

Seeing is believing



Vizual Edge puts vision training in the crosshairs of diamond success

Story by Don Cameron

Ted Williams, perhaps the greatest baseball hitter who ever lived, was known to have unparalleled vision. Maybe you can't pick up the spin of seams on a 90-mile-per-hour fastball, but you can gain an edge on your opponents with a tool the Splendid Splinter never had access to.

The Vizual Edge Performance Trainer is a computer-based 3-D tool that improves a player's timing, visual perception and decision-making. "We call it weight training for the eyes, but you could say that it's performance training with a click of the mouse," said Dr. Barry Seiller, an ophthalmologist who founded the Visual Fitness Institute and pioneered the Vizual Edge software that softball programs across the globe are incorporating into their training programs.

"Vizual Edge's sports vision training increases the speed and accuracy of your responses on the playing field," said Vizual Edge performance specialist Kathy Puchalski. "Our new website provides a comprehensive and clear understanding of this technology with numerous explanatory videos. Successful clients/teams include softball, tennis, hockey, football, lacrosse, golf and many other sports including motor racing."

Vizual Edge evaluates, measures, then boosts the speed and efficiency of your eye movements, depth perception, recognition and tracking ability, as well as the reaction time and accuracy of your

responses. From Olympic bobsledders to pro baseball players to collegiate softball stars, athletes worldwide are recognizing the importance of visual training. Major League Baseball clients have included the Chicago Cubs, San Diego Padres, Milwaukee Brewers, Kansas City Royals, Houston Astros and Seattle Mariners. Athletes in the United States, Canada, Brazil, Australia and other countries are using the tool.

"We see benefits not only at the plate with pitch selection but benefits in the field too," said Bill Becker, head softball coach at Kishwaukee College in Illinois. "Players are getting a better jump on the ball off the bat, reacting quicker. They have better peripheral vision, which can help with cutoffs and directing traffic."

In addition to evaluating your visual alignment, there are four key exercises in the Vizual Edge arsenal:

Depth Perception: Depth perception is about your eyes working together to place objects accurately in space so you can catch it, hit, move it. One exercise asks users to view five circles and pick out which of the circles appears to float at a different level than the others.

Vizual Flexibility: Your eyes must move together simultaneously and efficiently for good hand-eye coordination. Vizual Edge gives you clinically designed exercises to build visual flexibility and coordination. One exercise asks users to locate a diamond shape at the top, bottom, left or right within the box.

Vizual Recognition: Athletes need

to remember and react instantly to what they see. One exercise displays arrows on the screen, pointing up, down, left or right, and the user must punch in the same directional pattern, using the computer arrow keys or a game controller.

Vizual Tracking: Most sports demand intense single-point focus and tracking. Training improves your tracking. One exercise shows the user an arrow randomly on the screen, and the user must indicate the direction the arrow is pointing. Varying the flash time and size of the arrows can add a degree of difficulty and enhance training.

Colleges deliver a passing grade

From a fastpitch softball standpoint, batters have plenty to gain from efficient use of their eyes. "As a softball batter, you really have only two-tenths of a second to react to a pitch," Seiller noted. "What we're trying to do is slow the game down, speed up the batter's ability to perceive the ball coming in as quickly as possible, so they have more time to decide to swing or don't swing, or where to adjust their swing."

Joe Kinsella, head coach of Lake Forest College softball, said Vizual Edge's recent shift to web-based technology allowed him to seamlessly incorporate the tool into his team's training program. "It gives them one more reason why they should be successful this year. It's nice for them to be able to say, 'This is something that's a little

bit of an edge for me,'" Kinsella said during his team's preseason. "This is one piece of what we're doing to be better at seeing the ball, having focused, disciplined at-bats. I definitely can say that we are doing much better at tracking the ball."

Research supports the notion that vision training equates to better performance on the diamond. The most comprehensive study to date is a 2007 Texas A&M-Corpus Christi undertaking. A research team headed by kinesiologist Dr. Frank Spaniol measured the batted-ball velocity of pitches delivered at 76 to 80 mph by a baseball pitching machine. Members of the A&M baseball team split into two groups: players who trained with Vizual Edge and those who did not. The players who trained with Vizual Edge showed much higher performance in the batting cages. "The results of this study confirmed that college baseball players who trained with Vizual Edge outperformed those who did not," Spaniol reported. "It is highly likely these same findings could translate to college softball as well."

During the 2011 softball season, 15 Kishwaukee College ballplayers completed a survey on the perceived effectiveness of Vizual Edge. The participants averaged two training sessions per week for approximately 15 minutes per session for a period of 16 weeks. Results from the survey indicated that 100 percent of the subjects agreed or strongly agreed that visual skills play an important role in

softball performance, while 87 percent believed that Vizual Edge enhanced those skills. "Any time you can start teaching our athletes how to use their bodies and how much control they have, it's a good thing," Becker said.

Using Vizual Edge

The Vizual Edge exercises can be done anywhere there's a computer with Internet connection, using a joystick, game controller, mouse or keyboard arrows. Some of the exercises require 3-D glasses, which are provided by Vizual Edge, as is access to the Vizual Edge database, where you can review and update your personal evaluation data and chart your visual skill improvement over time.

