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Teched-Out Lesson Tees

Today's technology is changing the way in which PGA Professionals are teaching students

By Scott Kramer

The advent of portable video equipment is no doubt making life easier for PGA teaching professionals. Video allows teachers to "break down the swing any way you want; impact, takeaway, clubface, etc," says Abby Derman, PGA teaching professional at Kiawah Island (S.C.) Golf Resort's Tommy Cuthbert Learning Center, who is certified in instruction. "It also lets the student view the swing and actually see his or her movements, which actually shocks a lot of students. They often think they're moving one way but are actually moving another.

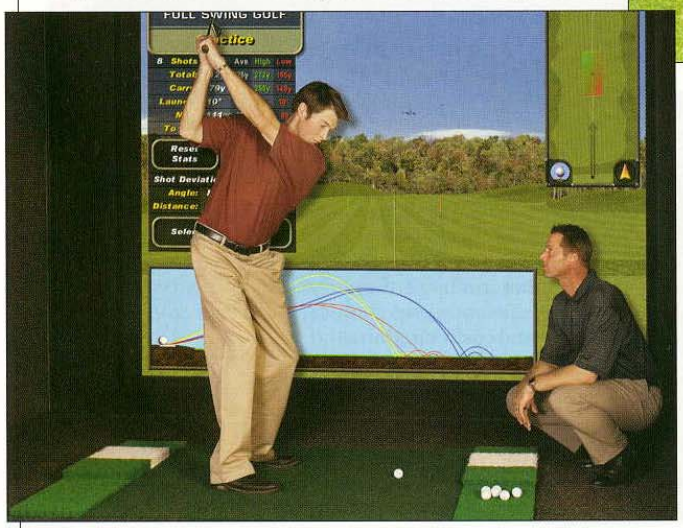
"Video enables students to see the problem, and basically gains trust between the student and teacher. Being able to see the swing is an amazing technology."

Enhance that video with some of the available golf-specific video systems and you have exponentially more teaching power. Joseph Hallett, also certified by The PGA and director of instruction at Red Tail Golf Club in Sorrento, Fla., has used a video system – JC Video – for years. He says it's easy to use and is compatible with many of his students' home computers.

Combining the swing analysis software with "the portability of high-resolution cameras and review capabilities of bright laptop screens means we can literally get down to business on the lesson tee, or anywhere else, in a matter of minutes," says Hallett. "Day in and out, a quick video of a swing movement or picture of a fundamental can reinforce or clarify a concept for a student that would otherwise hinder their learning speed.

"With today's technology, video delivers a clean, clear picture, travels well, and can literally be at your students' desk before they get home."

Get an even more elaborate set-up, such as the one PGA of America Director of Instruction Rick Martino uses at the PGA Learning Center in Port St. Lucie, Fla., and your teaching power increases even more. "I use the V1 Golf video system with three cameras set so I can film the students, feed the images into the printer for still prints, and have the V1 software break down the swing," says Martino. "I also use the Dynamic Balance Machine, which has force plate technologies that show pressure movement on the bottom of feet; the Full Swing Golf simulator, which shows ball trajectories, ball speed, launch angle and dispersion pattern; and the P3ProSwing, which provides information on club speed and rotation.



Simulators such as those from Full Swing Golf (below) provide feedback on trajectory, ball speed, launch angle and dispersion pattern, while computer-based video systems like this one from JC Video (right) have become more portable and able to send images to students via e-mail.

"We also take advantage of the Titleist launch monitor to retrieve ball flight information; MAT-T Motion Analysis Technology from TaylorMade, which uses 3-D full body and club motion and provides all fitting information, as well as swing measurement and comparison technologies; plus a SkyGolf unit for on-course and shot distance control."

Martino explains that he and his PGA Learning Center staff have these available for all lessons, and use whatever they believe a particular student needs.

Then there are products that extend well beyond video. Roger Knick, PGA

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head professional at The Golf Performance Center in Danbury, Conn., swears that the Bentley Kinetics three-dimensional swing feedback system his facility uses takes lessons to the next level.

"Two-dimensional video is our x-ray and this 3-D system is our MRI," explains Knick. "It helps us identify exactly the numeric values of the rotations in someone's swing. So if a golfer asks us if he's getting enough shoulder rotation, we can see it on video and also quantify it by using Bentley's technology. That's one great benefit for us and for the student because they can see it.

"We use it for the biofeedback aspect of it. The training aspect of it is outstanding for the student. We have their training regimen laid out for them."

Knick says he makes sure students are practicing what they need to, and practicing the correct way. "They get in the Bentley K-Vest and they can get an auditory tone or watch the LCD screen, as a mirror, to get the visual feedback they need," he adds. "It turns green if they're doing it correctly, and with the auditory tones, they can hear while they're swinging if they've reached the right positions. We also can use it for fitness training for golf swing movement.

"It's four times faster than video and a lot more accurate than watching the video. And we can see the swing from many different angles, unlike with video where you typically only capture face on or down the line. When we put them in the vest, we can basically see one swing from seven different angles. It's very efficient in coaching. It's been incredibly good for us. We still use video in conjunction with it because it's enhancing to the player."

