Task Cards, Video Apps and Analyzing Movement.
Engaging the motor, social and cognitive domains through reciprocal teaching.

Katie Hawke, Lyndie Kelley, Heath Pierce, Dan Gish, Jocelyn Chaput, Katie Beaudoin, Carly Perreault
Synchronized Goblet Squats LHS PE
Mosston’s Spectrum

1. **Style A Command** - teacher makes all decisions
2. **Style B Practice** - Students carry out teacher-prescribed tasks
3. **Style C Reciprocal** - Students work in pairs: one performs, the other provides feedback
4. **Style D Self-check** - Students assess their own performance against criteria
5. **Style E Inclusion** - Teacher planned. Student monitors own work.
Mosston’s Spectrum

6. Style F Guided Discovery - Students solve teacher set movement problems with assistance.
7. Style G Divergent - Students solve problems without assistance from the teacher.
8. Style H Individual - Teacher determines content. Student plans the programme.
9. Style I Learner Initiated - Student plans own programme. Teacher is advisor.
10. Style J Self Teaching - Student takes full responsibility for the learning process.
Teaching styles

Reciprocal teaching is categorized as teaching style C

Students work in pairs: one performs, the other provides feedback

Motor/Physical - Doer/Participant

Cognitive - interpretation of the movement

Social - to give and receive feedback
Reciprocal Teaching

Partner Feedback

Video Feedback

Doer/Participant

Peer Teacher

Use of Task card & Video FB

PE Teacher/Coach
Processing Information

- Visual - Task card/Video
- Kinesthetic - Participant
- Auditory - Instructions & feedback (verbal cues/
- Analytical (problem solving) - working together to detect & correct error

https://ctl.yale.edu/LearningStylesMyth
Use of Task Card

Goblet Squat
Partner Assessment Form:
Observe your partner while she/he executes the Goblet Squat 5 times then answer the following questions and try and give some corrective feedback so she/he can improve on the second attempt.

<table>
<thead>
<tr>
<th>Question</th>
<th>A</th>
<th>S</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>1. My partners feet were slightly outside shoulder width apart</td>
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<tr>
<td>2. My partner held the kettlebell at heart level</td>
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<td>3. My partners sat back and created 90° angle with her knees</td>
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<td>4. My partners kept her weight on her heels</td>
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<td>5. My partner kept her chest up</td>
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<td>6. My partners knees are pushed out</td>
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<tr>
<td>7. My partners elbows were close to the inside of knees</td>
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<tr>
<td>8. My partner Kept her heels planted</td>
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<tr>
<td>9. My partner pushed thru her heels back to standing</td>
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</tbody>
</table>

A=Always
S=Sometimes
N= Never
Partner Evaluation Form:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>S</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive: My Partner could rephrase the instructions to help me better understand the task when necessary</td>
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<tr>
<td>Cognitive: My partner gave feedback on correcting the technique specific to the task card</td>
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<tr>
<td>Social: My partner listened carefully when given instruction or feedback</td>
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<tr>
<td>Social: My partner gave instruction and feedback in a positive manner</td>
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<tr>
<td>Motor/Physical: My partner’s feedback helped me improve my performance in the goblet squat</td>
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</tbody>
</table>

Implementation - LHS
Implementation into Your School Curriculum

NASPE

**Standard 1:** The physically literate individual demonstrates competency in a variety of motor movement patterns.

**Standard 2:** The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.

**Standard 3:** The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.

**Standard 4:** The physically literate individual exhibits responsible personal and social behavior that respects self and others.

**Standard 5:** The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

https://www.shapeamerica.org/standards/pe/upload/Grade-Level-Outcomes-for-K-12-Physical-Education.pdf
Cognitive Vs. Autonomous Leaner
Split-Screen
Video Analysis and App - YouTube

Before Practice

Iron Path App

After Practice
There’s an app for that ...

