

Unit 2 The Driver

Chapter 5 Characteristics of Good Drivers

Objectives

What does it take to become a “good” driver? If you wanted to become a star basketball player or world class dancer, how much training and practice time would you plan on? Serious players would expect to train with professional coaches and practice for years to get anywhere near the top of their field.

For the average novice driver, it generally takes 25-50 hours of actual behind-the-wheel experience to be able to deal with even rudimentary traffic situations. Yet most drivers say they have never had any coaching beyond the basic program required for their license, and most rate their driving ability as 8-9 out of 10! There is no real test to measure ability, so anyone can fool themselves into believing they are a very good driver simply because they have not been involved in a crash.

Students should understand that driving is a complex set of mental, social, emotional and physical skills and processes. They need to be able to recognize and evaluate their own driving patterns and evaluate problem driving behaviors and attitudes. Responsible drivers must make sound judgments and decisions regarding the traffic situation, taking into account that the roadway is shared with other drivers and pedestrians, while maintaining an objective attitude.

Course Outline

1. Physical skills.

Driving is a psychomotor skill that requires learning a certain set of skills, then practice, practice, practice until the motions become almost automatic. While these skills are sometimes called "instinctive" reactions, they're not instinctive at all. They are learned responses.

New drivers must split their attention between basic car control (i.e., steering, braking, shifting gears) and the attention and concentration needed for the social and decision-making

aspects of driving. Novice drivers need to recognize that their ability to react effectively to traffic situations and avoid crashes will be limited until these car handling skills are mastered.

2. **Coordination.**

The coordination of a variety of motor skills is critical in order to accomplish an intended action. Drivers must make split second decisions in reaction to a traffic situation and execute those decisions smoothly. For instance, if a child runs into the road, the driver will have to simultaneously steer and brake (and perhaps clutch and shift gears), while watching for other potential hazards on the road, such as on-coming traffic or parked cars.

3. **Physical condition.**

A person's physical condition will substantially impact his/her ability to drive competently. Good drivers will be aware of their own physical limitations and will compensate appropriately (i.e., wearing corrective lenses) or will avoid driving entirely when fatigued (see Chapter 2.2 Challenges to Good Driving) or under the influence of alcohol or drugs (see Chapter 2.3 Driving Under the Influence).

4. **Mental skills and attitudes**

While car handling skills are important, driving is primarily a thinking task and is more about good decision making and good risk management than physical skill.

a. **Visual perception.**

Good decision making in driving depends on good information, and 90% of that information comes through the eyes. It is crucial that new drivers know how, when, and where to look, and what to look for. Novice drivers tend to fix their eyes close to the car rather than searching ahead, thus missing cues for potential hazards. New drivers are also less apt to use their mirrors than experienced drivers.

b. **Smith System.**

This is a five step system developed by Harold Smith in the 1950s to help drivers develop good visual search habits. It stresses eye discipline and the idea of a space cushion between the driver's vehicle and other traffic conditions.

(1) **Aim high in steering.**

In other words, the driver needs to look far ahead when driving, not right in front of their vehicle. The driver will then be able to analyze the traffic conditions and predict what will happen well in advance of a conflict.

(2) **Keep the eyes moving.**

Drivers should glance close and far, to each side, in the mirrors, and at the instrument panel, always returning their gaze to the front. This is known as scanning.

(3) **Get the big picture.**

Look at the whole scene, not just a single aspect. If a driver fixates on any one element, s/he could miss other cues coming from a different direction.

(4) **Make sure others see you.**

Communicate your intentions to other drivers by using your turn signals, lights, horn, even through eye contact or body movement.

(5) **Leave yourself an out.**

Drivers should identify a way to escape in case of a conflict. This is accomplished by constantly adjusting position to keep space around their vehicle in changing traffic conditions. This is a *space cushion*.

c. IPDE process.

The IPDE process is a system of seeing, thinking, and responding that consists of four steps:

(1) Identify.

Through visual cues, the driver identifies potential hazards. These hazards could include the roadway, the driver's own vehicle, other vehicles or pedestrians, traffic controls, animals.

(2) Predict.

