



With a green light indicating the far left lane is the safe outlet (above), a student maneuvers one of the Bondurant School Pontiac Solstice cars into that lane.

16 OR 61 - The timeless value of driver training

Story and photos by Larry Edsall

What's your teenaged son or daughter's life worth?

For about the cost of the deductible on your car insurance, you can equip him or her to be a much more aware and (hopefully) better and safer driver.

Yes, accidents happen, and especially, it seems, to young new drivers. But learning how to avoid, or at least mitigate, an accident not only saves your child the physical and emotional trauma of a crash, but it could save you the cost of your insurance deductible.

In the last couple of years, I've watched and written about several safe-driving programs for teenagers. Each has the same objective: to help new drivers become safer drivers. Many of the programs are sponsored by automakers or related companies and combine classroom-style instruction with varying amounts of behind-the-wheel experience. Unlike traditional driver's ed classes that used to be part of high school curriculum,

the point isn't passing the state driver's license test, but to equip the new driver with information and skills to avoid becoming another in the horrible statistics regarding teenagers and traffic.

It's one thing to watch and write, and another to participate, so when the folks at the Bob Bondurant School of High Performance Driving offered me entry into one of their racing-oriented driving courses, I asked if I could take their teen class. I figure that, at age 61, I'm just a transposed 16-year-old, and I was curious not only to see what a bunch of racers would teach teen drivers, but figured that, at age 61, I could use a refresher on how to react on the road.

One of the first things my eight classmates - seven boys, one girl, all high school sophomores - and I heard, however, is that it isn't about reacting. It's about anticipating. And several times throughout the day we were reminded about the importance of concentration and focus behind the wheel, and that

focus focused on keeping our eyes up and looking well ahead, aware of the cars around us and anticipating what each of them might do. Not only will you be aware of traffic, we were told, but you'll see those photo radar cameras that are popping up along so many roads.

The day started with what Bondurant calls "ground school," a classroom session that covered the importance of concentration, vision, smoothness, consistency, awareness and anticipation. We heard about "target fixation" and how a car tends to go where the driver's looking, so when you have to make an emergency maneuver, look for an opening, not at a tree. We also heard that what we were hearing was the same things Bondurant instructors tell professional racers when they come to school, and that includes drivers such as NASCAR stars Jimmy Johnson and Jeff Gordon.

"Vision" was an oft-repeated word, and we were told it's not just a matter of looking ahead, but of thinking ahead.



A Cadillac CTS (top right) is mounted on hydraulically controlled outriggers that lift the front or rear of the car to induce oversteer or understeer situations so the teen drivers can learn how such skids feel and start to develop the muscle memory to keep the car safely under control.

After they knocked down cones in the accident avoidance simulation, a Bondurant instructor reminds the teenagers that even with no distractions in their cars, they had trouble with the maneuvers and would need focused concentration when they move from the test track to the public pavement.

Bondurant instructor Jesse Dunham starts the afternoon session with a classroom lecture on the upcoming accident avoidance simulation that uses three traffic lanes to teach teenagers how to maneuver around a potential collision.

Cole McPherson stops for some personal instruction after one of her trips through the accident avoidance simulation course.



We learned how to hold the steering wheel to maintain control, about "contact patch" and how the weight transfer under acceleration, braking and turning affects your ability to maintain contact with the road and your control of the vehicle.

Then we headed out to the skid pad, basically a large, parking lot-sized patch of pavement where we went through a succession of exercises, starting with the throttle steering circle where we learned that even at less than 20 miles per hour you can easily lose control of a vehicle.





Each instructor had three students, and each student was assigned his or her own Pontiac Solstice for the day. To get started, we ran a slalom, steering between cones, first at 25 miles per hour, then at 30, 35 and 40. The point not only was to get us up to speed, but to demonstrate why you don't drive 40 mph in a 25-mph residential zone. Maneuvering between cones at 25 is one thing, but the task gets much tougher as speed increase.

Next, we parked our cars and got into one of the school's skid cars, Cadillac CTS sedans mounted on what look like the automotive version of training wheels. Actually, the outriggers allow the instructor to raise the front or rear wheels so they lose contact, inducing the car to skid so the student can start developing the muscle memory to anticipate and avoid or at least react and control a car in such a situation.

