



Improving Teaching with Strong Content Knowledge

Phillip Ward & Harry Lehwald



THE OHIO STATE UNIVERSITY



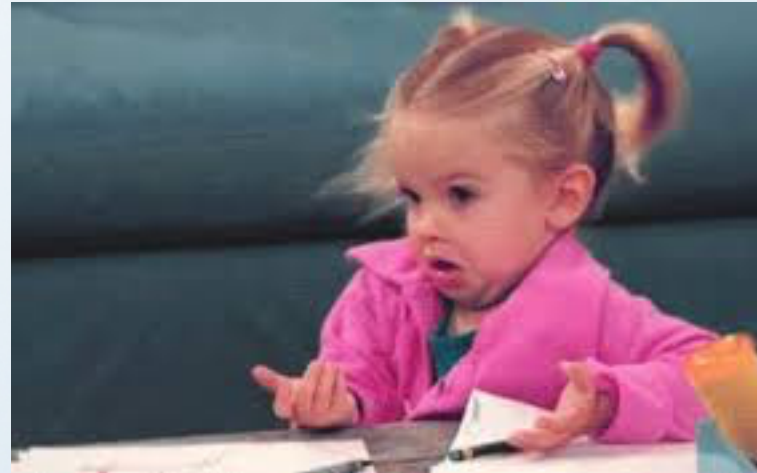
The Ohio Association for Health,
Physical Education, Recreation, and Dance

Let's start with some tasks:

- Select a sport or content area you know very well. Describe in note form a sequence of teaching progressions to teach a skill or tactic.
- Select a sport you know least. Describe in note form a sequence of teaching progressions to teach a skill or tactic.
- Describe in note form a sequence of teaching progressions to teach handballing in Australian Rules football.



What are the lessons to learn here?



Thinking about the content to teach

Concept 1:
Instructional tasks
= the curriculum to be taught

What's in a name?