Determine which hazards may become points of conflict and when.

(3) Decide.

What actions does the driver need to take to avoid the conflicts; how should speed be adjusted, braking, steering.

(4) Execute.

Implement the proper actions to avoid possible conflict

d. Attention/Alertness

Driving is a multi-task activity that demands full attention and concentration. Novice drivers must learn to divide their attention over a number of routine, simultaneous tasks, such as steering, scanning, and speed control. In addition, drivers must be able to rapidly switch their main focus of attention as the traffic conditions change. Too much attention on any one task or potential hazard can be as serious as not enough. Critical errors can occur when a driver is inattentive or distracted (i.e., using a car phone, talking with passengers, changing the radio station), fatigued, or impaired by alcohol or drugs.

e. Risk management

Once possible conflicts are seen and identified, drivers have to determine the level of risk involved in the hazard. Research shows that new drivers need to learn to recognize risky behavior in themselves and in other drivers and to make decisions that reduce those risks. What a driver is able to do and what they choose to do may not be the same. Novice drivers tend to underestimate the risk of specific actions, such as tailgating, speeding, and driving impaired and overestimate their ability to safely handle the possible consequences of risky behavior. Good drivers understand and acknowledge their level of experience and their own limitations.

(1) Experience.

While New Mexico's Graduated Licensing Law requires 50 hours of behind-the-wheel driving in order to obtain a driver's license, studies indicate that novice drivers take between five and seven years to become a mature driver. Drivers learn both desirable and undesirable behaviors mostly through experience.

i. Teenagers do pick up their parent's driving habits. Drivers, ages of 18-21, whose parents acquired three or more traffic violations were 38% more likely to have violations on their own driving records than teenagers whose parents had no violations.

ii. Teenage drivers often begin driving with dangerous habits they learn from their peers, especially excessive speeding. These habits are especially dangerous to novice drivers, because they do not have the experience to correct their mistakes.

iii. Experienced drivers develop a sensitivity or *feel* for the road and for how the vehicle handles in any given situation. This feel will change if the driver is in a car different from the one s/he normally drives.

f. Risky Behavior.

Studies of young drivers show they are more likely to engage in risky driving behaviors. Reasons for this could be because they do not have the skills and experience to recognize risky situations, they are apt to believe that they are invincible, and therefore will not be involved in a crash, or that they perceive they will gain admiration from their peers for risk seeking behaviors, such as excessive speeding or weaving in and out of traffic.

Numerous studies indicate that in collisions involving young drivers, the specific actions causing the collision include, 1) speeding; 2) following too closely; 3) failure to yield; 4) improper lane use; 5) improper turn; and 6) improper backing/starting. Further, these actions may be linked to conditions such as drinking and driving (see Chapter 2.3, Driving Under the Influence), careless driving and inattention. Other common driving errors include failure to wear a seat belt, distraction inside the vehicle (cell phone use, changing a CD or tape, eating or drinking), incorrect assumptions about the other driver (see Chapter 2.2, Challenges to Good Driving).

(1) Speeding.

Speed drastically affects the risk of driving. A report by the National Highway and Transportation Safety Administration (NHTSA) reports that in 1994 speed was a factor in 30 percent of all fatal crashes, and 12,480 lives were lost in speed related crashes. The 1999 New Mexico Highway Safety Performance Plan reports that speeding is a contributing factor in approximately 34% of all fatal crashes in New Mexico. As a new driver gains confidence s/he may drive well over the posted speed limit without any apparent problem. This may reinforce the idea that their skill or luck allows them to court danger with impunity. However, speed is certainly a key to most novice drivers' errors. Most of the potential hazards would fail to become actual hazards if the driver were going slowly enough to perceive and avoid them.

(2) Seatbelts save lives.

The "Buckle Up America" campaign reports that seatbelts are the most effective means of reducing fatalities and serious injuries when traffic crashes occur and are estimated to save 9,500 lives in America each year. Child safety seats, when used properly, reduce the risk of fatal injury in a crash by 69% for infants (less than 1 year old) and by 47% for toddlers (1 4 years old). Good drivers will always wear their seatbelt and insist that all occupants in their car are also properly restrained. (One tactic to get other occupants of the car to put on their seat belts is to point out that their decision not to wear their belt could fatally affect EVERYONE in the car B they could become a flying projectile if the car were to flip, having obvious negative impacts on the other passengers!)

