Authentic Assessment in Physical Education

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Assessment in our Field: What’s the Challenge?

As Physical Educators, we are responsible for multiple Domains:

1. Health-Related Physical Fitness (and improvements)
2. Cognitive Domain
3. Psychomotor (This is what makes our field unique)
4. Affective Domain

What are other disciplines primarily concerned with?

COGNITIVE DOMAIN
What Does NASPE say about Appropriate Instruction?:

1. Full inclusion of all students
2. Maximum practice opportunities for class activities
3. Well-Designed lessons that facilitate student learning
4. Out-of-school assignments that support learning, practice, and establishing life-long habits
5. No use of physical activity as punishment
6. Use of **regular assessment** to monitor, reinforce, and plan for student learning
A Physically Educated Person:

- Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.
- Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.
- Participates regularly in physical activity
- Achieves and maintains a health-enhancing level of physical fitness
- Exhibits responsible personal and social behavior that respects self and others in physical activity settings
- Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction
What are Appropriate Practice for Assessment?

1. Teacher decisions are based on ongoing individual assessments of children as they participate in PE class.

2. This info is used to individualize instruction and also to:
   1. Plan curriculum
   2. Plan daily lessons
   3. Communicate with parents
   4. Identify children with special needs
   5. Evaluate the program’s effectiveness
What is ‘Inappropriate Practice in Assessment?:

1. Assessment in the classroom addresses classroom rule compliance.
2. Dress, attendance, and effort are counted in affective area.
3. Assessment is not multifaceted; based on a single performance score on fitness tests.
4. Assessment only occurs in the contact of grading.
5. Assessment items focus on isolated skills in artificial context.
   (EX: dribbling between cones instead of game situations)
Formative and Summative Assessment – What’s the Difference and Why does it matter?

- **Formative assessment** – occurs **DURING** the unit or program
  - Intent is that work on what is being assessed will continue
- **Summative assessment** – occurs at the end of the unit program.

**Formative assessments are used to make adjustments in the learning process!**

Formative assessment does the following:

- Involves the students in the process of assessment and goal setting
- Motivates students to improve their performance
- Allows for teaching effectiveness judgments
- Provides teachers information on current student status in relation to learning objectives
- Places students in appropriate instructional groups
- Provides teachers with objective information for grading
- Maximizes probability of instructional alignments (NASPE)
What is Alternative Assessment?

- Challenge for today’s physical educator is to develop meaningful assessment tools

- Refers to any assessment that differs from a traditional assessment.
- Takes place in a real-world setting

3 Standards -
1. Is as game-like as possible
2. Requires cognitive development
3. Asks students to apply their skills in a game-like situation
What is Rationale for Alternative Assessment?

1. Accountability

2. Weaknesses of Standardized testing Practices

3. Authenticity

4. Objectivity

5. Accuracy
   * Validity and reliability issues
Some Types of Alternative Assessments

- **Student Projects**
  - Allows students to create new movement strategies from learned material

- **Portfolios**
  - Allows for representative collection of a student’s work over time
  - Intent is to involve students in assessment and have ownership of what goes into portfolio

- **Event Tasks**
  - Asks students to create something *during a single instructional period.*
    - Gymnastics routine, playing a game, dance routines, warm-up routine

- **Student Logs / Journals**
  - Provide the opportunity to personalize the PE experience
    - Effective for assessing affective domain
EXAMPLE: Fitness Portfolio

Purpose:

to demonstrate your ability to assess and evaluate your fitness level, set appropriate personal fitness goals, and design a personal fitness program to meet those goals over the course of the semester.

What is to be included:

1. An assessment of personal fitness in all 5 HRPF dimensions and identification of which methods you used to assess that aspect of fitness.
2. A presentation of your judgment about the meaning of the fitness scores
3. A presentation of your goals based on the data you have collected
4. Evidence of what you have done to meet those goals and your level of success with those goals.

Assessment of the Portfolio:

1. Includes evidence supporting the above 4 dimensions
2. The evidence supplied is accurate
3. The evidence is adequate to support your ideas
4. The evidence supplied communicates clearly
**Sample Portfolio Rubric:**
Scoring will need to be holistic

<table>
<thead>
<tr>
<th>Score</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>All portions of the assignment are completed in exemplary fashion. All information is accurate. All portfolio entries clearly communicate an understanding of portfolio requirements. Additional resources have been used to strengthen the material presented.</td>
</tr>
<tr>
<td>3</td>
<td>All portions of the portfolio are complete, but with less detail and thoroughness. Limited additional material has been added. Portfolio entries demonstrate a basic understanding of project requirements.</td>
</tr>
<tr>
<td>2</td>
<td>One or two significant portions of the portfolio have not been completed; other portions are brief. No additional materials have been utilized. Multiple errors in spelling and grammar occur, limiting the ability of the portfolio to communicate understanding of the project requirements.</td>
</tr>
<tr>
<td>1</td>
<td>Project is not completed as assigned.</td>
</tr>
</tbody>
</table>
Rubrics: What are they and What is their purposes?