Coaches Eye  Dartfish Express  imovie  Hudl Technique
Hudl Technique: Split screen

1. Select a video
2. Tap Compare
   a. Double Square in the top right corner of app
3. Select a video comparison
   a. Record a new video
   b. Compare with pro athletes
   c. Compare to your videos
4. Play back videos on split screen
**Squat Jump Task Card**

By Julie Plummer (Isenbey & Byra, 2013)

1. **STAND**
   - Stand tall with feet shoulder-width apart

2. **SQUAT**
   - Bend knees until thighs are parallel to the floor
   - Make sure knees are not far in front of toes & the back is flat
   - Hold arms in front sheet to center weight

3. **JUMP**
   - Straighten legs while forcefully pushing the floor away with feet
   - Swing arms back to jump off of the ground
   - Land quietly on the balls of feet

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**Shooting A Basketball**

The back is straight and the eyes are focused on the target.

The knees are bent at a 120° angle pointed toward the target.

The legs power up and the feet are on the tips of toes.

The arm is at a 60° angle pointed toward the target.

The dominant hand is flicked toward the target.

The feet land softly on the ground to reduce tension on knees.
Step Three: Follow through

A. Head is down
B. Legs bent
C. Bat finishes above shoulder
D. Back foot and hips have rotated forward
Activity

1. Goblet Squat
2. Single Leg Romanian Deadlift
3. Push up
### The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Grade 5</th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>S5.M1</td>
<td>Health</td>
<td>Describes how being physically active leads to a healthy body. (S5.M1.6)</td>
<td>Identifies different types of physical activities and describes how each exerts a positive effect on health. (S5.M1.7)</td>
<td>Identifies the five components of health-related fitness (muscular strength, muscular endurance, flexibility, cardiorespiratory endurance and body composition) and explains the connections between fitness and overall physical and mental health. (S5.M1.8)</td>
</tr>
<tr>
<td>S5.M2</td>
<td>Health</td>
<td>Identifies components of physical activity that provide opportunities for reducing stress and for social interaction. (S5.M2.6)</td>
<td>Identifies positive mental and emotional aspects of participating in a variety of physical activities. (S5.M2.7)</td>
<td>Analyzes the empowering consequences of being physically active. (S5.M2.8)</td>
</tr>
<tr>
<td>S5.M3</td>
<td>Challenge</td>
<td>Recognizes individual challenges and copes in a positive way, such as extending effort, asking for help or feedback, and/or modifying the tasks. (S5.M3.6)</td>
<td>Generates positive strategies such as offering suggestions or assistance, leading or following others and providing possible solutions when faced with a group challenge. (S5.M3.7)</td>
<td>Develops a plan of action and makes appropriate decisions based on that plan when faced with an individual challenge. (S5.M3.8)</td>
</tr>
<tr>
<td>S5.M4</td>
<td>Self-expression &amp; enjoyment</td>
<td>Describes how moving competently in a physical activity setting creates enjoyment. (S5.M4.6)</td>
<td>Identifies why self-selected physical activities create enjoyment. (S5.M4.7)</td>
<td>Discusses how enjoyment could be increased in self-selected physical activities. (S5.M4.8)</td>
</tr>
<tr>
<td>S5.M5</td>
<td>Self-expression &amp; enjoyment</td>
<td>Identifies how self-expression and physical activity are related. (S5.M5.6)</td>
<td>Explains the relationship between self-expression and lifelong enjoyment through physical activity. (S5.M5.7)</td>
<td>Identifies and participates in an enjoyable activity that prompts individual self-expression. (S5.M5.8)</td>
</tr>
<tr>
<td>S5.M6</td>
<td>Social interaction</td>
<td>Demonstrates respect for self and others in activities and games by following the rules, encouraging others and playing in the spirit of the game or activity. (S5.M6.6)</td>
<td>Demonstrates the importance of social interaction by helping and encouraging others, avoiding trash talk and providing support to classmates. (S5.M6.7)</td>
<td>Demonstrates respect for self by asking for help and helping others in various physical activities. (S5.M6.8)</td>
</tr>
<tr>
<td>Standard 4</td>
<td>Grade 6</td>
<td>Grade 7</td>
<td>Grade 8</td>
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<tr>
<td><strong>The physically literate individual exhibits responsible personal and social behavior that respects self and others.</strong></td>
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<tr>
<td><strong>S4.M1</strong></td>
<td><strong>Personal responsibility</strong></td>
<td>Exhibits personal responsibility by using appropriate etiquette, demonstrating respect for facilities and exhibiting safe behaviors. (S4.M1.6)</td>
<td>Exhibits responsible social behaviors by cooperating with classmates, demonstrating inclusive behaviors and supporting classmates. (S4.M1.7)</td>
