Overhand Throw Progression

Adapted from developmental motor skill rubrics created in collaboration by Farmington Public Schools (MI) and Bowling Green State University

1. Level One- "No Turn"



- a. Trunk Position- Front-facing
- b. Trunk Action- No turn
- c. Elbow overtakes Shoulder quickly

Decision Rule: Does the trunk remain in a front-facing position throughout the throw? If yes, Level One. If no, go to Level Two

2. Level Two - "Block Rotate"



- a. Split-stance opposite Foot ahead
- b. Trunk Position- Side to the target
- c. Some weight on the rear leg
- d. Trunk Action- Waist (Hip), trunk, and shoulders move together
- e. Weight transfers to front Leg
- f. Arm Position- Elbow leads forward throwing motion

Decision Rule: Does elbow lead arm as trunk rotates to front-facing? If yes, Level Two, If no, go to Level Three

3. Level Three- "Short Arm"



- a. Split stance opposite Foot ahead.
- b. Trunk Position- Side to the target
- c. Weight over the rear leg
- d. Trunk Action- Waist (Hip), trunk and shoulders move in order

- e. Weight transfers to front Leg
- f. Brace non-throwing side
- g. Arm Action- Shoulder and Elbow forwards together; Elbow leads Hand forward

Decision Rule: Is backswing upward to flexed elbow position? If yes, Level Three, If no, go Level Four

4. Level Four- "Long Arm"



- a. Split Stance Opposite Foot ahead
- b. Trunk Position- Side to the target
- c. Weight over rear Leg
- d. Trunk Action- Waist (Hip), trunk, and shoulders move in order
- e. Weight transfers to front Leg
- f. Brace non-throwing side
- g. Arm Action- Shoulder leads Elbow leads Hand

Decision Rule: Is backswing in downward circular motion? If yes, Level Four

How to Progress

The key is to use a variety of learning opportunities from explicit through to implicit. Obviously, the more instruction is offered in the early stages the fewer errors should be seen. Having fewer errors in the early stages aids learning but if this type of 'paint-by-numbers' approach is the only one used then learning can be limited. In the preceding illustrations, the teacher used a simple progression that kept the issue at a 'solving the puzzle' level rather than a robotic, explicit level.

The students were given a variety of balls to throw that were big enough to fit into their hands for a single-arm, overhead throwing action. A horizontal line was put on a wall at about 8 feet in height (about 2 x standing height for the average student's height). The instruction was to do a standing throw from the green line that was about 8 feet from the wall and aim the ball to hit the wall above the line.

Most students executed the Level 1 movement pattern which, generally, was all they needed to do to hit the wall above the line. Some of the less robust students needed more than one attempt to get the ball above the line.

How, then, to elicit a different throwing movement pattern that would get the students to use their Hips, Trunk and Shoulder more effectively in the throwing action?

Easy solution was to simply walk the students back an extra 10 feet from the wall and get them to repeat the challenge of getting the ball above the line. Now the patience comes into play. With no further instruction, the students had to make changes in stance and in action to solve the puzzle. If a student found a positive answer (e.g. they displayed actions and postures at the next level of the progression described previously) the teacher would ask them to demonstrate to the rest of the class. Students have really good observational and 'copying' skills in these pre-puberty years.

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