- Pre-established scale that specifies the work to be done
  - Lets students know what teacher’s expectations are for assignment

- Purposes of Rubrics:
  1. Help teacher define excellence and plan how to help students achieve it.
  2. Communicates to students what constitutes excellence
  3. Communicates goals and results to parents
  4. Helps other teachers be accurate, unbiased in scoring
  5. Maintains instructional alignment
Rubrics - Some Guidelines

Best Rubrics are those that:
1. Discriminate among performers in a valid way
2. Rely on descriptive language rather than comparative language
3. Provide useful information
4. Emphasize the finished product
Establishing Criteria for Judging Alternative Assessments – The Rubric

- Rubrics are fixed scales and list of characteristics that describe performance for each points on a scale.

- Rubrics can take several forms – most common are:
  1. Rating Scales
  2. Checklists

- Rating scales usually have 3-7 points

- Specific psychomotor or sport skills are measured using an analytic assessment while global sport skill criteria are measured with holistic assessment.

- In all cases of alternative assessment, it must be accompanied by:
  1. Objective
  2. Pre-established
  3. Pre-shared

Performance standards
Checklists and Rating Scales

- **Checklists** - used to detect presence or absence of skills
- **Rating scales** - used to determine degree to which behavior has been learned
# Rubrics: Checklist for Throwing Performance

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Check If Observed</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonthrowing side to Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throwing hand starts behind ear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steps toward target with opposite foot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elbow leads hand forward</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forearm extension prior to release</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release point just past the head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-through toward target</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rubrics: Rating Scale for Tennis Skill – Forehand / Backhand Drive

5 – Excellent
Proper grip, good balance and footwork, and near-perfect form. Consistently demonstrates correct stroke mechanics. Shots are hit with power and consistently placed appropriately.

4 – Good
Proper grip, good balance, adequate footwork, and acceptable, but not perfect form. Demonstrates above average consistency of stroke mechanics. Moderate power and consistent placement within court area.

3 – Satisfactory
Proper grip, acceptable balance, but footwork is poor. Form is somewhat erratic and inefficient, resulting in inconsistent shot placement. Style of stroke is more defensive in nature, but can sustain a short rally.

2 – Fair
Uses improper grip at times, poor footwork, and basically incorrect form. Inconsistent stroke mechanics. Defensive style of play, merely trying to get ball over the net. Unable to sustain a rally.

1 – Poor
Incorrect grip, off balance, with poor footwork. Form is very poor and erratic. Virtually no control of ball placement. Experiences difficulty in getting ball over net.
## Rubrics: Developmental Scoring for General Motor Skills (Age 9)

<table>
<thead>
<tr>
<th>Developmental Level</th>
<th>Catching</th>
<th>Throwing</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Can catch an object thrown with increased velocity or catch an object while moving.</td>
<td>Can throw with increased velocity and accuracy</td>
</tr>
<tr>
<td>5</td>
<td>Can transfer catching skills to a game situation</td>
<td>Can transfer throwing skills to a game situation</td>
</tr>
<tr>
<td>4</td>
<td>Can catch a variety of objects at different levels with a partner.</td>
<td>Shows trunk rotation and accuracy</td>
</tr>
<tr>
<td>3</td>
<td>Can catch a variety of self-tossed objects</td>
<td>Follows through toward target</td>
</tr>
<tr>
<td>2</td>
<td>Can catch a bounced ball from a partner</td>
<td>Shows opposition</td>
</tr>
<tr>
<td>1</td>
<td>Arms extended toward thrower; shows avoidance reaction</td>
<td>Limited body movement; arm dominated</td>
</tr>
<tr>
<td>Level</td>
<td>Knowledge</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Demonstrates a thorough understanding of the important concepts or generalizations and provides new insights into some aspect of that information</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Displays a complete and accurate understanding of the important concepts or generalizations.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Displays an incomplete understanding of the important concepts and generalizations and has notable misconceptions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Demonstrates little understanding of the concepts and generalizations and has several misconceptions</td>
<td></td>
</tr>
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Making Authentic Assessment part of your Program:

- Authentic Assessment becomes effective when the following can occur:
  1. Establish criteria – What is “good“ performance when you establish learning outcomes?
  2. Use Self-testing Tasks frequently
  3. Use simple Check Sheets and Rating Scales
     1. Can be used to assess simple and complex behaviors
     2. Enables students to see / learn critical components of skills
  4. Use peer assessment
     1. Forces student to consider and focus on criteria and develop critical observations skills
  5. Use “Exit slips” or “30-second wonders” to assess lesson objectives
  6. Use videotape
  7. Sample Student behavior - Not every behavior must be assessed to evaluate teaching or program objectives