

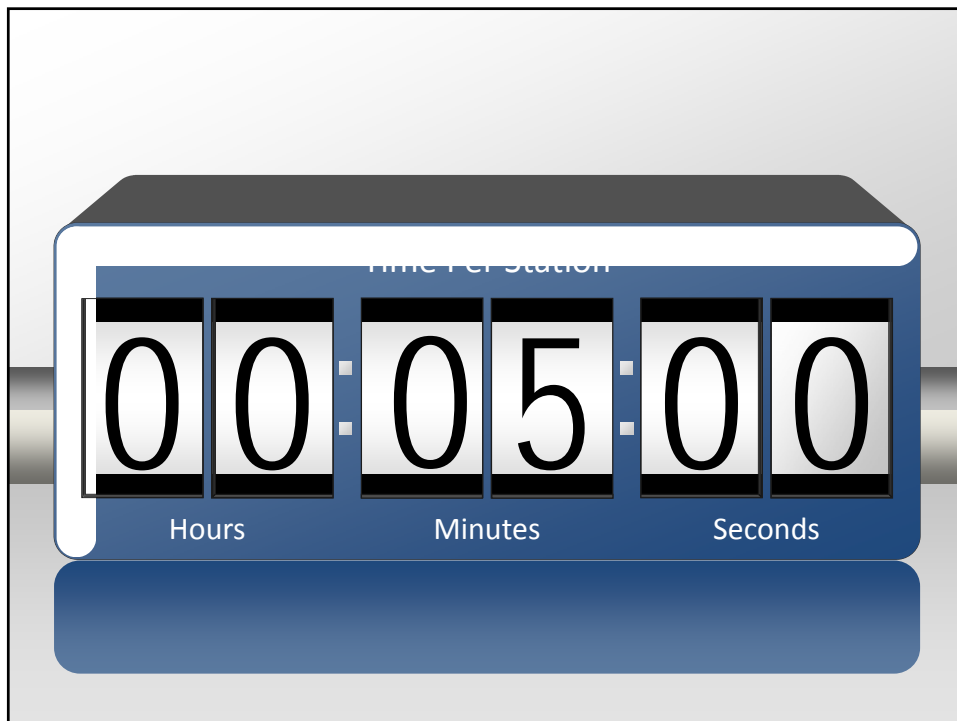
Standard 2

- Demonstrates understanding of movement concepts, principals, strategies, and tactics as they apply to the learning and performance of physical activities (NASPE, 2004).
 - Grades 9-12:
 - Correctly identifies biomechanical principles relating to propelling an object
 - Identifies motor learning principles relating to practice for skill improvement



Team Handball Application

INTEGRATING MOTOR LEARNING AND BIOMECHANICAL CONCEPTS



1. An emphasis on speed during performance negatively effects accuracy and vice versa.

2. To spin faster, pull limbs closer to the axis of rotation

3. To create spin, apply an off-center force

4. The more joints you use the more force you create.



Team Handball Unit Project

INTEGRATING MOTOR LEARNING

Immersion (Project) Approach (Fogarty, 1991)

- Design a project that requires students to explore a given concept(s) during an extended period of time



Team Handball Unit Project

- Concepts/Principles
 - Open vs. Closed Motor Skills
 - Assessing Performance
 - Designing Practice
- Project (modified from Rink, 2012)
 - Students will:
 - Identify the skills used in team handball
 - Determine where they fall on the open/closed continuum
 - List the implications for practice
 - Develop and implement a practice schedule/plan for the unit
 - Assess progress and adjust practice plan accordingly



Type of Skill

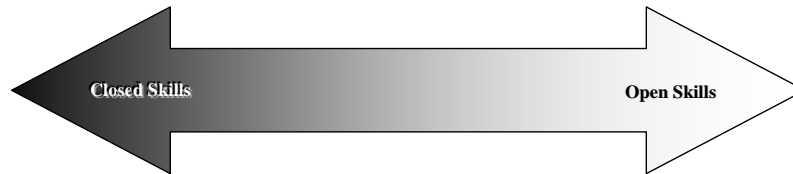
1. List the skills/actions that were used to play the game.
2. For each skill/action listed, answer the following questions:
 - Do you know what type of action is needed (a) ahead of time or (b) just before an action is needed?
 - Do you have control over when to begin the action?
 - Do you have to match your actions with those of a teammate, an opponent or other variable?
 - Is the skill solely dependent on movement form?
 - Do you repeat the action the same way each time or does it change depending on the situation?