Drills

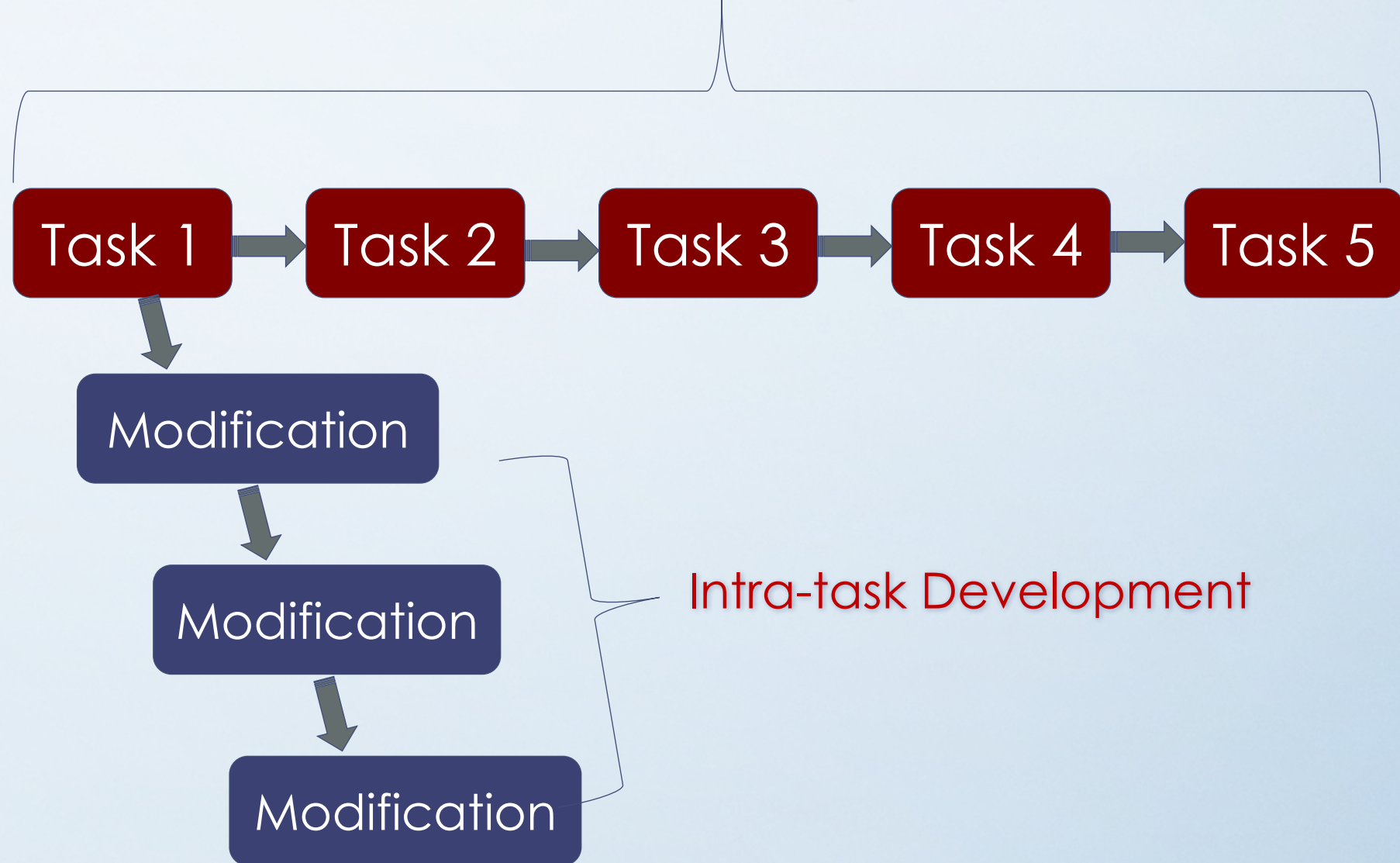
Instructional tasks

Activities

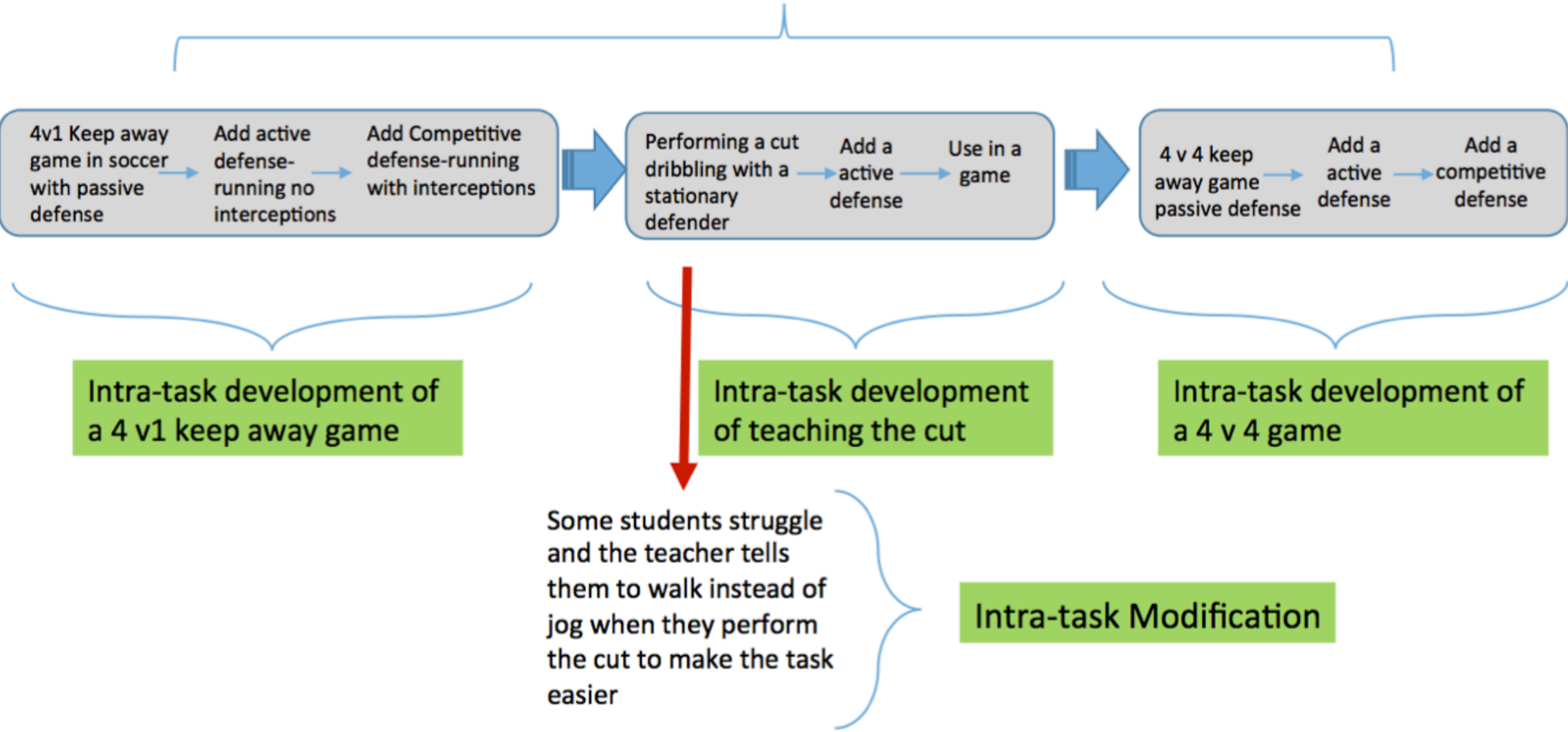
Teaching Progressions

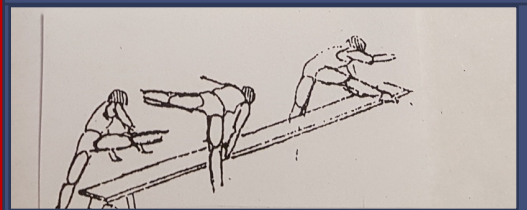
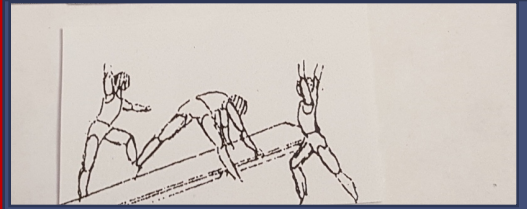
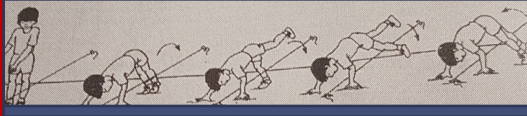
Viewing Teaching as inter & intra task development

