data for instructional and curricular changes
- Documents procedures used in making importance decisions

# What are Rubrics?

- A matrix like table including descriptive language defining performance quality
- A selection of skills or skill components that represent overall performance
- A description of performance across a minimum of 2 performance levels
  - Pass/Fail, Good/Not so good
- A set of “accepted” performance criteria describing performance

# Designing Rubrics - Framework

- Describe performance in a valid way
  - Core elements of movement
- Descriptive Language
  - What does performance look like at each level
- Provide Useful Discrimination
  - 3-5 performance levels usually best
- Emphasize Technique
  - Be wary of over-rewarding effort! Did they truly learn/master the movement

# Current Problems

- Checklists
  - Ugly cousin of a rubric
  - Present or not present is a very crude measurement
- 1, 2, 3, 4 Scale
  - Large distinction between levels
  - Passing level often identified incorrectly as a #2
- 3/5 components
  - Suggests some components are not important
- Rubrics in general
  - Alignment of Letter, Language, Points and Percentage is poor

# LLPP Example

- For the passing level on a rubric choose a letter grade and identify the minimum requirement under each heading (or OTHER)
- LETTER
  - A, B, C, D, F
- LANGUAGE
  - Developing, Average, Competent, Exceeds Expectations
- PERCENTAGE
  - 50%, 60%, 70%, 75%, 85%, 90%
- POINTS
  - 5, 7, 8, 9, 10



# LLPP Alignment Framework

## Align everything!

### □ LETTER

- Accepted grades in education are A, B, C, D, F

### □ LANGUAGE

- Description must align with other elements

### □ PERCENTAGE

- Range allows discrimination
- Must align with letter grade

### □ POINTS

- Range allowed discrimination
- Must align with letter AND percentage



# Anatomy of a Rubric

- Performance Levels
  - Number of performance levels must distinguish between different types of performance
  - 3-5 levels
- Performance Criteria
  - Single Skill assessments must identify key components of movement
  - Sport assessments must choose the essential skills
- Performance Descriptors
  - Must describe what performance looks like at each level
  - Must focus on movement quality

# Rubric Design

		Performance Levels					
Performance Criteria	Skills	Unacceptable 0 > 40% 0 > 4pts	Developing 40 > 70% 4 > 7pts	Acceptable 70 > 90% 7 > 9pts	Target 90 > 100% 9 > 10pts	Score	
	Skill #1	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.		
	Skill #2	1. 2. 3.	<div style="border: 1px solid black; padding: 20px;"> <h2>Performance Descriptors</h2> </div>				
	Skill #3	1. 2. 3.					1. 2. 3.

Create developmentally appropriate performance descriptors for a SKIPPING assessment for 2<sup>nd</sup> grade students

**Developing (Fail)**

\_\_\_\_\_ %

\_\_\_\_\_ Pts

**Proficient (Pass)**

\_\_\_\_\_ %

\_\_\_\_\_ Pts

Create developmentally appropriate performance descriptors for a RUNNING assessment for \_\_\_\_\_ grade students

**Developing (Fail)**

\_\_\_\_\_ %

\_\_\_\_\_ Pts

**Proficient (Pass)**

\_\_\_\_\_ %

\_\_\_\_\_ Pts

Create developmentally appropriate performance descriptors for a Badminton Long Serve assessment for \_\_\_\_\_ grade students

<b>Developing</b> _____ % _____ Pts	<b>Proficient</b> _____ % _____ Pts	<b>Target</b> _____ % _____ Pts

Create developmentally appropriate performance descriptors for a Volleyball Forearm Pass assessment for \_\_\_\_\_ grade students

<b>Developing</b> _____ % _____ Pts	<b>Proficient</b> _____ % _____ Pts	<b>Target</b> _____ % _____ Pts