Like most video games, you can make the level of difficulty of the exercises harder as your skills progress. Most athletes train with Vizual Edge 1 to 3 times per week, for 15 to 20 minutes per session, for between 6 and 30 weeks. Players can do Vizual Edge sessions before or after an outdoor workout, at home or in their dorm rooms, even via laptop during a road trip.

While pro athletes and college powerhouses such as the University of Arizona softball program have used Vizual Edge, Seiller said the biggest market is for smaller programs and intermediate-level ability groups. Vizual Edge understands the limited budgets of some of these smaller

programs and can offer vision training packages that fit those budgets. "We try to craft programs that are cost effective for even the small programs," Puchalski said.

The program comes in a variety of options, from a one-person intro package (12 sessions) for \$69.95, to a 500-session plan for teams and facilities for \$1,500.

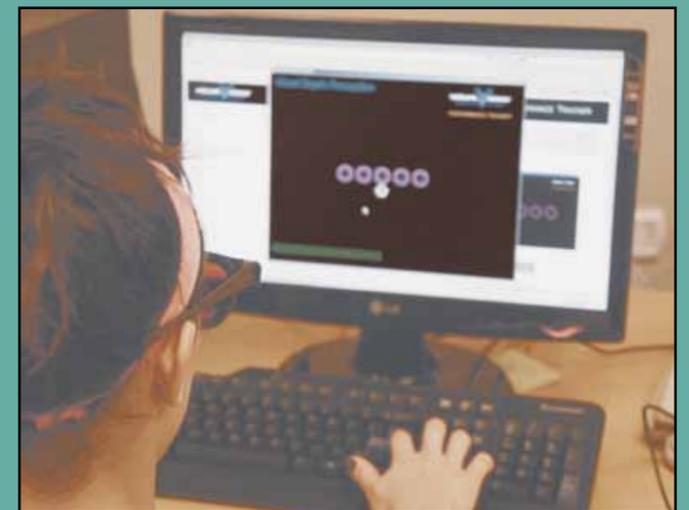
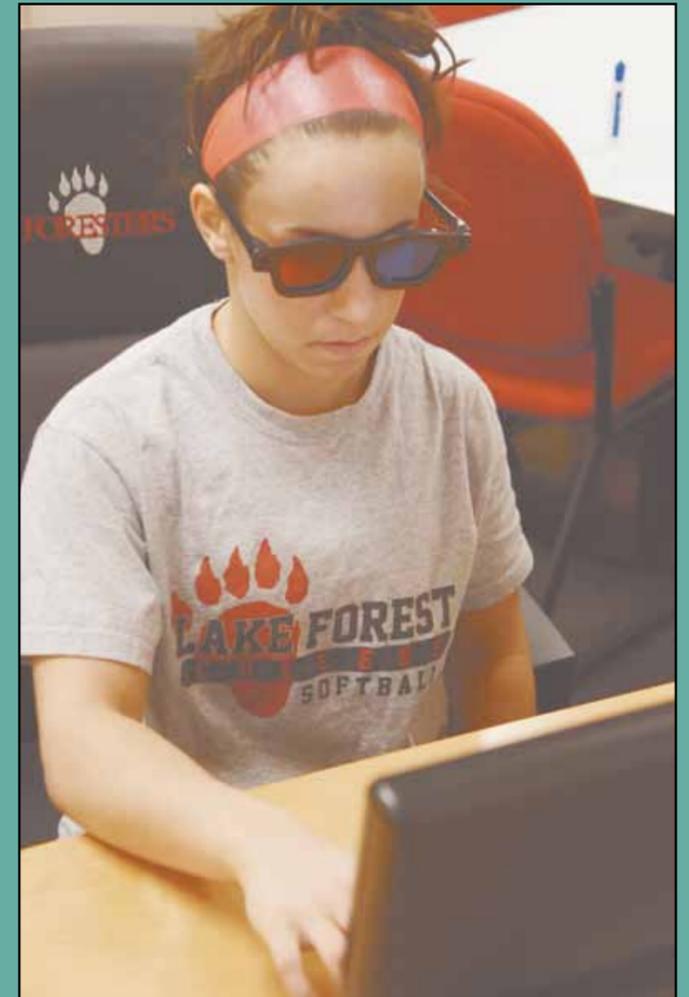
"For us it's been a pleasure working with softball coaches," Seiller said. "They are very open to new ideas. We've found them welcoming to any new type of technology in general."

Sports is just one aspect of the visual training big picture. Vizual Edge has potential to improve academic skills, according to Seiller. The U.S. military has used the program for soldiers recovering from blast injuries on the war front. Concussion rehab programs are also seeing the benefits of visual training.

Puchalski said one of the key benefits Vizual Edge offers is mental, boosting ballplayers' confidence. "There's a real tight fit with sports psychology," Puchalski said.

Seiller, a Lasik surgery specialist, cautioned that the program is not a substitute for eye health. "The Vizual Edge program doesn't improve your eyesight, it improves how you use this visual information," he said. "You might be 20-20 in the doctor's chair, but might be 0-for-20 at the plate."

For more information, check out the website www.vizualedge.com.



Alyssa Vechiola, freshman infield/outfielder from Lake Forest College wears the 3-D glasses as part of the Vizual Edge exercises she is doing.