

The Effects of Selective Attention and Driving

Selective Attention

Susan McHale, Chelsee Wilson, Todd Peck
Published by *K20 Center*

This work is licensed under a Creative Commons CC BY-SA 4.0 License

Grade Level	9th – 12th Grade	**Time Frame**	2-3 class period(s)
Subject	Social Studies	**Duration**	90 minutes
Course	Psychology		

Essential Question

What is selective attention? What are the positive and negative effects of selective attention? How does selective attention, like texting, affect driving?

Summary

Students will identify what is selective attention through an auditory simulation and a video simulation. Students will brainstorm the positive and negative consequences of selective attention. Students will investigate the negative effects of selective attention such as texting and driving.

Snapshot

Engage

Students are introduced to the term "selective attention" and begin drafting a definition of selective attention with a partner.

Explore

Students explore the concept of selective attention further through watching a short video clip. After a general discussion, they refine their definition of selective attention and brainstorm the positive and negative consequences with selective attention.

Explain

Students read two articles and look at an info graphic about texting and driving. Students will create GIST statements about what they read. Students share the information learned by creating an info graphic or PSA poster about texting and driving.

Extend

Students create a survey to learn the demographics of how much and how often their high school's students text and drive.

Evaluate

The definition of selective attention, GIST statements, and the PSA poster or Info graphic serve as

assessments.

Standards

Oklahoma Academic Standards (Social Studies: Psychology (9th through 12th grade))

PS.3.4: Explain the processes of sensation and perception, as well as the capabilities and limitations of sensory processes including the visual, auditory, kinesthetic, olfactory,and gustatory sensory systems.
PS.3.5: Describe the interaction of a person and the environment in determining perception including Gestalt principles and how one's experiences and expectations influence perception.

Attachments

- The-dangerous-psychology-of-texting-while-driving - Spanish.docx
- The-dangerous-psychology-of-texting-while-driving - Spanish.pdf
- The-dangerous-psychology-of-texting-while-driving.docx
- The-dangerous-psychology-of-texting-while-driving.pdf
- Trying to Hit the Brake on Texting While Driving—The Effects of Selective Attention and Driving - Spanish.docx
- Trying to Hit the Brake on Texting While Driving—The Effects of Selective Attention and Driving - Spanish.pdf
- Trying to Hit the Brake on Texting While Driving—The Effects of Selective Attention and Driving.docx
- Trying to Hit the Brake on Texting While Driving—The Effects of Selective Attention and Driving.pdf
- texting-and-driving-infographic - Spanish.gif
- texting-and-driving-infographic.gif

Materials

- http://www.youtube.com/watch?v=IGQmdoK_ZfY
- Texting While Driving Infographic (attached)
- The Dangerous Psychology of Texting While Driving handout (attached)
- Trying to Hit the Brakes on Texting While Driving (attached)
- Poster materials or access to Piktochart website for infographics
- Student devices with internet access (optional)

Engage

The teacher tells the students he or she wants to conduct an experiment. The teacher asks students to close their eyes and be silent for a 90 seconds. They are just to listen with their eyes closed. After the 90 seconds have passed, they will be asked to write down all that they hear.

After the 90 seconds have passed, ask students to silently write down everything they heard without any discussion. Students will then stand up and form a group of 3 students. Have students discuss with their small group, the following questions:

1. Tell your group what you heard during the 90 seconds.
2. Were these things you have heard before?
3. If there was something that you had NOT heard before, why do you think you had NOT heard it previously?

Ask students to return to their seats and discuss these questions as a class.

Explore

Introduce the term "selective attention" and ask students how that term might apply to the experiment conducted previously.

Sample Student Responses

An example might be that "I never heard the air conditioner before because it's something in the background noise and not something I pay attention to." Ask students if they may have heard something for the first time because they simply had not paid attention to it before.

To deepen understanding of "selective attention", ask students to watch the following video clip. Tell students that their job is to watch a ball being passed to other players, By paying attention, they should be able to count how "many passes" the white team makes. You are looking for the correct number of passes by the team wearing white.