5. Social skills

Driving is more than an individual activity; it is a social contract that involves sharing the road with others - pedestrians, automobiles, emergency vehicles, interacting and cooperating with other people (see Chapter 1.4, Sharing the Road). There are enormous costs in both lives and money to poor driving behaviors. In New Mexico, motor vehicle crashes are the leading cause of

death for everyone under the age of 44. The yearly economic impact of traffic crashes in New Mexico alone is nearly \$2 billion, in lost productivity, property damage, medical bills, car insurance rates, and the costs of police, firefighters and emergency medical personnel.

a. Responsibility.

Responsible driving is a function of the driver's conscience that goes beyond the individual's personal gratification. It requires that drivers commit to meeting social objectives and norms based on perceived risks for the entire community, even if the risk seems too small for the individual driver to worry about. Also, it requires that each individual be willing to analyze his/her own driving performance and keep it in line with personal and social values.

b. Traffic psychology.

Developed by Dr. Leon James at the University of Hawaii, traffic psychology refers to how a driver learns to modify his/her own style of conduct in traffic situations and to monitor the impact of the individual's driving behavior on other road users. The benefits of this idea includes perfecting the American character by teaching interpersonal skills that encourage:

- (1) **chivalry** (being polite to strangers)
- (2) **charity** (caring for the feelings of other road users)
- (3) **freedom** (self-responsibility)
- (4) **family values** (being nice to your passengers)
- (5) **citizenship and respect for law and order** (obeying traffic ordinances)
- (6) **spirituality** (subtle connectedness among traffic users)
- (7) **morality and rationality** (people's rights in public places)
- (8) **empathy and sympathy** (showing solidarity with other traffic users)
- (9) **national unity and integration** (identifying with positive symbols)
- (10) **creative driving practices** (multi-tasking, recreation, artistic expression)

6. Emotional process.

A driver's emotional state has a profound impact on his/her driving ability. Road rage, aggression, and stress are increasingly cited as major contributing factors in traffic crashes (see Chapter 2.2 *Challenges to Good Driving*).

a. Attitude.

A person's attitude toward driving impacts his/her willingness to learn how to drive safely - and act on the learning.

(1) Control.

The National Safety Council's Alive at 25 program stresses that each driver has the ability and responsibility to control his/her own behavior. There are results and/or consequences for every decision a driver makes, and the driver is the only one who can make driving decisions and choose to act in a particular way. While it's possible that nothing will happen, the consequences of bad driving decisions can be immediate and catastrophic. A moment's inattention to make a cell phone call or change a CD can result in a lifetime in a wheelchair or death.

(2) Peer pressure.

Peers can play an enormous role in a novice driver's attitude toward taking risks behind the wheel. Safe driving is too often considered boring while risky driving is seen as

exciting. The teasing and coaxing of others in the car is a hazard that could be deadly. There will be times when good drivers will have to avoid peer pressure and take the risk of being seen as “wimpy” rather than the possible fatal risk of being considered “macho.”

b. Motivations.

Drivers are inclined to assign motivation to another driver’s actions and respond negatively based on that assumption (i.e., assuming that the other driver didn’t let you change lanes because s/he was intentionally trying to block your path). Most of the time when other drivers’ actions are not intentional or personal, s/he is usually just being inattentive. Rather than reacting personally and aggressively, good drivers remain objective about other drivers’ actions.

c. Stress.

Traffic stress from road congestion is a major contributing factor to violent traffic disputes. Good drivers learn to relax, take a deep breath, and avoid using their vehicle as a weapon against others.

Student driver checklist.

In response to high incidences of injury and fatalities among teenagers, Cobb County, Georgia developed A Handbook for Responsible Driving. Below is a checklist that parents can use to help their teenager learn good driving skills, or any driver can use to test themselves on their driving skills.

