

## **Guide for Teachers: Risk Communication Initiative**

### **Students in grades 4-7**

#### ***Objective***

Driving a car has recognizable hazards, for example, we may collide with other drivers or there could be mechanical problems with our vehicle. Even though there is an inherent risk associated with this activity, this is accepted due to the transportation value and the safety systems in place. Furthermore, there are several prevention and mitigation measures that help make a safe drive, for instance:

- Prevention measures: car maintenance, drivers training, tires for all weathers.
- Mitigation measures: air bags, seat belt, impact barriers, emergency response personnel.

The game HazCars is designed for students in grades 4 through 7. It consists on a board with cards as complement. The main objective of the game is to teach the difference between hazards and risks related to driving. The young players are required to choose different road conditions, driving speed, and weather conditions. The routes associated with high speed, bad road/weather conditions have a shorter distance to drive; however, these routes show more hazards on the way. In contrast, the routes related to low speed or good road/weather conditions have a longer distance to drive, nevertheless, these routes face significantly fewer hazards. By making different choices, the students learn that every decision could lead to good or bad consequences. The ultimate goal is to teach each one of these future drivers to conduct this activity safely.

In addition to find hazards on their way, the students will also find prevention and mitigation measures, these can be used whenever they want to block a specific hazardous situation (prevention cards) or, to reduce the severity of an event (mitigation cards).

#### ***Texas Essential Knowledge and Skills for Grades 4-7***

The game HazCars could be incorporated into the Physical Education course for students in grades 4-7.

The Texas Essential Knowledge and Skills for Grade 4 (§116.6. Physical Education) states:

‘The student understands and applies safety practices associated with physical activities. The student is expected to: describe and apply safety precautions when cycling and skating; and identify potential risks associated with physical activities.’

In addition, the same document highlights: ‘Social development. The student understands basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance, and gymnastics.’

Similar statements are also found in the Texas Essential Knowledge and Skills for Grade 5 (§116.7. Physical Education), Grade 6 (§116.22. Physical Education) and Grade 7 (§116.23. Physical Education).

#### ***Preparation of the HazCars material***

The teacher should print the board game. Besides, he/she needs to print and cut the cards that complement the board. It is recommended to print the cards using the ‘both sides’ option of the printer - the cards have content on both sides. Furthermore, the teacher will provide one die and as many tokens as students want to participate. This game can be played in groups of 2-5 players.

### ***Activities after the game***

#### **✓ Quiz:**

1. Please list three hazards associated with driving

A: Collision, car failure due to mechanical problems, loss control of the car due to high speed, flat tire due to debris on the road, distraction causing near miss, and others.

2. Please list three prevention measures that help avoiding car accidents

A: Maintenance, drivers training, car inspection, tires for all weathers, and others.

3. Please list three mitigation measures that help to decrease the consequences of a car accident

A: Airbags, seat belt, impact barrier, prompt emergency response personnel, and others.

4. Please explain the difference between hazard and risk

A: A hazard is something that can cause harm. Risk is the chance, high or low, that any hazard will cause harm to somebody.

5. Describe the choices you made in the game and why you made them? Did your choices make the driving experience easier or more difficult?

A: This is an open-ended question; students are guided to choose the safer routes in the game.

6. What would you do if you play HazCars a second time? Would you make the same choices?

A: This is an open-ended question; students are guided to make better decision making.

#### **✓ Debate**

Students can be divided into two teams (5 in each team) in order to debate about the following topics. Compare the two choices:

- Choice A: High speed driver, hazardous road conditions and bad weather (shorter distances with more hazards on the road).
- Choice B: Low speed driver, good road conditions and good weather (longer distances with fewer hazards on the road).

Which one would you choose? Explain why.