Inter-task Development



Inter-task Development task development within a lesson





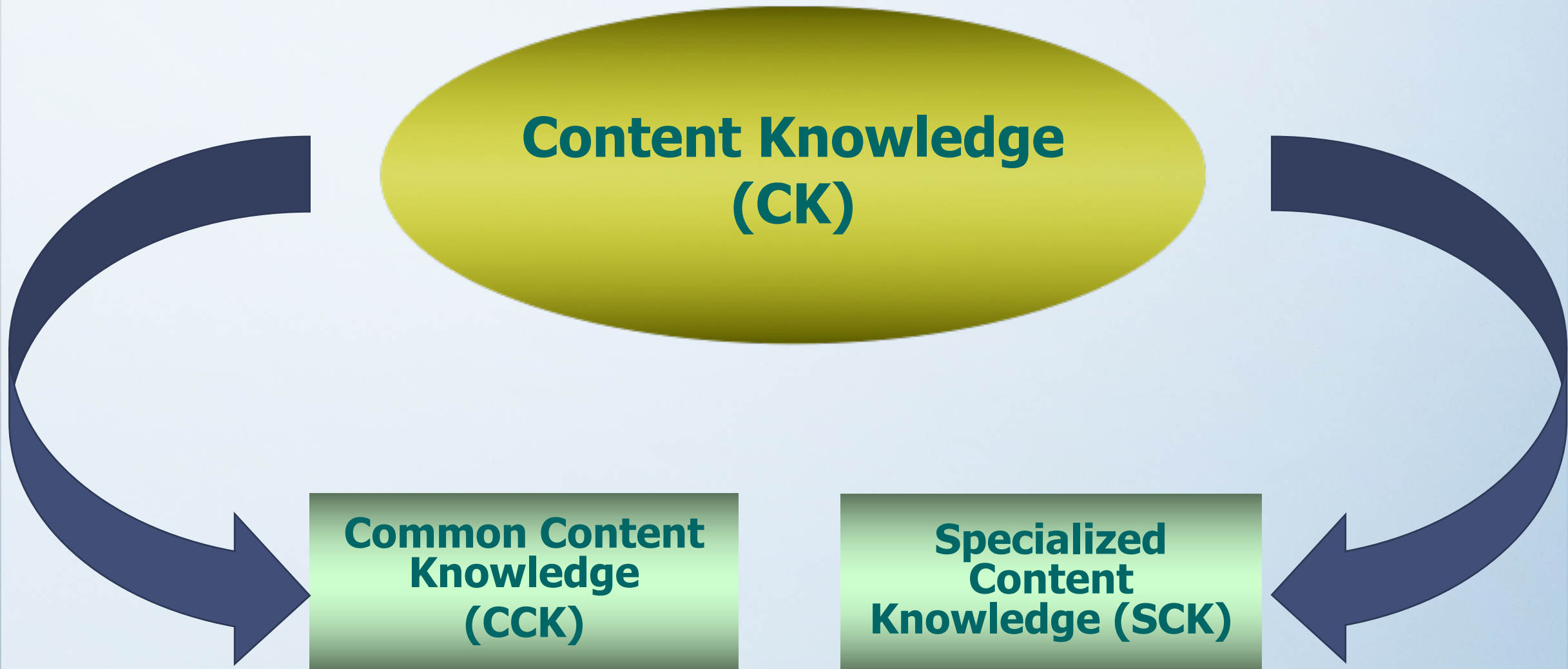
Thinking about the content to teach

Concept 2: Two Kinds of Content

You know one well ... not sure about the other?

Some tasks

- Describe the technique of the sit up.
- List a sequence to learn the sit up starting with a simple abdominal exercise like chin to chest and finishing with a rather challenging one like an inclined sit up with your head below your feet!
- Which task progressions would you exclude if you were teaching 8th graders who were quite fit?
- Which task progressions would you exclude if you were teaching 1st graders who may not have performed a sit up before?



Ball, Thames & Phelps (2008)

CCK

SCK

Rules & Etiquette

Technique & Tactics

Error Detection

Tasks &
Representations



Fitness Exercise Content Knowledge

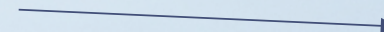
Common Content Knowledge

Lie on your back on the floor, bend your knees 90 degrees, and plant your feet flat. Tuck your chin slightly toward your chest.....

Specialized Content Knowledge



Pedagogical Content Knowledge



A Mid-Presentation Quiz:

Which of these influence deeper SCK?

- **Educational background – degree**
- **Age**
- **School- elementary, middle school or high school**
- **Gender**
- **Teaching rank young, mid-career late career**
- **Years playing or performing the content**
- **Number of content lessons taught per year**
- **Years of teaching**
- **Years of teaching the content**
- **Number of professional development workshops on the content**

A Mid-Presentation Quiz:

Which of these influence deeper SCK?

- **Educational background – degree**
- **Age**
- **School- elementary, middle school or high school**
- **Gender**
- **Teaching rank young, mid-career late career**
- **Years playing or performing the content**
- **Number of content lessons taught per year**
- **Years of teaching**
- **Years of teaching the content**
- **Number of professional development workshops on the content**

What does impact SCK?

Reflection and Tinkering

What do you need to know to teach content well?