<td>Accepts responsibility for improving one’s own levels of physical activity and fitness. (S4.M1.8)</td>
</tr>
<tr>
<td><strong>S4.M2</strong></td>
<td><strong>Accepting feedback</strong></td>
<td>Identifies and uses appropriate strategies to self-reinforce positive fitness behaviors, such as positive self-talk. (S4.M2.6)</td>
<td>Demonstrates both intrinsic and extrinsic motivation by selecting opportunities to participate in physical activity outside of class. (S4.M2.7)</td>
<td>Uses effective self-monitoring skills to incorporate opportunities for physical activity in and outside of school. (S4.M2.8)</td>
</tr>
<tr>
<td><strong>S4.M3</strong></td>
<td><strong>Working with others</strong></td>
<td>Demonstrates self-responsibility by implementing specific corrective feedback to improve performance. (S4.M3.6)</td>
<td>Provides corrective feedback to a peer, using teacher-generated guidelines, and incorporating appropriate tone and other communication skills. (S4.M3.7)</td>
<td>Provides encouragement and feedback to peers without prompting from the teacher. (S4.M3.8)</td>
</tr>
<tr>
<td><strong>S4.M4</strong></td>
<td><strong>Rules and etiquette</strong></td>
<td>Accepts differences among classmates in physical development, maturation and varying skill levels by providing encouragement and positive feedback. (S4.M4.6)</td>
<td>Demonstrates cooperation skills by establishing rules and guidelines for resolving conflicts. (S4.M4.7)</td>
<td>Responds appropriately to participants’ ethical and unethical behavior during physical activity by using rules and guidelines for resolving conflicts. (S4.M4.8)</td>
</tr>
<tr>
<td><strong>S4.M5</strong></td>
<td><strong>Working with others</strong></td>
<td>Cooperates with a small group of classmates during adventure activities, game play or team-building activities. (S4.M5.6)</td>
<td>Problem-solves with a small group of classmates during adventure activities, small-group initiatives or game play. (S4.M5.7)</td>
<td>Cooperates with multiple classmates on problem-solving initiatives including adventure activities, large-group initiatives and game play. (S4.M5.8)</td>
</tr>
<tr>
<td><strong>S4.M6</strong></td>
<td><strong>Safety</strong></td>
<td>Identifies the rules and etiquette for physical activities, games and dance activities. (S4.M6.6)</td>
<td>Demonstrates knowledge of rules and etiquette by self-officiating modified physical activities and games or by following parameters to create or modify a dance. (S4.M6.7)</td>
<td>Applies rules and etiquette by acting as an official for modified physical activities and games and creating dance routines within a given set of parameters. (S4.M6.8)</td>
</tr>
<tr>
<td><strong>S4.M7</strong></td>
<td><strong>Personal responsibility</strong></td>
<td>Uses physical activity and fitness equipment appropriately and safely, with the teacher’s guidance. (S4.M7.6)</td>
<td>Independently uses physical activity and exercise equipment appropriately and safely. (S4.M7.7)</td>
<td>Independently uses physical activity and fitness equipment appropriately, and identifies specific safety concerns associated with the activity. (S4.M7.8)</td>
</tr>
<tr>
<td>Standard 2</td>
<td>Level 1</td>
<td>Level 2</td>
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<td><strong>The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.</strong></td>
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<tr>
<td><em>S2.H1</em></td>
<td>Applies the terminology associated with exercise and participation in selected individual-performance activities, dance, net/wall games, target games, aquatics and/or outdoor pursuits appropriately. (S2.H1.L1)</td>
<td>Identifies and discusses the historical and cultural roles of games, sports and dance in a society. (S2.H1.L2)</td>
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<tr>
<td>Movement concepts, principles and knowledge</td>
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<tr>
<td><em>S2.H2</em></td>
<td>Uses movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a selected skill. (S2.H2.L1)</td>
<td>Describes the speed vs. accuracy trade-off in throwing and striking skills. (S2.H2.L2)</td>
<td></td>
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<tr>
<td><em>S2.H4</em></td>
<td>Identifies examples of social and technical dance forms. (S2.H4.L1)</td>
<td>Compares similarities and differences in various dance forms. (S2.H4.L2)</td>
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<tr>
<td><em>S2.H5</em></td>
<td>Uses strategies and tactics effectively during game play in net/wall and/or target games. (S2.H5.L1)</td>
<td>Applies strategies and tactics when analyzing errors in game play in net/wall and/or target games. (S2.H5.L2)</td>
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</tbody>
</table>
### Evidence 1

