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There is an “I” in Golf

BY BARRY L. SEILLER

Golf is surely not spelled with an “I,” but it is played with an “eye” — an eye on the ball, an eye on the slope of the green, an eye for the hazards, and an eye to gauge the distance to the pin. Golf is also a sport with an inherent “I” in terms of individuality; it’s about precision and concentration and instincts. At its core, golf is a game of skills: mental skills, physical skills and visual skills.

The skills required in golf, as with any other sport, can be taught, practiced and honed to perfection. One of the most important aspects of golf is a good set of visual skills. If a golfer has a perfect stance, a flawless backswing and an uncanny talent for hitting the sweet spot, but is still unable to properly pinpoint the target, the overall skillset falls apart.

Sports vision enhancement training is an integral part of a total athletic training program. Surprisingly, the visual dynamics of golf are similar to those of other individual and team sports; good visual and ocular motor (eye muscle) skills, along with increased concentration capabilities, can dramatically improve a golfer’s performance on the course. Conversely, if visual information is inaccurate, it can throw off the body’s timing and cause a decrease in performance. Just as with physical skills, visual skills can be evaluated, measured, taught, trained, practiced and perfected.

In the past decade, sports vision researchers have recognized that superior visual skills correlate with superior performance. Experts have developed tests and training procedures that can be used to evaluate and improve visual skill levels, as needed by an individual athlete in a specific sport. Each sport demands a unique combination of visual skills. What follows is an in-depth discussion of the visual skills that are particularly important to the game of golf.

#### The Pieces of the Visual Puzzle

While obtaining and maintaining good eyesight in terms of “20/20 vision” is certainly a good place to start, it’s just the beginning. *Visual acuity*, or keenness of vision, is essential to identifying and hitting the target — whether you’re aiming 200 yards straight down the fairway or aligning a five-foot putt on the green. Proper corrective lenses (glasses or contacts) or refractive surgery may be needed in some cases. But this is just the tip of the iceberg when it comes to addressing your visual needs.

*Depth perception* — the ability to judge distances — is crucial in golf. When trained properly, depth perception acts as a valuable aid in estimating yardage and in selecting the proper club.

Watching a professional golfer tee off is a thing of beauty. He addresses the ball, legs apart. The club appears to be an extension of his hands and arms as he begins the backswing — head down, eyes on the ball, knees slightly flexed, arms firm. All the muscles work in concert with one another, producing one fluid movement, as he makes the downswing, hitting the club head perfectly on the ball and continuing with his follow-through to complete the circle. This is often

referred to as the “connection theory,” and is a result of good *hand-eye-body coordination*. Balance, hand speed, swing rhythm and head position all can be taught and trained utilizing specialized electronic equipment.

*Visualization* is the processing of seeing yourself performing an athletic activity. Goal-oriented visual imagery techniques are used to help develop consistency in performance. Simply stated, if you can imagine yourself performing a proper swing often enough, you will tend to actually perform the swing in a like manner. Many trainers have their students practice with their eyes closed while visualizing the path they want the ball to take. Visualization is an excellent pre-tournament tool.

*Visual memory*, like visualization, is a skill that has both visual and mental elements. Like any other type of memory, visual memory involves the recalling of past experiences. The ability to put that memory or information to use during a round of golf is the goal of visual memory training. This skill also helps an athlete build their level of consistency. If a player can remember what he did last time he played particularly well on a specific course in a similar situation, he may be able to repeat the performance.

Curtis Strange, winner of the 1998 and 1989 U.S. Open believes that great putters are born, but that good putters can be made. *Speed of focusing* — the ability to effectively shift one’s focus from near to far — is particularly linked to putting performance. A player often misses a putt because he or she does not read the proper break. Optical lenses, electronic training devices and print materials can be used to train such a player to shift his or her eyes between various targets more quickly and accurately.

To understand yet another visual skill, it might be useful to imagine the following scenario. It’s the seventeenth hole of a pro-am, the third shot of a par four, facing a 21-foot putt on an uphill slope. The glaring sun, 92 degrees in intensity, is causing the player’s already fatigued body to burn and sweat profusely. Neck and neck with his opponent, he hears the anxious crowd murmur annoyingly. Birdie or par? While most golfers aren’t likely to encounter this specific situation, all players face extreme mental and physical pressure at some point. This is the moment at which a high level of *visual concentration* pays off. Visual concentration is the ability to stay focused and maintain peak performance levels even during adverse conditions. Strobe lights, auditory signals and flash bulbs are all used during training exercises to simulate real-world distractions; over time, the trainee learns to disregard such distractions and focus his or her mind and eyes on the game.

Another visual skill that is important for golfers is *fixation ability* — the ability to fine-focus on a target, quickly and accurately, using a series of eye movements. The ability to properly focus on the ball and the target, whether three feet or 300 yards away, is essential in making good contact between the club head and the ball. Fine focusing techniques can help both in hitting the sweet spot and stroking a smoother putt.