Play the "The Monkey Business Illusion" video and stop it when the answer is shown of "16 passes". Now ask students if they noticed anything else in the video. Have all students share. Allow all answers but do not share your knowledge about the video further. Then play the rest of the video.

Embedded video
https://youtube.com/watch?v=IGQmdoK_ZfY

Teacher's Note: The Monkey Business Illusion Video

The author Daniel J. Simons, of this video clip (and a book) makes the assumption that we "see" what we expect to see or that attention is usually focused (selective attention) on an expected outcome. In this video, some people do NOT see the gorilla, the player leaving the game, nor the curtain changing colors which were all unexpected.

After both the listening activity and the Monkey Business Illusion video, ask students to write a definition of "selective attention" with a partner. Then have the partners combine with another group, refine or combine their definition to one. Have groups of 4 share their definitions. You may wish to identify one class definition from the various submissions either through voting or by combining what students believe are the best definitions.

Explain

What are the positive and negative effects of selective attention? Pose this question to the student groups of 4. Ask them to fold a piece of notebook paper in half lengthwise or "hot dog" style. Have them brainstorm both the positive effects of selective attention and the negative effects of selective attention. Share all lists through a class discussion.

Tell students that they will be looking at one "negative effect" of selective attention-- when students text and drive. The student groups look at 3 documents related to texting and driving — 2 news articles and one info graphic. Student groups will create a GIST statement in their own words for EACH reading selection. The teacher may wish to select only one of the news articles provided in the interest of time.

Teacher's Note: GIST Reading Strategy

GIST (Generating Interactions between Schemata and Text) Reading Strategy- GIST is a comprehension strategy that can be used both during reading and after reading. It is one approach to summarizing a text. When using GIST, students create summaries that are 20 words or less for increasingly large amounts of text. By only allowing student summaries to be 20 words or less, the teacher is forcing students to use the three major strategies essential for comprehension and retention of key ideas in any text. Students delete trivial information, select key ideas, and generalize in their own words.- Students are forced to discard unnecessary and unimportant information so that they may focus on what is significant for them to understand and remember.

Have student groups share their summaries in a round robin fashion for each news article read and the info graphic.

Using the GIST statements, students create a PSA poster on the dangers of texting and driving to hang in the hallways or they create an Info graphic of their own using PiktoChart.

Teacher's Note: PiktoChart

Info graphics are a way to share information in a chart format. Using Info graphics allow students to summarize and synthesize large amounts information into both pictures/graphics and simple messages. Creating an info graphic is both a 21st century skill and a literacy strategy. PiktoChart is very easy to use and the teacher can create one teacher account or students can create their own free account.



https://learn.k20center.ou.edu/lesson/478?rev=23429



https://learn.k20center.ou.edu/lesson/478?rev=23429

This info graphic image can be reproduced and is in the student zip folder. The website also has a "no texting" pledge where students can sign up. Source: http://www.kars4kids.org/texting/" target="_blank"> http://www.kars4kids.org/texting/

Extend

How often are your peers texting and driving? What would encourage them to stop? As an extension activity, have students create a student poll or survey that includes information learned from this lesson. Free surveys can be created at Survey Monkey.

1. Have them brainstorm 7 to 10 possible questions in their groups.
2. All groups share questions and combine similar ones.
3. Students fist vote from 1 to 5, all questions with a 5 receiving the most votes.
4. The process continues to narrow down in the same manner as number #3, until the top five to six most important questions are revealed

The selected questions become the student survey that is given to all students via Survey Monkey. You may wish to divide your class or classes into three groups: 1) one group will solicit students to take the survey at lunch or present it to other classes 2) another group compiles the information and a 3) third group creates charts or an info graphic of the information compiled.

Evaluate

The definition of selective attention, the GIST summaries, the poster or Info graphic product can all serve as assessments. The Extend activity is optional.

Resources

- A further video on misdirection and attention is a Ted Talk at: https://www.youtube.com/watch?v=GZGY0wPAnus
- K20 Center. (n.d.). PiktoChart. Tech Tools. https://learn.k20center.ou.edu/tech-tool/2394
- Simons, Daniel. (2010, April 28). *The Monkey Business Illusion* [Video]. YouTube. http://www.youtube.com/watch?v=IGQmdoK_ZfY