

CERCA SET **Distracted Driving**
English Language Arts

How can engineers and lawmakers improve driver safety and minimize driver distraction?

LESSON TITLE **Could Driverless Cars Solve Distracted Driving?**

CERCA QUESTION Are driverless cars the solution to distracted driving?

RESOURCES

- **Build Background Knowledge**
<https://www.pinterest.com/thinkcerca/distracted-driving-cerca-set-board/>
- **CERCA Framework**
- **Vocabulary Routine**
- **Speaking and Listening Routines**

	Whole group		Online
	Small group		Offline
	Individual activity		Activity time period
	Speaking and listening activity		Audio
			Available in English and Spanish

Introduce the CERCA Question



Introduce the concept of self-driving cars by citing the prevalence of distraction and thus human error while driving. Briefly explore the advantages and disadvantages of driverless cars, and ask students to express their opinions about this technology.

1 Connect



Have students log in to ThinkCERCA and click into this lesson.

Introduce Vocabulary



Use **Semantic Webbing** to introduce vocabulary

NOTE: Some students will need support for additional words not listed on the student support page. Weave them into the instruction.

LEVEL 3-4 Expanding

▶ **ASK:** What are some examples of computers that have replaced people?

Support language acquisition with the following sentence frame:

Computers have replaced people in _____.

▶ **ASK:** What are some advantages and disadvantages of driverless cars?

Discuss students' opinions about the efficacy and safety of driverless cars. Ask students to cite examples to support their opinions.

LEVEL 3-4 Expanding

Read the overview aloud and discuss vocabulary. Then read the writing prompt aloud for students before they answer.

Complete Step 1: Connect.

LEVEL 3-4 Expanding

Assign vocabulary words to small groups, or to partners. For small groups, assign a word and have them map it out on the whiteboard. When they are finished they can take a minute to explain it while classmates copy the map down. For partner work, have mixed ability pairs create maps for all assigned words in their notebooks.

After the routine have students add the focus words to their word notebooks.

LEVEL 4-5 Bridging

▶ **ASK:** What are some advantages and disadvantages of driverless cars?

Discuss students' opinions about the efficacy and safety of driverless cars. Ask students to cite examples to support their opinions.

LEVEL 4-5 Bridging

Complete Step 1: Connect.

LEVEL 4-5 Bridging

Depending on student familiarity with the vocabulary words you can create webs for all new words, or just the most challenging words. Have students work in pairs to write their own definition of the word in English. Next, have them brainstorm an image or mental picture to illustrate each word.

After the routine have students add the focus words to their word notebooks.

Introduce the Summary



Remind students that this is a summary for the passage they will read. Point out the Vocabulary as you read.

LEVEL 3-4 Expanding

Have students read the Spanish version on the student support page, if applicable, before you read the summary aloud and have students follow along.

LEVEL 4-5 Bridging

Ask a student to read aloud the summary in English to practice their fluency.

2 Read



Have students read the text, using Vocabulary from the student support page as appropriate.

LEVEL 3-4 Expanding

Read comprehension questions with students before they begin reading the passage.

Complete Step 2: Read.

Discuss comprehension questions. Point out key vocabulary words in the text, especially as they are relevant to finding answers.

LEVEL 4-5 Bridging

Complete Step 2: Read.

Discuss comprehension questions. Point out key vocabulary words in the text, especially as they are relevant to finding answers.

3 Engage with the Text



NOTE: If you have concerns that your students are struggling with comprehension, you may wish to work with them on Step 4: Summarize before Step 3: Engage with the Text.

LEVEL 3-4 Expanding

Model highlighting the text for students.

Complete Step 3: Engage with the Text.

Use the following sentence frames to discuss the highlights students made.

Driverless cars run by _____.

This may be safer than humans driving because _____.

LEVEL 4-5 Bridging

Complete Step 3: Engage with the Text.

Discuss the highlighting students did. Ask students to share their highlights and notes, and use the following sentence stems to support student engagement in the conversation.

Self-driving cars can _____ which is safe because _____.

Driverless cars are also very efficient because _____.

4 Summarize



Prepare students to write a CERCA by having them summarize the text.

LEVEL 3-4 Expanding

Complete a summary of the article together using either the suggested sentence frames below or the stems in the product. Encourage students to use Vocabulary from the lesson.