How Teachers of the Year Utilize Technology

With all of the sophisticated technology available for golf instruction these days, *PGA Magazine* surveyed several 2006 PGA Section Teachers of the Year on what technology – both low- and high-tech – they employ into their lessons and how, which products they have success in teaching with, and any other swing training aids they recommend to their students. Here's where they're at on the lesson tee:

Bob Bourne, *PGA director of instruction, Stonewater Golf Club, Highland Heights, Ohio, Northern Ohio PGA Section:*

"In all of my lessons, I use a laptop computer, which has allowed me to e-mail lesson summaries and lesson reminders to students, schedule lessons, double check the club's event calendar, e-mail gift certificates for lessons and rate schedules for lessons.

"By running V1 and Model Golf software, it's allowed me to show students the swings of Tour players in slow motion. I use a video camera to film 90 percent of my lessons and give the students the videotape to take home as their homework for reinforcement. Videotaping the short game, long game and golf course lesson is just another form of communication that should be used by all PGA Professionals. I also use the video camera to film my assistants giving lessons, so they can evaluate themselves.

"As far as low-tech training devices, I use a nubby ball between the arms to

The Bentley Kinetics K-Vest system gives feedback on a golfer's swing in 3-D, and can be used as a diagnostic tool during lessons or for reinforcement during practice sessions.

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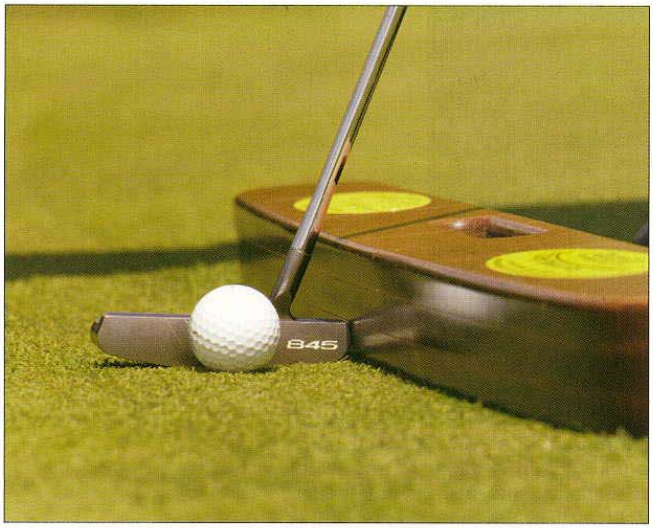


The Putting Arc is a simple, low-tech training aid used by instructors to help students get a feel for the proper path of the putting stroke.

improve the rotation of the core on the big and little swing, along with helping someone learn to chip with the arms; a balance board to improve weight shift on the backswing and downswing; surgical tubing around the upper arms to improve connection in the backswing and to feel the arms folding on the forward swing; a tennis racquet for the person who gets the club to far above his or her head. This allows the student to feel that the club is to the side of the body. This also gives the feeling of starting the downswing with the feet and creates the proper timing in the downswing.

"I also use styrofoam beach 'noodles' with golf shafts inserted in the center, sticking them on the target line to show the correct swing path. And I use natural slopes to help golfers with uphill, downhill and sidehill lies.

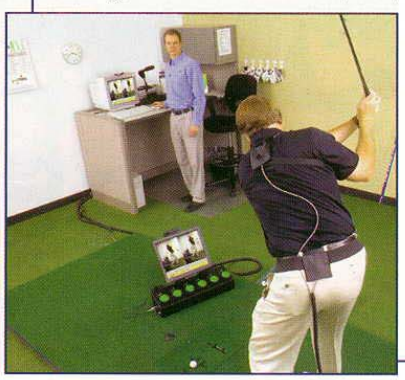
"As for products, the Momentus Power Hitter has offered a huge impact in creating proper timing to stronger students who can't feel the clubhead. The Medicus 5-iron and driver help eliminate casting from the top of the swing and also force a one-piece takeaway. Finally, the Rick Smith Swing Glove allows the back of the left wrist to remain flat at the top of the swing. This puts the club in a square position and helps correct a slice and breaking down at impact."

Technology Report '07

GolfTEC capitalizes on technology

You just never know when a good high-tech idea will blossom into a powerhouse business. Such is the case with Denver-based GolfTEC Enterprises, a company started 12 years ago by PGA Professionals Mike Clinton and Joe Assell – who at the time were fresh graduates of Mississippi State University's PGA Professional Golf Management program.

They began with a simple concept: Measure an amateur golfer's swing using biofeedback sensors and video, and combine that technology with a PGA Professional's expertise, to improve a golfer's game. Today, the company uses high-tech clubfitting technology, such as sensors that measure body movement during the swing and then incorporate audible biofeedback tones to help a golfer find the correct swing positions; state-of-the-art motion analysis system with multiple cameras; a digital video system that records every swing; digital swing analyzer; and an online WebLesson system that allows golfers to access their swings online.



In May, GolfTEC introduced SEVA Putt, a revolutionary putting instruction technology that identifies the actual physics of putting. It measures the exact path of the putter via sensors that are attached to the putter with small, unobtrusive plastic clips. It works in concert with GolfTEC's SEVA Pro, a full-swing golf instruction program that uses digital video, impact analysis. With all of GolfTEC's technology and expertise, its average customer previously took less than three lessons per year and now takes 15.

In June, GolfTEC provided its millionth lesson. The company now employs 260-plus PGA of America instructors who collectively teach 1,000 lessons each day at 91 locations around the country.