Deep Understanding of Content:

- Lets return to our first exercise today and I want you to look at the sequence of content you know well.
- For each task progression just make a quick note of the technique –it might be the same for all tasks.
- Next for each task describe the 1-2 common errors
- Choose 4 error make a note of how you might correct

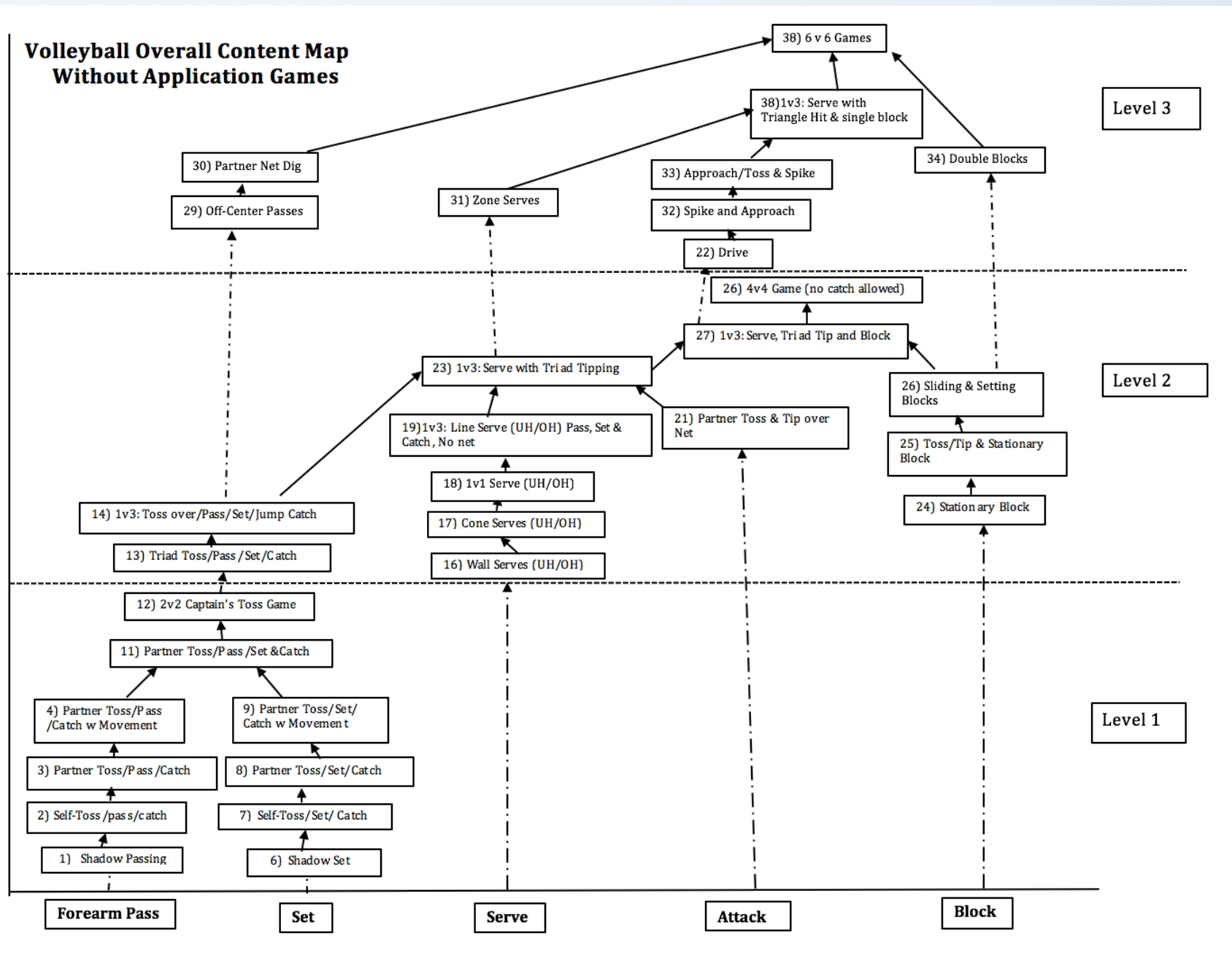
Ways of representing the content to be taught

- Scope and Sequence
- Block Plans
- Content Maps

Content Maps....