Use the following sentence frames to create a summary.

Driverless cars _____, **which overcome driver distractions such as** _____.

Self-driving cars might be safer because _____.

Complete Step 4: Summarize.

LEVEL 4-5 Bridging

Complete Step 4: Summarize.

Review the summaries to ensure that all students understand the big ideas of the passage. Encourage students to use Vocabulary from the lesson.

5 Build Your Argument



Practice creating a CERCA together using the CERCA graphic organizer (online or offline) and the leveled frames below and on the student support pages. Remind students that some of their evidence can come from their highlighting work.

NOTE: You may wish to have students orally respond to the CERCA question using a Listening and Speaking Routine instead of writing a response.

LEVEL 3-4 Expanding

Use the following sentence frames to complete the CERCA graphic organizer.

Claim *Self-driving cars [are/are not] the solution to distracted driving*

Reason because _____.

Evidence *Driverless cars run by* _____

Reasoning *which makes roads [safer/less safe] by* _____.

Counterargument *Some people argue that driverless cars would be a [good/bad] solution to distracted driving. However, others say that they would be* _____.

Complete Step 5: Build Your Argument.

LEVEL 4-5 Bridging

Have students share their thoughts with the group.

Use the following sentence frames to complete the CERCA graphic organizer.

Claim *Driverless cars [will/will not] solve the problem of distracted driving*

Reason because _____.

Evidence *Driverless cars run by* _____

Reasoning *which makes roads [safer/less safe] by* _____.

Counterargument *Some people argue that* _____ *. However, others say that* _____ *would* _____.

Evidence _____ *also [contributes/does not contribute] to safer roads*

Reasoning because _____.

Have students complete the graphic organizer with at least one more piece of evidence and associated reasoning. Assist as needed.

Complete Step 5: Build Your Argument.

6 Create Your CERCA



Have students write their CERCA in the lesson online so that you can provide feedback and monitor growth.

NOTE: Remind students that they can use the Copy all button to move their work into the text box.

LEVEL 3-4 Expanding

Use the responses students made in the graphic organizer to model writing in response to the CERCA question.

Have students reread their draft. Then have them submit to complete Step 6: Write Your CERCA.

LEVEL 4-5 Bridging

Have students write their CERCA. Provide support as necessary. Remind students that they can use vocabulary words as they write.

Use this sentence frame to help students conclude their CERCA:
Driverless cars run by _____ which could mean _____.

Have students add a conclusion and then reread their draft. Then have them submit to complete Step 6: Write Your CERCA.

Complete Speaking and Listening Activities



Complete a whole group speaking and listening activity with all students who completed the grade level lesson. Prompt students to use the vocabulary from the passage in the activity.

LEVEL 3-4 Expanding

Do the **Fishbowl Activity** with students. Modify the activity for these students by providing them with questions in advance of the discussion, and with appropriate sentence frames to support them in answering those questions so that they will be ready to participate in discussion.

LEVEL 4-5 Bridging

Do the **Fishbowl Activity** with students. Modify the activity for these students by providing them with questions in advance of the discussion.

Vocabulary

assume (verb): take

*autonomous (adj.): independent

beacons (noun): lights that are used as guides

*distracted driving (noun): the act of driving while engaged in another activity

*enact (verb): put into action

evasive (adj.): unclear

fatalities (noun): accidents that result in death

gauge (verb): measure

*human error (noun): a mistake made by a person

penetration (noun): the action of making it into something

prohibition (noun): an official ban

*prompted (verb): caused

Summary

Between 2020 and 2025 there will be driverless cars on the road that will allow their passengers to be as distracted as they want to be, a panel of engineers announced recently. If technology continues as it is progressing now, partially automated cars will be on the road in significant numbers by 2016. More highly automated vehicles will be here by 2020 and driverless cars by 2025. Driverless cars can be safer than human drivers because the brain needs to be prompted to steer in a new direction or brake to avoid a collision, whereas cameras, radar and lasers can read the surroundings and take evasive action. Driverless cars allow us to avoid human error altogether, which is constantly increasing as drivers become more and more distracted, especially by technology. Nonetheless, it will still be challenging for people to accept self-driving cars.