**Daily participation in gym/outside activities.**

**Daily participation in fitness center workouts.**

**Muscle Assessment**

**Training logs.**

**Nutrition Log**

**Daily Observations**

### Evidence 2

**Daily participation in gym/outside activities.**

**Daily participation in fitness center workouts.**

**Daily Observations**

**Heart Rate Monitors**
### Foundations of Fitness

<table>
<thead>
<tr>
<th>Action</th>
<th>Evidence 1</th>
<th>Evidence 2</th>
<th>Evidence 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>activity specific movement skills in 2 or more lifetime activities (outdoor specialized skills, in health-related fitness activities. selected individual-performance activities, net games, and or other skill.</td>
<td>activities</td>
<td>activities</td>
<td>activities</td>
</tr>
<tr>
<td>S3 H1: Discuss the benefits of a physically active lifestyle. machines and free weights. development (e.g., strength, endurance, range of motion). personal fitness plan.</td>
<td>workouts.</td>
<td>workouts.</td>
<td>workouts.</td>
</tr>
<tr>
<td>S3 H5: Designs and implements a fitness program. activity, and exercise (e.g. injury prevention, proper alignment, (e.g. Heart rate monitors, nutritional apps/software).</td>
<td>Heart Rate Monitors</td>
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<tr>
<td>Training Logs</td>
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<td>Heart Rate Monitors</td>
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</table>
SINGLE LEG STABILITY SPLIT STANCE STRENGTH

PIVOTING

Shoulde, hips and toes are all level, chest is up, and back is strong.

Center of Gravity (COG) is shifted the desired direction which increases efficiency of movement on the pivot.

Weight is on the balls of the foot and hips are down and back to maintain balance.

The knees and lower legs are parallel and pushing in the same direction to turn effectively.

The torso is in neutral, ribs are zipped and tailbone is tucked. This creates a ball of pressure that protects the lumbar spine during movement.

The shoulders and hips are level which helps with stabilization of the lower body.

Head and eyes are looking through the torso and hips in shuffled direction.

Shoulder, hip and knee are all aligned at the end range of motion.

Stabilized foot and hip controlling rotational torque through the joint.

Solid foot-to-ground contact and ankle stability to provide foundation for the lower.

The torso rotates as a unit - the shoulders and hips are parallel and stacked.

The heel of the lead leg is planted in the ground to increase muscle activation.

The toes of the trail leg are tucked to create allow for strong ground contact and push off.

The trail leg’s knee aligns with the hip and shoulder creating a stack of centered joints.

Stabilized knee and hip controlling rotational torque through the joint.

Shoulder, hip and knee are all aligned at the end range of motion.
**TRIPLE EXTENSION**

The ANKLE, KNEE & HIP are fully extended to produce maximum force during the movement.

- The upper arm is at approximately 45 degrees to the torso, which limits stress on the shoulder joint.

**HORIZONTAL PULLING**

- The wrist is neutral and in line with the elbow which limits torque and enhances grip strength.
- The torso is engaged and the spine is neutral.

**ACCELERATION**

- The forearm and upper arm are at 90 degrees to each other. Arm action reciprocally drives leg action.
- The upper arm is at approximately 90 degrees to the torso, ensuring explosive power output.
- The upper body angle allows the body to pull explosively in the desired direction.
- Toes pulled up engaging the ball of the foot – ensuring explosive ground contact on each stride.
References