Student Driver Checklist

DRIVER	Never	Sometimes	Always
1. Knows location of instruments, gauges and safety devices and checks them before driving			
2. Adjusts mirrors and seat properly			
3. Wears safety belts without being reminded			
4. Works to maintain a safe following distance			
5. Demonstrates correct hand position on the steering wheel			
6. Demonstrates the "two-second" rule - you can count "1-1000, 2-1000" between the time the back of a car in front of you passes a stationary object and the time the front of your car reaches the same spot			
7. Is aware of other drivers' blind spots			
8. Checks blind spots before changing lanes			
9. Is aware of tailgaters and knows how to deal with them			
10. Anticipates changing traffic lights			
11. Checks mirrors frequently			
12. Uses horn appropriately			
13. Signals before turns and lane changes			
14. Anticipates possible braking situations			
15. Appears relaxed and comfortable while driving			
16. Is comfortable driving at night			
17. Uses high and low beams appropriately			
18. Adjusts speed to road, traffic, and weather conditions			
19. Works to maintain a space cushion or buffer zone on all four sides of the car			
20. Checks intersections carefully and pauses before entering an intersection			
21. Sets emergence brake or parking brake before leaving vehicle			
22. Demonstrates good, smooth movements and coordination during and after turns			
23. Demonstrates good scanning habits at all times			
24. Obeys traffic laws - including speed limits			

7. Teaching Tips:

Have students keep a driving journal where they record:

- a. What their driving behavior is (i.e., speeding, tailgating, not using their turn signals, obeying all traffic laws, wearing their seatbelt).
- b. What emotion is associated with their actions.
- c. How does the action and related emotion affect how safely they drive.
- d. How does their driving behavior impact other drivers and pedestrians.

Have students team up. One will observe the other's driving behavior, using the checklist above, then discuss each item. Suggest that the students have an experienced driver (such as a parent) observe them on a regular basis.

Suggested Review Questions

1. **True or False: Driving is a psychomotor skill that involves a set of motions that are instinctive reactions.**

False. The motions and skills used in driving are learned responses.

2. **Name the four sets of skills needed to be a good driver.**

Physical, mental, social, emotional

3. **True or False: Car handling skills are the most important part of good driving.**

False. While car handling skills are important, driving is primarily a thinking task and is more about good decision making and good risk management than physical skill.

4. **Name the five elements of the Smith System.**

- (1) Aim high in steering.
- (2) Keep the eyes moving - scan the scene.
- (3) Get the big picture.
- (4) Make sure others see you.
- (5) Leave yourself an "out."

5. **True or False: Many collisions could be avoided if drivers were not speeding.**

True. Most potential hazards fail to become actual hazards when the driver is going slowly enough to perceive and avoid them.

6. **What is the single most effective means of reducing fatalities and serious injuries when traffic crashes occur?**

Wear seatbelts

7. **Which of the following is true about risky driving behaviors (choose all that apply):**
- (1) A person can become a mature, competent driver with 50 hours of behind-the-wheel driving experience
 - (2) Teenagers are more likely to have traffic violations if their parents have traffic violations
 - (3) Novice drivers are usually able to safely handle the consequences of risky driving behavior, such as tailgating or speeding.
 - (4) Teenagers often pick up dangerous driving habits from their friends or relatives.
 - (5) Young drivers are more apt to be tentative and cautious in their driving habits

Numbers 2 and 4 are true.

8. **The National Safety Council's Alive at 25 program stresses that each driver has the ability and responsibility to do what?**

Control his/her own behavior.

9. **Which of the following is not true of driving (choose all that apply):**

- (1) Good drivers remain objective about other drivers' actions.
- (2) Stress is a major contributing factor to traffic disputes.
- (3) If a driver cuts you off in traffic, he is probably trying to make you miss your exit.
- (4) Most of the time, poor driving behavior occurs because the driver is not paying attention.
- (5) Good drivers will learn excellent car handling skills so they can use their car aggressively against other drivers.
- (6) The driver is the only one who can make driving decisions and choose to act in a particular way.

Numbers 3 and 5 are NOT true.