Passing

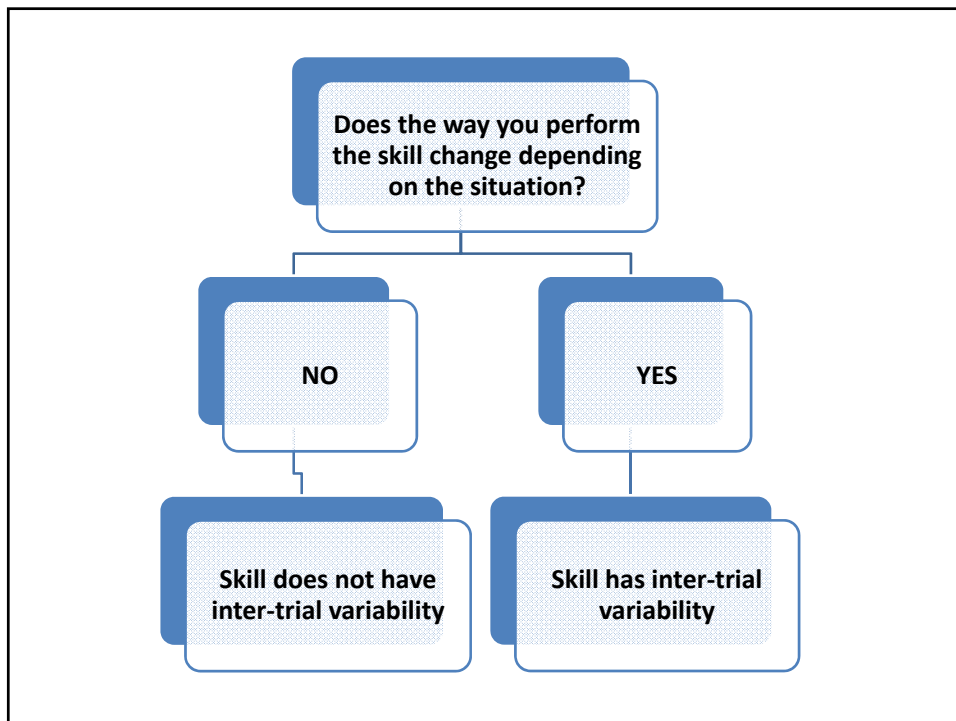


- Do you know what type of action is needed (a) ahead of time or (b) just before an action is needed?
- Do you have control over when to begin the action?
- Do you have to match your actions with those of a teammate, an opponent or other variable?
- Is the skill solely dependent on movement form?
- Do you repeat the action the same way each time or does it change depending on the situation?

Assess the skill in degree of being open or closed



- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Type of action needed known ahead of time • Performer decides when to begin action • The skill is solely dependent on movement form | <ul style="list-style-type: none"> • Type of action unknown until just before needed • No control over when to begin the action • Have to match your actions with those of a teammate, an opponent or other variable(s) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Passing

- Identify all of the variations of passing that could occur in a game
 - Distance
 - Direction
 - Speed
 - Type of pass
 - Overhand, underhand, sidearm, bounce, wrist
 - Passer is stationary/ moving
 - Receiver is stationary/moving
 - With and without defenders on the passer/receiver



Implications for practice

Closed Skills

- Depends on the degree of inter-trial variability (ITV)
- Closed skills, no ITV
 - Practice technique
- Closed skills with ITV
 - Practice all possible variations of the skill simulating game conditions

Open Skills

- Practice all possible variations of the skill simulating game conditions



Initial PETE Standards

- Standard 1: Scientific and Theoretical Knowledge
 - *Physical education teacher candidates know and apply discipline-specific scientific and theoretical concepts critical to the development of physically educated individuals.*

