Hi and Lois
By Brian and Greg Walker … June 12, 2011

Driving a car is all about multi-tasking.

Pressing the brake and accelerator pedals...

...Turning the steering wheel...

...Checking the mirrors...

...Keeping an eye out for other cars...

...Reading signs...

...Changing the radio stations...

HOLD IT!

That is two tasks too many!

...Watching the speedometer...

...Answering the cell phone.
Distraction Dodger Overview

• Purpose
  – To help teens and adults understand the importance of concentrating on driving and refraining from engaging in extraneous activities
  – To use the human factors of driving to increase interest in cognitive psychology as a potential career path through non-intuitive, open-ended, thought-provoking questions.
  – To gain attention for the field of human factors and the study of driving behavior by providing a unique and valuable tool for teen and adult drivers and those who educate them.
Distraction Dodger Overview

• Audiences
  – Primary audience: Teen drivers or drivers’ education students nationwide, ages 15-17, with a wide range of demographics.
  – Secondary audience: Driver education teachers and programs; departments of transportation/vehicle safety; university transportation programs throughout the country.
  – Tertiary audience: Pre-drivers ages 12-15 with a wide range of demographics with the goals of influencing later driving habits and encouraging them to influence parent and older sibling driving habits.
Distraction Dodger Development

• Distraction Game
  – The University of Minnesota’s Intelligent Transportation Systems Institute and the HumanFIRST Program collaborated to develop the game.
  – Other partners: WebCourseworks and David B. Glick
  – Distraction Dodger balances realistic driving situations with a clear safe driving message
  – The game has been carefully designed so that it does not result in users becoming so adept that they convince themselves they are capable of driving distracted.
Distraction Dodger Curriculum

• Lesson 1: Driver Distraction

• Lesson 2: The Extent and Impact of Distracted Driving

• Lesson 3: The Cognitive Psychology of Driver Distraction

• Lesson 4: The Impact of Distractions on Reaction Time

• Lesson 5: Technology Solutions to Driver Distraction
Users will...

- Be able to identify various distractions and their relative impact on driving ability, including kinesthetic, visual and auditory tasks.
- Be introduced to content-related vocabulary such as attention allocation, resource management, information processing and task loading.
- Have the opportunity to explore the scientific method and other concepts through data downloads.
- Understand safety implications (dangers and consequences) associated with distracted driving.
- Understand how cognitive psychology applies to driver distraction and other transportation issues.
Distraction Dodger Implementation

- University of Minnesota Summer Camps
  - 45 11th and 12th graders
  - Students interested in STEM majors
- Evaluation Survey
  - 63% of students said, as a result of playing game, they will drive less distracted
  - 70% of students said, some improvement in driving habits will take place due to game and curriculum
  - “Game was fun and should be used in driving courses”
Distraction Dodger Follow-up Survey

- Second follow-up survey distributed five months after camp
- 16 students responded
- Over half feel the game still impacts their everyday driving habits and decisions
- The game helped 15 of these students to encourage telling others about dangers of distracted driving
Distraction Dodger Demo
To access the materials:

- The game: http://www.its.umn.edu/DistractionDodger/game/

- The curriculum: http://www.its.umn.edu/Education/k12outreach/curricula/driverdistraction/

- Questions:
  – Contact Shawn Haag at haag0025@umn.edu or 612-625-5608