Peripheral vision refers to the outermost boundary of a person’s range of vision. *Central/peripheral awareness* is being aware of the primary target (the ball) while simultaneously knowing where you want to direct the ball with your club. Obviously, this is a crucial skill to master. Computer-aided and light sensitive electronic instrumentation are used to train central/peripheral awareness in golfers and other athletes.

## Other Visual Considerations for Golfers

As mentioned in the early portion of this article, keenness of eyesight is crucial for all athletes, and golfers are no exception. For that reason, regular visits to an eyecare practitioner to address your possible need for glasses, contacts or corrective surgery are imperative. In addition, it's important to remember that sunlight can wreak havoc on the eyes of even those with 20/20 vision. Glare disability can be a major problem on the golf course. Bright sunlight takes its toll on both the mental and physical aspects of performance, and makes reading the green more difficult. Additionally, exposure to ultraviolet rays causes an increase in cataract formation. This risk, along with the obvious eye discomfort caused by bright sunlight, makes it essential to protect one's eyes. Fortunately, a variety of products are available to the golfer, including distortion-free sunglasses or photochromic corrective eyeglasses. Ultraviolet coatings also can be incorporated into lenses to provide maximum sun protection. It is important to stress the importance of consulting an eyecare professional — an improper pair of lenses can distort or even impair your vision.

## In Short

Amateur and professional athletes alike generally exhibit some degree of natural talent, as well as the potential to develop and fine-tune that talent. This is where advances in technology and training regimens have played a major role in sports. Athletes are eager to investigate new concepts or techniques — anything they feel might enhance their performance and give them that leading edge. Just as biomechanics has gained recognition and respect in the world of golf, visual skills training is coming of age. Whether you're a pro, amateur, or simply one of the millions of men and women in love with the game of golf, improved visual skills can make your next trip to the golf course a more rewarding and pleasant experience.

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### **Some Low-tech Approaches to Improving Your Visual Skills**

The following are some multi-purpose exercises that you can perform at home to improve and enhance your visual skills. Do two or three of these exercises for a total of 30 minutes three times per week. You may feel some eye strain, but will not experience pain.

- Hold a pencil at arm's length. Focus on the pencil's number and move the pencil toward you. When the number begins to blur, extend your arm and begin again. Then, hold one pencil in each hand — one as close to your face as possible without the number blurring, and the other at arm's length. Focus first on the near pencil (you may notice the distant pencil blurring into two images). Then stare at the far pencil. Alternate your focus, gradually increasing your speed. Do each exercise for five minutes, rest five minutes and repeat.
- Put press-on letters on a Wiffle ball, then hang the ball by a string in a doorway. Twist the string and, while the ball turns, identify as many letters as possible. Perform for three minutes, rest three minutes and repeat.
- Place press-on letters or numbers randomly on a clear acetate sheet. Put the acetate over a TV screen. Turn on the TV and try to track the letters or numbers in sequence (a, b, c or 1, 2, 3). Do this for three minutes, rest three minutes and repeat.

- While a passenger in a car or while walking briskly, hold your head steady and try to read road signs, license plates, etc., on your far right or left, without moving your head or eyes. Do this for five minutes, rest five minutes and repeat.
- Turn on a TV station (such as the preview channel) that continuously lists text on the screen. Also open a newspaper. Alternate your reading of the TV and the paper, gradually increasing your speed. Do this for five minutes, rest five minutes and repeat.
- To improve your hand-eye-body coordination, perform these exercises while bouncing on a mini-trampoline.

### **A New, High-tech Way to Improve Your Visual Skills**

For the serious athlete, vision training has gone high-tech. The Vizual Edge Performance Trainer™ is a new CD-ROM-based training tool for amateur and professional golfers who aim to gain a competitive edge by improving their visual skills. The program was designed as an outgrowth of regimens being used with world-class professional athletes and Olympians, and is now available to the public. Dr. Barry L. Seiller and a team of experts at the Visual Fitness Institute (Vernon Hills, Ill.) have been working with high-level athletes since 1989 and have found that visual performance training can help athletes of any caliber achieve optimal performance under game conditions.

The Vizual Edge Performance Trainer™ package includes the CD-ROM, a pair of 3-D glasses and the VizEdge string, which is used to train visual flexibility. The program walks the user through a series of evaluation exercises to begin diagnosing visual skill deficiencies. Once initial skill levels are determined and recorded, the user can begin training exercises to improve his or her visual skills — ocular flexibility, eye alignment, visual recognition, depth perception and tracking. Like most training and conditioning regimens, visual training should be done regularly. Long-term effects are generally noticed after four to eight weeks of regular training, which should be continued throughout the year so that newly improved skills don't wane.

Training with the CD-ROM is done with arrow keys or a joystick and is akin to sports-themed video games. The system maintains a record of the user's results, which helps athletes track their progress and stay motivated. Because the program has variable difficulty levels, users can work their way up as their skills improve and without the likelihood of boredom, since the program has settings that are impossible to achieve.

The Vizual Edge Performance Trainer™ sells for \$299 at [www.vizualedge.com](http://www.vizualedge.com) and comes with a one-year user license and a money-back guarantee. The product offers a competitive edge that was previously only available to elite athletes who trained at specialized facilities.