Pitch Recognition Training Pays Off For Redhawks

Editor's Note: In the March 12 edition of *Collegiate Baseball*, we reported on an innovative pitch recognition training program at Southeast Missouri State prior to the 2014 baseball season. This is the what transpired during the 2014 season.)

CAPE GIRARDEAU, Mo. — After being picked sixth in the conference pre-season poll, Southeast Missouri State University won the 2014 Ohio Valley Conference by five games as Head Coach Steve Beiser earned Coach Of The Year honors.

Matt Tellor won Player of The Year in the Ohio Valley.

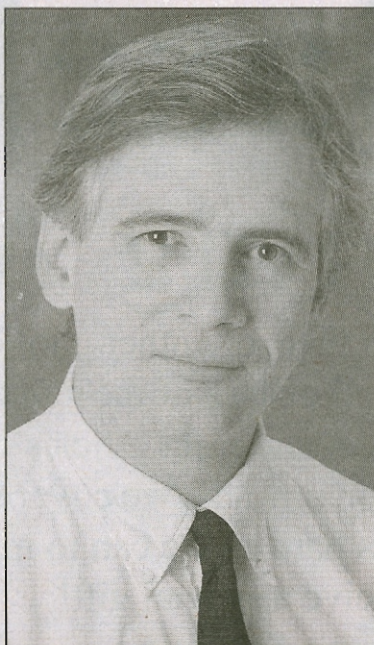One of the big reasons for the accolades was more run production.

SEMO scored almost two runs-per-game more in conference play in 2014 than in 2013 and was at or near the top of the league in batting average, on-base percentage, slugging percentage, and walk-to-strikeout ratio.

Much of SEMO's improvement resulted from 2014 being the coaching staff's second season with the team and the message being clear.

"There was a lot of buy-in," says Beiser.

"We had several returning players who really embraced our approach. Which is good at-bats. Disciplined, productive, professional at-bats."

Beiser adds, "The pitch recognition program Coach Lawson put in showed them, 'Look, we're not just talking the talk. We can work on this. We've got a plan.'"

DR. PETER FADDE

In fall/winter practice before the 2014 season, SEMO hitting coach Dillon Lawson had collaborated with Dr. Peter Fadde, an instructional technology professor at Southern Illinois University, to design and install a pitch recognition training program that combined players' self-study using a computer pitch recognition program with batting cage drills that used the same principles.

The key scientific principle was *occlusion*, or cutting off the batter's view shortly after release of a pitch.

On the computer, players watched batter's point-of-view video of pitchers delivering pitches.

The video cut to black, first with about a third of ball flight shown, and players guessed the type or location of the pitch.

As players improved their scores, the video was cut off sooner until it cut to black immediately after release of the pitch.

The computer kept players' scores and progressed them to higher levels like a video game.

Occlusion Secret

In the meantime, Coach Lawson and Dr. Fadde developed a set of live batting cage and bullpen stand-in drills that also used the occlusion method.
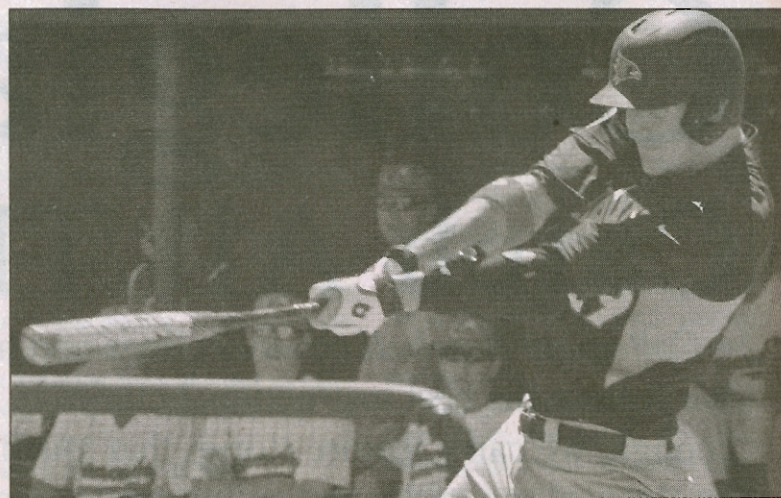
"Occlusion is the secret sauce," says Dr. Fadde.

"No matter how hard a batter works, his eyes are lazy. If you let them see the ball, they'll track it. It's survival instinct. Something hard and fast coming at you, you'll track it. So by taking away the ball flight, you force the hitter's eyes to focus on release and pre-release cues."

Lawson created a Net Occlusion drill in which he, or a teammate, threw a pitch into a net strung across the batting tunnel.

The net was about 10 feet in front of the "pitcher" and the batter was another 30 feet away. If the batter recognized fastball, he'd call out "fastball" and hit the ball off the tee.

If the pitcher threw a breaking ball or changeup, the batter called the pitch and didn't swing.

"But that's where we made it interesting," says Lawson. "We tape a line across the net, a little above my release point. If they see fastball below the line, swing. If they see breaking ball above the line, swing. But fastball above the line or breaking ball below the line, no swing."

SEMO's Matt Tellor won Player of The Year in Ohio Valley.

The other go-to pitch recognition drill was Bullpen Stand-In. While batters have been standing in since Little League, this drill was different. Batters needed to call the pitch *before* the ball hit the catcher's mitt.

"Otherwise it's a tracking drill," says Dr. Fadde.

"By making them call out loud before the ball hits the mitt, the batter has to decide very shortly after release. I call it *attention occlusion*. It's the same principle as the computer. You cut off ball flight to make their eyes pick up release cues."

Occlusion Science + Batting Drills = Inside Mechanism

Going into the pitch recognition training project, Lawson and Fadde had two goals: Keep it true to the science and make it fit into regular practice routines.

"It's non-invasive training," says Lawson. "We were in their heads and they didn't even know it."

Use of the computer program, which was a beta-test version on loan from *Axon Sports*, ended after fall/winter practice, but the team continued to do Net Occlusion and Bullpen Stand-In drills throughout the regular season. "By then it was part of our routine," says Lawson. "Guys would have wondered if we didn't do it."

"It's great to see the bump in stats," says head coach Steve Beiser. "But to tell you the truth, we'd seen what we needed to see by the end to inter-squad games in the spring. And then through the season – mature, professional at-bats up and down the lineup."

"What I like most," says Lawson, "is that our best got better. Matt Tellor (10th round pick First-Year Draft, Atlanta Braves) cut down his strikeouts without giving up any power or aggressiveness. And he hit five more home runs off of breaking balls than during the 2013 season.