10. **List five (5) actions from the student driver checklist that should always be followed.**

See Checklist.

Resources

1. Printed Materials

A Handbook for Responsible Driving for Parents and Teens. Cobb County Teen Driver Awareness Committee, Cobb County, Georgia. May be found on the Web at www.nhtsa.dot.gov

Novice Driver Education Model Curriculum Outline. Prepared for the AAA Foundation for Traffic Safety. May be found on the Web at www.aaafoundation.org

Drive Right, Teacher's Edition. Scott Foresman

2. Web Sites:

Teen Drivers

The place for parents and teens to consider the issues that face every teen driver.

<http://www.TeenDrivers.com/>

Dr. Driving

Get a driving personality makeover! Delve into Driving Psychology!

<http://aloha.net/~dyc/>

Drivers.Com

Visit the Traffic Safety Village

<http://www.drivers.com/>

AAA Foundation for Traffic Safety

<http://aaafoundation.org/>

National Highway Traffic Safety Administration

<http://www.nhtsa.dot.gov/>

National Safety Council

<http://www.nsc.org/>

National Organizations for Youth Safety

40 national organizations comprises this impressive youth safety coalition.

<http://www.noys.com/>

TIP SHEET for PARENTS who are teaching their children to drive

Your biggest contribution to your teen's safety and effectiveness behind the wheel will be your example. Patience, courtesy, and a willingness to improve will be your best assets. Now is the time to review your own driving habits and offer your teen the example of courtesy and consideration for other road users. This may do more than anything else to ensure your teens driving safety.

Planning Practice Sessions

Random driving around during practice sessions can be dangerous. It's all too easy for the novice driver to get into trouble, particularly in the early stages. Before getting into traffic be sure that your teen has good coordination with hands and feet. Until the novice is sure of the pedals, the danger of hitting the wrong pedal in a panic situation is always present.

It's important to plan practice sessions. Decide where to go and what you are going to do before setting out. Take some care in selecting a suitable area. A large deserted parking lot is ideal for the initial sessions because it allows the beginner to concentrate fully on the feel of the controls and the response of the car.

For the initial street sessions find the quietest streets possible. Your teen will learn the correct road and traffic procedures from the professional instructor. Your job will be to provide good feedback while he or she practices these procedures.

Accurate lane driving and positioning for turns, good signal timing, and good road sense are the basic ingredients for passing the government road test. These will be learned more effectively by driving around the block with somebody who provides good feedback than by hours of random driving on highway or streets. On the other hand, a co driver who allows the novice driver to get away with faults or who provides poor feedback may hold back the learning process considerably.

Practice Hints

Stay alert. Some beginners may give the impression of being confident and in control but may be totally unprepared to deal with any sudden change in conditions and very reliant on you, the co driver, for guidance and even assistance in control. Anticipate problems and always be ready to react.

Communicate clearly: Give directions well in advance and try to always use the same terms (don't say accelerator one time and gas pedal the next, for example).

Don't hit the beginner with everything at once: a simple right turn, for example, involves several steps – checking mirrors, signaling, checking blind areas, braking, positioning, checking for traffic before the turn, steering, and recovery. To expect a beginner to follow all of these correctly during the early sessions is asking too much.

Don't get excited during practice sessions. This communicates itself quickly to the driver and can make performance difficult.

Don't overload: A big part of being an instructor or co driver is reminding the driver to check traffic and to signal and to bring attention to potential hazards. But once again, remember that everything you say is also a distraction for the driver. Be sparing in your comments and, above all, try to avoid letting the beginner get into situations he or she can't handle.

Stop and discuss: When your teen makes a mistake, he or she may not be clear as to what went wrong. Explaining and discussing while on the move is not very effective. The beginner is too busy driving! Stop as soon as you can, while the mistake is still fresh in the memory, and sort out the problem. Don't jump on every mistake, however, and make a big thing of it. This will affect the beginner's confidence and concentration on the driving task.

Don't clash with what the professional driving instructor teaches. If your teen is doing something that you think is incorrect and maintains that the driving instructor teaches this way, talk to the driving instructor. Student drivers often wrongly interpret their instructor's directions.