LESSON TITLE **Could Driverless Cars Solve Distracted Driving?**

CERCA QUESTION Are driverless cars the solution to distracted driving?
 Los autos de conducción automática, ¿son la solución para las distracciones al conducir?

Vocabulary

English	Español
assume (verb): take	asumir (verbo): tomar
*autonomous (adj.): independent	*autónomo (adjetivo): independiente
beacons (noun): lights that are used as guides	balizas (sustantivo): luces que se utilizan como guías
*distracted driving (noun): the act of driving while engaged in another activity	*distracciones al conducir (sustantivo): el acto de conducir mientras se está ocupado en otra actividad
*enact (verb): put into action	*promulgar (verbo): poner en acción
evasive (adj.): unclear	evasivo (adjetivo): incierto
fatalities (noun): accidents that result in death	fatalidades (sustantivo): accidentes que tienen como resultado la muerte
gauge (verb): measure	calibrar (verbo): medir

Vocabulary continued

***human error**

(noun): a mistake made by a person

***error humano**

(sustantivo): un error cometido por una persona

penetration

(noun): the action of making it into something

penetración

(sustantivo): la acción de entrar dentro de algo

prohibition

(noun): an official ban

prohibición

(sustantivo): hacer que algo sea ilegal

***prompted**

(verb): caused

***solicitado**

(verbo): inducido

Could Driverless Cars Solve Distracted Driving?

Are driverless cars the solution to distracted driving?

Los autos de conducción automática, ¿son la solución para las distracciones al conducir?

Summary

English Between 2020 and 2025 there will be driverless cars on the road that will allow their passengers to be as distracted as they want to be, a panel of engineers announced recently. If technology continues as it is progressing now, partially automated cars will be on the road in significant numbers by 2016. More highly automated vehicles will be here by 2020 and driverless cars by 2025. Driverless cars can be safer than human drivers because the brain needs to be **prompted** to steer in a new direction or brake to avoid a collision, whereas cameras, radar and lasers can read the surroundings and take **evasive** action. Driverless cars allow us to avoid human error altogether, which is constantly increasing as drivers become more and more distracted, especially by technology. Nonetheless, it will still be challenging for people to accept self-driving cars.

Español Entre 2020 y 2025 habrá automóviles de conducción automática en la calle que permitirán a sus pasajeros estar tan distraídos como quieran, anunció un panel de ingenieros recientemente. Si la tecnología continúa como ha progresado hasta ahora, los automóviles parcialmente automatizados estarán en números significativos en las calles para el año 2016. Más vehículos automatizados estarán aquí para el 2020 y los automóviles de conducción automática para el 2025. Los automóviles de conducción automática son más seguros que los conductores humanos porque el cerebro necesita que le soliciten que mueva el volante en una dirección diferente o frenar para evitar una colisión, mientras que las cámaras, el radar y el láser pueden leer el entorno y tomar acciones **evasivas**. Los automóviles de conducción automática evitan los errores humanos en su totalidad, lo que está constantemente en aumento al volverse los conductores más y más distraídos, especialmente por la tecnología. Sin embargo, continuará siendo un desafío que las personas acepten los automóviles de conducción automática.

Could Driverless Cars Solve Distracted Driving?

Are driverless cars the solution to distracted driving?

4 Summarize

Driverless cars _____,

which overcome driver distractions such as _____.

Self-driving cars might be safer because

_____.

5 Build Your Argument

Claim *Self-driving cars [are/are not] the solution to distracted driving*

Reason *because* _____.

Evidence *Driverless cars run by* _____

Reasoning *which makes roads [safer/less safe] by*

_____.

Counterargument *Some people argue that driverless cars would be a [good/bad] solution to distracted driving. However, others say that they would be* _____.

5 Build Your Argument

Claim *Driverless cars [will/will not] solve the problem of distracted driving*

Reason *because* _____.

Evidence *Driverless cars run by* _____

Reasoning *which makes roads [safer/less safe] by*
_____.

Counterargument *Some people argue that*
_____.

However, others say that _____ *would*
_____.

Evidence _____
also [contributes/does not contribute] to safer roads

Reasoning *because* _____.

6 Create Your CERCA

Driverless cars run by _____, *which could mean*
_____.