

SHOULD WE OPERATE SELF-DRIVING CARS?

THIS ACTIVITY SHOULD TAKE ABOUT 90 MINUTES. IF STUDENTS ARE ABLE TO REVIEW MEDIA FOR HOMEWORK, IN-CLASS TIME SHOULD BE 45 TO 60 MINUTES.

INVESTIGATE

Read, watch, and listen to the three media resources on the Thinkalong module. Students can use the Investigate graphic organizer to summarize each piece of media and record new information. Below are summaries of the three pieces of media curated in the Thinkalong module.

ETHICS AND SELF-DRIVING CARS

PBS | May 15, 2018 | Video
2:57 minutes

A video clip from NOVA that briefly looks into self-driving cars, and questions the role ethics plays within them.

- There are challenges regarding the coding that goes into ethical concerns such as the “trolley problem” (whether to kill 5 people or one).
- The video author discusses decisions within coding that work off of top-down approach: examples including valuing a human life over an animal’s, or deciding to move closer to a truck than a bicycle.
- There’s also possibility for a bottom-up approach, where the car acts dependent on the driver’s preferences.
- While they’ve trained the cars’ AI with real-life examples and feedback on how to act, there’s a concern regarding extreme scenarios where to save others, the driver is sacrificed.
- Considering that 94% of accidents are caused by human error and emotional reaction, self-driving cars pose the potential for overall safer roads.

LETTING GO OF THE WHEEL: HOW GOOGLE IS EASING PEOPLE INTO SELF-DRIVING CARS

NPR | July 31, 2015 | Audio
4:28 minutes

An audio interview with Allysya Bowman: a Google employee that tests self-driving cars that investigates Google’s tactics to convince skeptics.

- When auto-driving, the system within the Google car detected a temporary stop sign nearly immediately after encountering it, slamming the breaks by itself.
- Steve Henn says that the “car sees more than we do. It doesn’t get distracted.” He notes that however, trusting in these safety features won’t necessarily convince people to convert, and that Google must think critically about the car’s design.
- Google had originally intended to keep the steering wheel in as an effort to convince people they could grab control at any moment, though second-guessed that decision at the thought that more often than not, it wouldn’t be utilized.
- Inclusion of windows, voice-activated command, and a big red “stop” button are design features that may alleviate the concerns of skeptics and give them the illusion of control.

WHY IT'S TIME TO THINK ABOUT SELF-DRIVING CARS IN REGARDS TO PARKING

NPR | May 28, 2019 | Audio

3:24 minutes

An audio discussion amongst Shankar Vedantam, Rachel Martin, and Adam Millard-Ball on the potential complications that self-driving cars pose to parking.

- Shankar Vedantam claims that when we think about the future of self-driving cars, we think about their ability to get us to new destinations safely, but not about what changes may occur in regards to parking.
- Adam Millard-Ball notes that autonomous cars can avoid parking restrictions, such as two-hour limits.
- Vedantam and Rachel Martin discuss the environmental damage and gas/battery insufficiency of cars that drive around to avoid parking tolls.
- Vedantam wonders if cars could create their own traffic jams, or drive around residential streets as an alternative to parking.
- Vedantam mentions that Millard-Ball's experiments question the once established line between parking and driving, prompting the question on how cities would earn revenue from self-driving cars, should they decide not to park.

KEY WORDS

Look out for these important keywords in the news stories. Discuss the definitions with your classroom and see how they affect the understanding of the story.

- Ethics
- Human
- Automation
- Safety

CONTEMPLATE

Students will use media literacy questions to critically engage with news by thinking about its purpose, searching for bias and discussing missing perspectives. They will answer the 5 Key Questions of Media Literacy created by the Center for Media Literacy, which are:

1. Who created this message?
2. What creative techniques are used to attract my attention?
3. How might different people understand this message differently than me?
4. What values, lifestyles and points of view are represented in, or omitted from, this message?
5. Why is this message being sent?

A graphic organizer is included in this guide and the Thinkalong website to help students answer these five questions about each piece of media.

DEBATE

Students will engage their peers in an evidence-based debate using the media they just analyzed. Use the debate tool on the module webpage to help form an evidence-based response to the debate question.

In addition to rich in-class discussions, teachers can also connect with other classrooms through the Thinkalong website.