- Taking you sequence and making connections

Volleyball Level Content Map



Task Sheets

Each task has an individual task sheet that includes the following:

1. Purpose of Task as Related to Aspects of Skilled Performance
 - Technique, Tactics, Agility, Fair Play, & Communication
2. Task Description – how to perform the task, rotations (when needed), Extensions, and Motivational suggestions.
3. Equipment needed
4. Teaching points: Cues/Critical Elements
5. Common Errors: Their Causes and Correction
6. Some tasks will include an illustration of either a task or technique

Task Sheet Example

Task 3: Partner Toss, Pass & Catch

Purpose of Task as Related to Aspects of Skilled Performance

- > Tactic: The ball is passed towards another student to begin the return.
- > Fair Play: Partner tosses ball in a manner that allows passer to pass the ball.
- > Communication: Saying “Mine” to indicate possession as the ball comes.

Task Description

With a ball, students are paired up with one ball per pair. One student gently tosses the ball to the other student who calls out, “Mine” and then forearm passes the ball back to the tosser. The tosser catches the ball and repeats the action. After a determined number of times, have students switch roles. *Extension 1* - when control is evident, have the tosser toss the ball short (so if the ball is missed it would hit the passer’s feet) causing the passer to step forward one step to forearm pass the ball, *Extension 2* - increase the number of passes (2, 3 etc.) between partners before the catch.

Equipment Needed

1 ball per pair

Teaching Points: Critical Elements/Cues

Technique

- See teaching points for forearm passing tasks 1 & 2.

Tactic:

- Contact the ball lower in the arc to direct the flight to the target; *Cue*, “Low contact”.

Communication:

- Student receiving the toss needs to call out “mine” to indicate that they will contact the ball; *Cue*, “Call for it”.

Common Errors: Their Causes and Correction

- Ball angles to the side after contact; *Cause 1*: Arms not even; *Correction Cue 1*: Remind students to make a platform with their arms; *Cause 2*: Toss is to the side; *Correction task 2*: Move the tosser closer to the passer.
- Ball does not go directly to the tosser; *Cause*: Passer’s shoulders are not pointed towards the tosser; *Correction task*: Make sure the passer begins by facing the tosser before the toss is made.
- Passer doesn’t get under the ball; *Cause*: Passer’s knees aren’t bent; *Correction cue*: “Bend knees”.
 - Toss is inaccurate; *Cause*: Toss is too far away or ball is tossed too high or low; *Correction task*: Have the tosser move closer to the passer.
 - Forgets to call, “Mine”; *Cause*: They get excited and are concentrating on the contact; *Correction cue*: Have the tosser remind the passer each time the passer fails to call “Mine”.