Then it was back into the Solstices for laps around the handling oval. We were particularly impressed when we were told that even Bob Bondurant, a former racing champion and founder of the school, before he takes a vehicle out onto one of the school's race tracks, drives it around this oval, laid out with plenty of runoff room, for several laps to get a feeling for how the car responds in acceleration, braking and turning.

Every so often, we were called over and were joined in the car by one of the instructors for personalized instruction. In my case, I needed to work on holding the brake a little longer and then releasing it more smoothly.

After a lot of laps – I was impressed throughout the day with how much time we were getting behind the wheel – we moved to a braking exercise, first stopping our cars from 65 miles per hour without using the anti-lock feature on the braking system, then learning how to slow and steering around something by employing the ABS.

Lunch followed – pizza (after all, we're teenagers!). The instructors gone, we talked among ourselves about what we'd learned. The skid car and oval were the most fun. The slalom and braking were the most eye-opening.

The parents would have been pleased with the tone of the conversation.

One dad had said he tried to instruct his son on driving, but realized "it's one thing coming from a parent," but that the same words from a professional instructor might carry more weight. "I want him to be a safer and more aware driver," dad said, adding that one thing he hoped his son would learn at the school was to gain the confidence needed so he wouldn't panic when facing threatening situations on the road.

This parent wasn't alone. Another dad said his teenager needed to develop assurance as a driver; he hoped the school would help his child overcome those fears.

Another parent had just the opposite problem: His son had done quite a bit of go-karting and was perhaps a little too comfortable behind the wheel. He hoped the Bondurant experience might bring his son's attitude back toward the realities of

driving in traffic.

And at least one parent noted that the enrollment fee was almost identical to the deductible on an auto insurance policy. "If he avoids one accident..." dad said, adding, "I only wish I'd have sent my daughters through this."

After lunch it was back to the classroom for a few minutes, then back to the skid pad for an accident-avoidance exercise in which we'd drive toward three green lights, each marking a different lane. Two of the lights would turn red and we'd have to maneuver safely into the indicated lane without using the brakes. Instead, we were told to lift off the gas pedal, steer toward the correct lane and then squeeze back on the gas. After working on that a few times, the need to brake would be included with full-on ABS maneuvering.

The exercise was intense, and lots of lane-marking cones were hit. Afterward, we were reminded of how much concentration it took to try to avoid the simulated accidents in a controlled environment. We were asked if it would be possible to be that focused if we were trying to manipulate a cell phone or iPod while listening to loud music or interacting with a bunch of friends in the car. It was a sobering discussion.

Finally, the students met their most daunting challenge. The last exercise of the day was done in Pontiac G8 sedans. It was a parking drill that involved various scenarios, including parallel parking. Once again, we were reminded that there

Students hone their driving skills on the short, flat oval track at the Bondurant school. Passing is not allowed on the track, but there is a shortcut through the infield drivers can take at any time so cars don't become bunched together.

are dangers at the slowest of speeds.

Driving done, it was back into the classroom for a debriefing. The students were encouraged to offer feedback. A couple mentioned how difficult parallel parking had been.

"Considering it was school, and on Saturday, it was fun," said another.

Yet another said he was impressed by how it's sometimes better to use the throttle than the brakes, and how important it is to keep your eyes up and well down the road.

"Getting out of a skid or 'drift' is harder than it looks," said another.

One said he was surprised at how responsive the cars were to driver input. Another said she felt much more comfortable driving, much more in control of the car than she had before the day began.

As we left the classroom and returned to the roadways, one of the instructors had this final reminder: "Use your new powers for good, not for evil." ■

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SPECIALIZED TEEN DRIVING SCHOOLS AND PROGRAMS

By Larry Edsall

Parents eagerly spend time and money (and miles of travel) to make sure their children learn to play a sport or dance or sing or create the next iPhone application or video game experience. And yet, when it comes to teaching a teenager to drive...

In his book *Traffic*, Tom Vanderbilt explains that driving "is an incredibly complex and demanding task."

In the extensive research for his book, Vanderbilt learned that a driver has to process "a bewildering amount of information," is constantly making "predictions and calculations and on-the-fly judgments of risk and reward," and is doing all that in a "spontaneous setting" of constant change while "engaging in a high amount of sensory and cognitive activity—the full scope of which scientists are just beginning to understand."

