Article # 3 SKILL ACQUISITION

In previous talks, you may remember references to the book and Youtube video "The Talent Code". The author, Daniel Coyle, believes that a major factor in accomplishing world-class ability is (obviously) consistent, deliberate practice done with near-perfect technique. This results in your body's production of "myelin", a substance that wraps around your nerve endings. Myelin acts as an insulator around nerve endings to make the signals to your muscles faster and more accurate. Think of the grip on a Field Hockey stick, or electrical tape around a wire. The more you practice, the more myelin that is deposited around your nerve endings, the stronger the signal to your muscles, and the better you become. An athlete like Tiger Woods or a musician like Yo-Yo Ma is LOADED with myelin from years of practice.

Through your "Homework" WCU would like you to increase your myelin production and become a better athlete. The process begins with "visualization". Slowly, and without a ball, practice a dazzling stick-handling move followed by the perfect shot. After you see yourself beating your defender and placing your shot exactly where you want it, do it again with a ball. Later, after dozens of visualized and slow-motion moves, "do it right, then do it fast". You are "imprinting" the skill in your muscle memory, so you can call upon it later when needed. Then do it again, and again, and again. When you are completely proficient at a skill, and want to be "supersonic", the final phase is called "Overspeed". You do a motion in practice faster than you ever would in a game. Examples of overspeed training are: stickhandling a golf ball, sprinting downhill on a slight decline, assisted sprinting being pulled by a bungee cord, peddling a stationary bike with the chain removed, hitting a boxing speed bag, etc. if you can handle these moves in hyperdrive, game speed is easy.

The two approaches to improving athleticism and skill acquisition involve Generalization and Specificity. To generally improve your athleticism- crosstrain. Play anything that will help you. For stickwork: Ice Hockey, Golf, Softball, Tennis, Lacrosse, etc. For general eye/hand coordination: Basketball, Volleyball, Handball, Juggling, etc. For footwork: dance, gymnastics, agility ladders, or any running game. Also consider doing more activities with your off-hand. If you are right handed try these activities with your left: brush your teeth, open doors, carry books, eat food, etc. Under parental supervision ONLY, try chopping wood or swinging a sledgehammer! If you have access to a boxing workout, a speed bag and a heavy bag are amazing tools. Which brings me to a boxer's most prized possession- the jump rope. Every athlete on the planet should devote practice time to jumping rope. You derive so much benefit from this one activity, it's unbelievable. You get eye/hand coordination, wrist strength, rhythm, foot agility, quickness, stamina, skill, and lower-leg plyometrics all from jumping rope. You are missing out on an amazing opportunity to improve your athleticism if you don't jump rope. It should be part of every athlete's skill training.

The second approach to Skill acquisition involves Specificity. Specificity means to exactly duplicate a movement under the same conditions as the skill desired. Use the exact playing surface, exact stick, etc., with no extra weights, ropes, tracks etc. For example, if you want to be a better stickhandler for Indoor FH, use the correct ball, exact stick, correct floor surface, right shoes, etc. Everyone has different theories on how many repetitions it takes to become proficient at a specific skill, but suffice it to say it's many thousands of reps to imprint a skill in your brain, and to acquire enough myelin to do it well.

Before you attempt any skill, get the “cobwebs” out of your muscles by doing a dynamic warm-up. Move the involved body parts briskly to wake them up, raise their temperature, pump extra blood into the fibers and to signal them it’s time for work. Do your skill work at the beginning of an exercise session while you are still fresh and alert. As soon as you fatigue, rest or stop entirely since you do not want your technique to suffer. When you are tired, your technique gets sloppy, you start to overcompensate with the wrong body parts, and imprint the wrong movement. Do not confuse skills with conditioning, when you are tired, take a slight break.

The moral of the story is practice, practice, practice. Combine the exact skills needed to play your sport, with the general athletic benefits from cross-training, to become the best athlete you can be.

Next: Article #4 the Synergy of Music, Rhythm, and Field Hockey!