

## **Skill Development, Part II - Practice Drills**

For years I have pondered this game methodically using my training in exercise science and biomechanical analysis to advance its instruction and research. As far as I know, there has yet to be any real study of our sport from either an ergonomic or mechanical perspective. In fact, very little physics related literature has been produced as well. What there is available, I have stored in my bowling library. Though I have obtained pieces of literature from the 1950's when there was a push to study women and bowling, several dissertations and thesis, to date the true scientific study of our sport remains unscathed.

I would like to think my research in the areas of bowler-athlete development are ground breaking paving a path to many future endeavors for myself and others. Whether or not this is the case, I cannot say. What I can tell you is that I have developed several practice drills and skill enhancement methods that I use with my students and even collegiate players. Based on scientific principle and physical education methodology these drills and practice techniques are useful to coaches working with students at most all levels. This month I wish to provide two practice drills geared toward improving our targeting and playing of the various lines of the lane.

### **Seeing is Believing**

How hard is it to play a line on the lane that is invisible? Very hard. Now try to teach that same invisible line to a student. Very very hard. What if the student is slightly visually impaired or cross-dominant? Very very very hard. One practice habit that works for me is to physically draw a line on the lane for both myself and the student to see. I don't mean literally drawing a line with a marker or some other form of substance, though I have thought about snapping a fluorescent chalk line on the lane for instructional purposes. A line or pathway can be outlined using long towels or clothe. I had a seamstress sew three 10' towels together to make a 30' towel. I use the towel to mark off a portion of the lane that the bowler should either be inside or outside while bowling. For example: lay the towel on the lane stretching down the fifth board from the foul line to as far as possible. Challenge your students to play down the first four boards without hitting the towel. You can even create a reward system if they throw a certain number of shots in a row without touching the towel.

To further the drill, string two separate strips of towels together on the lane, about 5 boards wide, to form a pathway or road when teaching different lines. Start from the foul line and lay a path for the bowler to practice within. As the bowler gets better at playing that line, decrease the number of boards between the towels so the line tightens up. Take away the area and see who can play what line. Challenge your bowlers by varying the pathways. It's a great way to actually see the line we are trying to teach. It's also great visualization to see a path and be able to align the body and arm swing on and through that path.

### **To Target or Not to Target**

Teaching targeting is another tough skill we have yet to really scathe the surface. Targeting has been taught in many different manners from using dots, arrow, boards, drawing imaginary lines and pathways to watching the foul line or even the pins. Training the eyes is a skill that may at first seem to be what many term as part of the "mental game," but more appropriately is a physical skill. Hand eye coordination is both hereditary and germinated through proper training.

Last season I found myself looking away from my target during the release. Aggravated and encouraged, I stumbled upon an opportunity to create a drill to target more effectively. My biggest objective was to train my body, mind, and eyes to lock on to a target of my choice and stay affixed until ball rolled well beyond it.

I took a king size bed sheet (black) and draped it over a man-made piece of tubing that I secured in the air across a lane. I set the stems of the unit into the gutter of the adjacent lanes and the unit was raised about 5 feet in height. I set the black sheet about 12 inches off the ground so the ball could safely pass under it without touching it. A solid black wall or barrier is what I created. The sheet or wall could then be placed anywhere up or down the lane wherever I was to target. By practicing with this black wall at my target it forced me to focus on the spot I was using and it easily identified when I looked away, I would see solid black.

Move the wall up or down the lane and have you students practice targeting at different lengths. Challenge your students to watch the ball roll through the target before moving their eyes. Staying affixed to a target will enable our students to develop greater balance in the finish position, greater reliance in their arm swing, and greater confidence in their accuracy. Some say accuracy is king in our sport. If that's the case, let us develop greater accuracy with our students.

Seeing both the line you are trying to play and focusing on that target while your body approaches and rolls the ball are both difficult and insecure tasks. We should try many different methods to develop our skill and using the towels to lay out a path and a black wall to focus our sighting will enable our students to develop the necessary skills they seek. I suggest trying both during the same practice session and see if you find them as challenging and satisfying as I. If you have drills or practice habits you use regularly with your student, please share them with me so that I can add them to my collection.