And yet, after almost no formal training, other than perhaps a course designed not to teach driving skills but to assure passage of a state driver's licensing exam, we send our teenagers out onto the road, where they are injured or killed by the thousands each year.

A case can be made that handing the keys to a teen without proper preparation is another form of child abuse. And the costs to the injured individuals, to shattered families and to society at large are huge.

However, those costs also are, at least to some extent, if not avoidable then certainly open to mitigation through better, through genuine, driver's education and training.

Sure, accidents will happen, but too often crashes are not really accidents but the result of mistakes in judgment, errors in attention and anticipation, or simply not knowing what to do.

Specialized teenage driving schools and other teen-oriented safe-driving programs are designed to teach and hopefully prepare new drivers not only for the physical skills they'll need to drive, but for the decision-making they must do amid all of the distractions they'll face on the road.

Here is a list of some of these schools and programs:

BOB BONDURANT SCHOOL OF HIGH-PERFORMANCE DRIVING

The instructors at the famed Bondurant School just south of Phoenix enjoy teaching teens, they say, because the new drivers haven't had time to learn bad habits, so the instructors can get right to teaching instead of spending time with trying to get students to unlearn. In addition to standard General Motors vehicles, students spend time in a special skid car that can simulate a variety of low-traction situations. www.bondurant.com

BMW TEEN SCHOOL

The BMW Performance Driving School is in Spartanburg, South Carolina, near the automaker's US assembly plant. A special feature is a track imbedded with water jets that can be activated to simulate obstacles suddenly appearing in the roadway. www.bwmusa.com/Standard/Content/Experience/Events/PDS/ProgramsandCourses/TeenSchool.aspx

BRIDGESTONE WINTER DRIVING SCHOOL

Bridgestone's winter driving school at Steamboat Springs, Colorado, allows teenagers to participate if parents sign a waiver. Winter driving techniques and vehicle control maneuvers are not the same set of skills you use on warm and dry pavement. There are aspects of winter driving that go against the typical driver's instincts. www.winterdrive.com

CHRYSLER ROAD READY TEENS

Road Ready Teens is a home-based (Internet) program for parents and the new drivers in their families. The program comprises an interactive instructional computer game for the teen driver and a 12-page manual for the parents. Road Ready Teens is available in English and Spanish. www.roadreadyteens.org

DRIVER'S EDGE

Driver's Edge is a non-profit organization that goes around the country teaching safe-driving skills. Among its sponsors is tire maker Bridgestone, which stages its own Safety Scholars safe-driving video competition (www.safetyscholars.com) and has launched a new global Think Before You Drive (www.thinkbeforeyou-drive.org) teen safe-driving effort. www.driversedge.org

DRIVINGMBA

Arizona-based DrivingMBA offers a variety of driving programs, both at a driving simulator and on the road. Among the school's offerings are several designed for teenagers. www.drivingMBA.com

FORD DRIVING SKILLS FOR LIFE

Though primarily a web-based educational program for teenage drivers and their parents, Ford's Driving Skills for Life includes free behind-the-wheel sessions held at locations around the country. The web-based part of the program has instructions for parents and various learning activities for the teenaged driver. For example, in the Hazard Concentration game—a timed match game—we learn that if it takes you one second to divert your eyes from the road to change the radio station while driving 60 miles per hour, you've traveled 90 feet with knowing where you were. www.drivingskillsforlife.com

HONDA TEEN DEFENSIVE DRIVING PROGRAM

Honda not only has a defensive driving school program for teenagers, but offers a 2-for-1 price discount. Honda's program is offered in conjunction with the Mid-Ohio School at the Mid-Ohio Sports Car Course at Lexington, Ohio, though instruction takes place off the racing surface at a vehicle dynamics center. www.mid-ohio.com/School/Courses/Defensive-Driving/1

N CONTROL DRIVING

Another Arizona-based driving program, N Control was launched by a former Bondurant instructor. www.ncontroldriving.com

TOYOTA DRIVING EXPECTATIONS

What to expect from your car, the road and from yourself is the theme of Toyota Driving Expectations, a four-hour program held in various venues to offer classroom and at-the-wheel driving education for newly licensed teenagers and their parents. Not only are the new drivers taught proper techniques, but parents can learn how to break their own bad driving habits. www.toyotadrivingexpectations.com