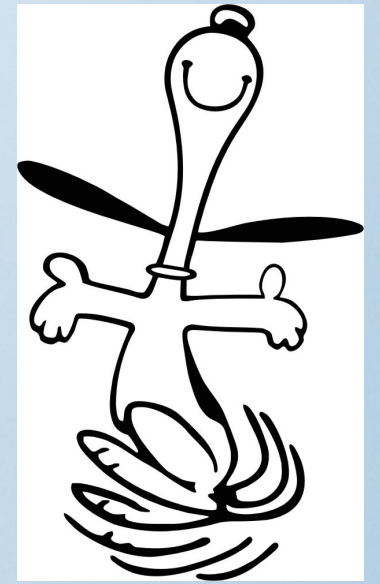
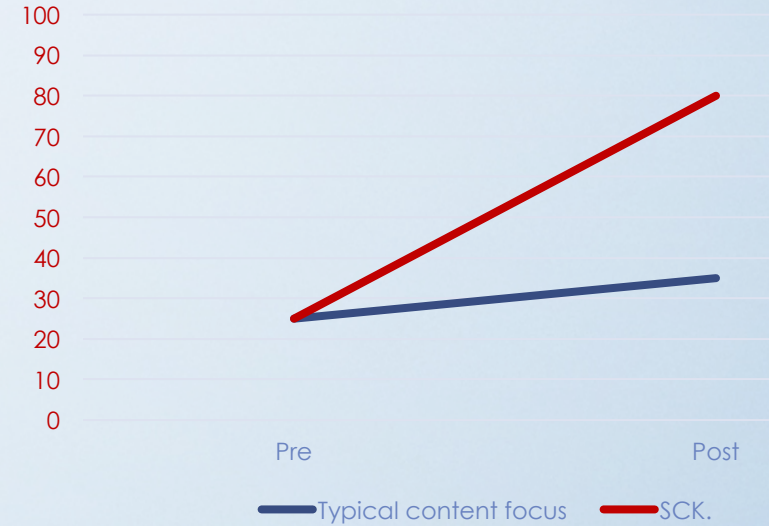
Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10
Warm up	Warm up	Warm up	Warm up	Warm up
Introductory Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Introductory Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Introductory Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Introductory Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Introductory Application Game: <ul style="list-style-type: none"> Partner Game Task 66
Content Development <ul style="list-style-type: none"> 36) Straight FH OH Clear Rally 37) Straight BH OH Clear Rally 38) Alternating Str FH/BH OH Clear Rally 	Content Development <ul style="list-style-type: none"> 39) Crossover FH OH Clear Rally 40) Crossover BH OH Clear Rally 41) Crossover FH/BH OH Clear Rally 	Content Development <ul style="list-style-type: none"> 42) Alternating Straight/Cross FH OH Clear Rally 43) Alternating Straight/Cross BH OH Clear Rally 44) Alternating Straight/Crossover OH Clear Rally 	Content Development <ul style="list-style-type: none"> 45) Target Low Serve & FH UH Drop Return 46) Target Low Serve & BH UH Drop Return 47) UH Drop Rally 	Content Development <ul style="list-style-type: none"> 48) Target High Serve & FH OH Drop Return 49) Target High Serve & BH OH Drop Return 50) High Serve FH/BH OH Drop Rally
Closing Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Closing Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Closing Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Closing Application Game: <ul style="list-style-type: none"> Partner Game Task 66 	Closing Application Games: <ul style="list-style-type: none"> Partner Game Task 66

Some realities

- In China physical education teachers are trained in two content specializations.
- In the USA the average physical education teacher needs to know at least 15 different content areas.
- But so do elementary school classroom teachers!
- To get good at teaching a content area **you need to spend a lot of time teaching the same thing**
 - To understand how to present it to students
 - To understand what students understand and don't understand about the what you are teaching.

Teaching in depth leads to:

- Student competency 30th to 80th percentile gain
- Student engagement
- High MVPA
- And when tied to curricular models like Sport Education -JOY





Thank you

Email: Ward.116@osu.edu

Web Site: u.osu.edu/ltpc

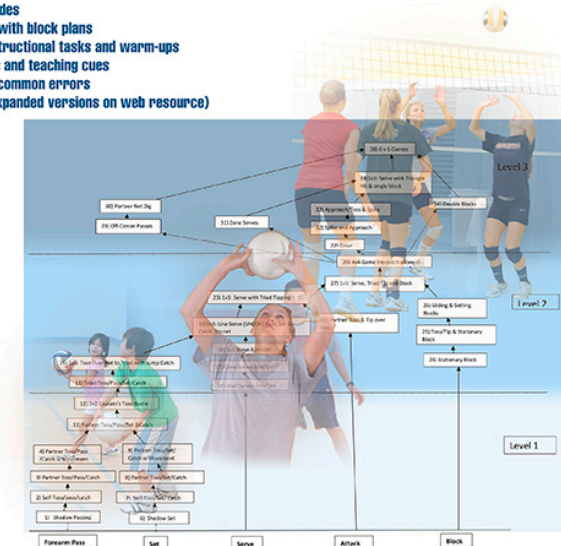
Book:

Effective Physical Education Content and Instruction

An Evidence-Based and Teacher-Tested Approach

Includes

- Sequential units with block plans
- Ready-to-use instructional tasks and warm-ups
- Critical elements and teaching cues
- Corrections for common errors
- Content maps (expanded versions on web resource)



Phillip Ward
Harry Lehwald