# Rubric Design - Descriptors

		Performance Levels				
						Score
Skill Components	Skipping	1. Step-Hop 2. Arm swing	1. Step-Hop 2. Arm swing	1. Step-Hop 2. Arm swing	1. Step-Hop 2. Arm swing	
	Volleyball Forearm Pass	1. Ready Position 2. Alignment 3. Platform 4. Contact 5. Leg Action	1. Ready Position 2. Alignment 3. Platform 4. Contact 5. Leg Action	1. Ready Position 2. Alignment 3. Platform 4. Contact 5. Leg Action	1. Ready Position 2. Alignment 3. Platform 4. Contact 5. Leg Action	
	Badminton Long Serve	1. Stance 2. Swing 3. Contact 4. Flight 5. Accuracy	1. Stance 2. Swing 3. Contact 4. Flight 5. Accuracy	1. Stance 2. Swing 3. Contact 4. Flight 5. Accuracy	1. Stance 2. Swing 3. Contact 4. Flight 5. Accuracy	

# Volleyball Rubric Example

	<b>Unacceptable</b> 0 >40% 0 >4pts	<b>Developing</b> 40 >70% 4 >7pts	<b>Acceptable</b> 70 >90% 7 >9pts	<b>Target</b> 90-100% 9-10pts	<b>Score</b>
<b>Serve</b>	1. Does not clearly step and/or inappropriate foot steps forward 2. Toss is erratic; seldom above head height and in front of body 3. Contacts ball with closed fist or slaps at ball 4. No follow through or weight transfer 5. Ball rarely lands in the court	1. Inconsistently steps with opposite foot from serving hand 2. Toss is occasionally in front of hitting shoulder, may be inappropriate height 3. Contacts ball with closed hand and/or "palms" ball 4. Does not clearly follow through and/or transfer weight	1. Steps with opposite foot from serving hand 2. Toss is in front of hitting shoulder and proper height a majority of the time 3. Contacts ball with open hand and above head 4. Follow through, transfers weight	1. Steps with opposite foot from serving hand as ball is tossed 2. Toss is consistently in front of hitting shoulder and proper height 3. Contacts ball with open hand above head and in front of body 4. Follow through with palm toward target; transfers weight	
<b>Pass</b>	1. No ready position, limited knee bend, arms by sides, back upright 2. Midline of body is not aligned with target 3. Arms bent at elbow, hands not appropriately linked together 4. Ball is contacted on wrist/hands 5. No leg push, arms swing at the ball before and after contact	1. Poor ready position, slight knee bend, arms in front, back upright 2. Midline of body rarely aligned with target 3. Arms slightly bent at elbow, hands together not hand in hand 4. Ball is contacted on forearms/wrist	1. Ready position, knees bent, arms in front 2. Midline of body sometimes aligned with target 3. Arms straight, hand in hand thumbs down 4. Ball is contacted with forearm	1. Good ready position, low, knees bent, arms in front, forward lean 2. Midline of body aligned with target 3. Arms are straight with wrists together, hand in hand thumbs down 4. Ball is contacted on lower forearms in midline of body	



