Rigor & Vigor: Cognitive Rigor in High MVPA PE
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Let’s define Cognitive Rigor:

True rigor is creating an environment in which each student is expected to learn at high levels, each student is supported so he or she can learn at high levels, and each student demonstrates learning at high levels.

Two keys to this type of teaching and planning:

1) Depth of Knowledge
2) Backward Design
Depth of Knowledge (DOK) is:

A tool used to categorize tasks according to the complexity of thinking required to successfully complete them.
Depth of Knowledge (DOK) is:

There are 4 DOK Levels:

1) Recall & Reproduction
2) Skills & Concepts
3) Strategic Thinking
4) Extended Thinking
Backwards Design is:
Planning that begins with learning outcomes/targets.

- What do students need to know?
- How do we get them there?
Backwards Design is:

Each lesson/activity aligns to TEKS / Outcomes using:

• Student Targets
• Instructional Content
• Formative/Summative Assessments
What does this look like in the real world?

Let’s figure it out!

When I say “GO” move into the activity area, find a partner and a spot, and then get back-to-back with a ball in between you. Make a basketball sandwich!
STUDENT TARGETS

By the end of today’s lesson I will...

• Dribble throughout the activity area changing both direction and speed.

• Actively engage in each activity in order to improve my skill and improve my fitness.

• Complement my partner 2X with specific positive feedback on her/his performance.
Dribble Triathlon

Partners take turns completing the 3 events that make up the Dribble Triathlon.

- 33 Right-Hand Dribbles (P1 then P2)
- 33 Left-Hand Dribbles (P1 then P2)
- 33 Crossover Dribbles (P1 then P2)

CUES: Finger Tips, Waist High, Eyes Up
Driver’s Test

• Take turns dribbling and grading each other’s driver’s tests.

• To pass the test, dribble throughout the area, keeping control of your ball.

• 1 player dribbles, the other grades the test. Watch for our 3 cues:
  Fingertips, Waist High, Eyes Up
Follow the Leader

• On the start signal, one partner (walking without a ball) will lead a partner (dribbling a ball) throughout the activity area.

• On the stop signal, both partners will freeze. A point is scored if partners are close enough to give a knuckle bump.
Knuckle Collectors

- You have 1 minute to collect as many knuckle bumps as you can.
- 1 partner will stay on the spot to give knuckle bumps. The other will dribble throughout the area to collect knuckle bumps.
- After 1-minute, we’ll switch. Remember your score!
Knuckle Collectors

• What’s the knuckle sum of partner 1 & partner 2?

• Find another pair. What’s the sum of pair 1 & pair 2?

• Find another group. What’s the sum of group 1 & group 2?
Knuckle Collectors

Use the four operations with whole numbers to solve problems.

CCSS.MATH.CONTENT.4.OA.A.3: Solve multistep word problems posed with whole numbers and having whole-number answers.
Let’s debrief dribbling!

• DOK 1: Can you remember the cues for dribbling? (Recall)

• DOK 2: How would you summarize the skills and concepts you used in the activity Knuckle Collectors? (Skills & Concepts)
Passing Triathlon
Partners take turns completing the 3 events that make up the Dribble Triathlon.

• 10 Chest Passes
• 10 Bounce Passes
• 20 Alternating Passes (Chest/Bounce)

Look 4 hands, Step & Push, Thumbs Down
Passing Lane Points

• You have 1 minute to make as many bounce passes as you can.

• 1 partner will stay on the spot to receive passes. The other will dribble throughout area to collect passes.

• After 1-minute, we’ll switch. Remember your score!
Let’s debrief dribbling!

• DOK 2: Talk with your partner about 2 positive things that she/he did in today’s lesson on dribbling and passing. Give specific examples. (Skills & Concepts)
Let’s debrief dribbling!

• DOK 3: What nonverbal communication cues are used when passing? Can you predict the outcome of the partner passing challenges if a pair does not have good nonverbal communication? (Strategic Thinking)
Let’s debrief dribbling!

• DOK 3: Talk with your partner. Come up with an interpretation of the saying: “Students of the Game”? Support your answer with specific examples and/or details.
Let’s debrief dribbling!

• DOK 4: Using vocabulary specific to basketball, as well as your understanding of the skills and movement concepts used in the lesson, create a short inspirational “pep talk” that you could give to your partner to motivate them to practice and improve their skills.
Did we work toward the outcomes?

- S1 E26.4 Combines traveling with the manipulative skill of dribbling, throwing, and catching in teacher designed small-sided practice environments.
- S2 E1.4a Applies the concept of open space to combination skills involving traveling and dribbling.
- S2 E1.4c Dribbles in general space with changes in direction and speed.
- S3 E2.4 Actively engages in the activities of physical education class, both teacher-directed and independent.
- S4.E4.4 Praises the movement performance of others both more- and less-skilled.
Did we work toward the TEKS?

• **(1K) Movement.** Students demonstrate key elements in manipulative skills such as hand dribble.

• **(2B) Movement.** The students identify ways movement concepts such as time, space, effort, and relationships can be used to refine movement skills;

• **(5D) Physical activity and health.** The students identify potential risks associated with physical activities.

• **(6B) Social development.** The students analyze potential risks associated with unsafe movement and improper use of equipment.

• **(7D) Social development.** The students demonstrate effective communication, consideration and respect for the feelings of others during physical activities such as encourage others, allow others equal turns, and invite others to participate.
Did we work toward the outcomes?

Operations and Algebraic Thinking

- *Use the four operations with whole numbers to solve problems.*
- CCSS.MATH.CONTENT.4.OA.A.3: Solve multistep word problems posed with whole numbers and having whole-number answers.

Speaking and Listening

- CCSS.ELA-LITERACY.SL.4.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
What do you think?

Do we have time for questions / discussion?

Maybe / maybe not!
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QR CODE for the Free Conference Session Handout