# Gameplay Rubric Example

	<b>Unacceptable</b> <b>0 &gt;40%</b> <b>0 &gt;4pts</b>	<b>Developing</b> <b>40 &gt;70%</b> <b>4 &gt;7pts</b>	<b>Acceptable</b> <b>70 &gt;90%</b> <b>7 &gt;9pts</b>	<b>Target</b> <b>90-100%</b> <b>9-10pts</b>	<b>Score</b>
<b>Movement</b>	<ol style="list-style-type: none"> <li>1. Player rarely moves to help teammates</li> <li>2. player rarely changes pace</li> <li>3. Player rarely changes direction</li> <li>4. Player rarely performs diagonal runs</li> <li>5. Player rarely recycles movement</li> </ol>	<ol style="list-style-type: none"> <li>1. Player sometimes moves to help teammates</li> <li>2. Player sometimes changes pace</li> <li>3. Player sometimes changes direction</li> <li>4. Player sometimes performs diagonal runs</li> </ol>	<ol style="list-style-type: none"> <li>1. Player moves regularly to help teammates</li> <li>2. Player changes pace</li> <li>3. Player changes direction</li> <li>4. Player performs diagonal runs</li> <li>5. Player recycles movement</li> </ol>	<ol style="list-style-type: none"> <li>1. Player is continuously moving to help teammates</li> <li>2. Player changes pace at appropriate times</li> <li>3. Player changes direction at appropriate times</li> <li>4. Player performs diagonal runs to receive pass or create space</li> </ol>	
<b>Offense</b>	<ol style="list-style-type: none"> <li>1. Communication is limited and/or very unclear</li> <li>2. Player uses team concepts rarely</li> <li>3. Moves the ball slowly</li> <li>4. Does not clearly move to create or exploit space, or infrequent/ineffective movement</li> <li>5. Demonstrates poor decision making through pass and movement selection</li> </ol>	<ol style="list-style-type: none"> <li>1. Sometimes communicates with teammates or communication is unclear</li> <li>2. Player uses team concepts infrequently</li> <li>3. Moves the ball, lacking a little speed</li> <li>4. Moves reactively, does not clearly create or exploit space</li> </ol>	<ol style="list-style-type: none"> <li>1. Regularly communicates with teammates</li> <li>2. Player uses team concepts frequently to gain an advantage</li> <li>3. Moves the ball quickly</li> <li>4. Moves to create or exploit space</li> <li>5. Demonstrates some decision making through pass and movement selection</li> </ol>	<ol style="list-style-type: none"> <li>1. Regularly and clearly communicates with teammates</li> <li>2. Player uses concepts such as switches, triangles, give &amp; go regularly and effectively to gain an advantage</li> <li>3. Moves the ball quickly and effectively to gain an advantage</li> <li>4. Moves proactively to create or exploit space</li> </ol>	

# Rubric Implementation Example

	<b>Unacceptable</b> <b>0 &gt;40%</b> <b>0 &gt;4pts</b>	<b>Developing</b> <b>40 &gt;70%</b> <b>4 &gt;7pts</b>	<b>Acceptable</b> <b>70 &gt;90%</b> <b>7 &gt;9pts</b>	<b>Target</b> <b>90-100%</b> <b>9-10pts</b>	<b>Score</b>
<b>Serve</b>	1. Does not clearly step and/or inappropriate foot steps forward 2. Toss is erratic; seldom above head height and in front of body 3. Contacts ball with closed fist or slaps at ball 4. No follow through or weight transfer 5. Ball rarely lands in the court	1. Inconsistently steps with opposite foot from serving hand 2. Toss is occasionally in front of hitting shoulder, may be inappropriate height 3. Contacts ball with closed hand and/or “palms” ball 4. Does not clearly follow through and/or transfer weight	1. Steps with opposite foot from serving hand 2. Toss is in front of hitting shoulder and proper height a majority of the time 3. Contacts ball with open hand and above head 4. Follow through, transfers weight	1. Steps with opposite foot from serving hand as ball is tossed 2. Toss is consistently in front of hitting shoulder and proper height 3. Contacts ball with open hand above head and in front of body 4. Follow through with palm toward target; transfers weight	
TP					
JS					
KM					
MN					
DL					

# Standards Based Grading

## It's not fair! Yes it is and here's why

- ❑ Common thought is this punishes low skilled students
- ❑ Curricular and assessment framework
  - ❑ Learning Domains: Psychomotor, Cognitive, Affective
  - ❑ Standards: ISBE and/or NASPE
  - ❑ Skill Categories
- ❑ Decide as a program how much each Learning Domain is worth
  - ❑ **WEIGHTING**
    - ❑ **Psychomotor (40%), Cognitive (30%), Affective (30%)**

# Well-Rounded Students

- Importance of Psychomotor, Cognitive and Affective learning domains

## EXAMPLE

- Student A is skilled (varsity sport) but does not demonstrate strong cognitive understanding and also has some inappropriate values, beliefs, attitudes and behaviors
  - Should this student get an A?
- Student B is low skilled, but demonstrates good cognitive understanding and demonstrates positive values, beliefs, attitudes and behaviors
  - Should this student get an A?

**■ THE ANSWER IS NEITHER SHOULD!!!**

t-parry1@neiu.edu



@dr\_tomparry