

Name: _____

PHILOSOPHY OF SCIENCE - Summer 2018

Writing Assignment #3: Explaining the “Science Communication Paradox”

On many topics there is a **gap** between what the **public** thinks about certain scientific issues and the **consensus opinion of scientists** on those issues.

This chart shows some examples of this gap.

(AAAS scientists = the American Association for the Advancement of Science)

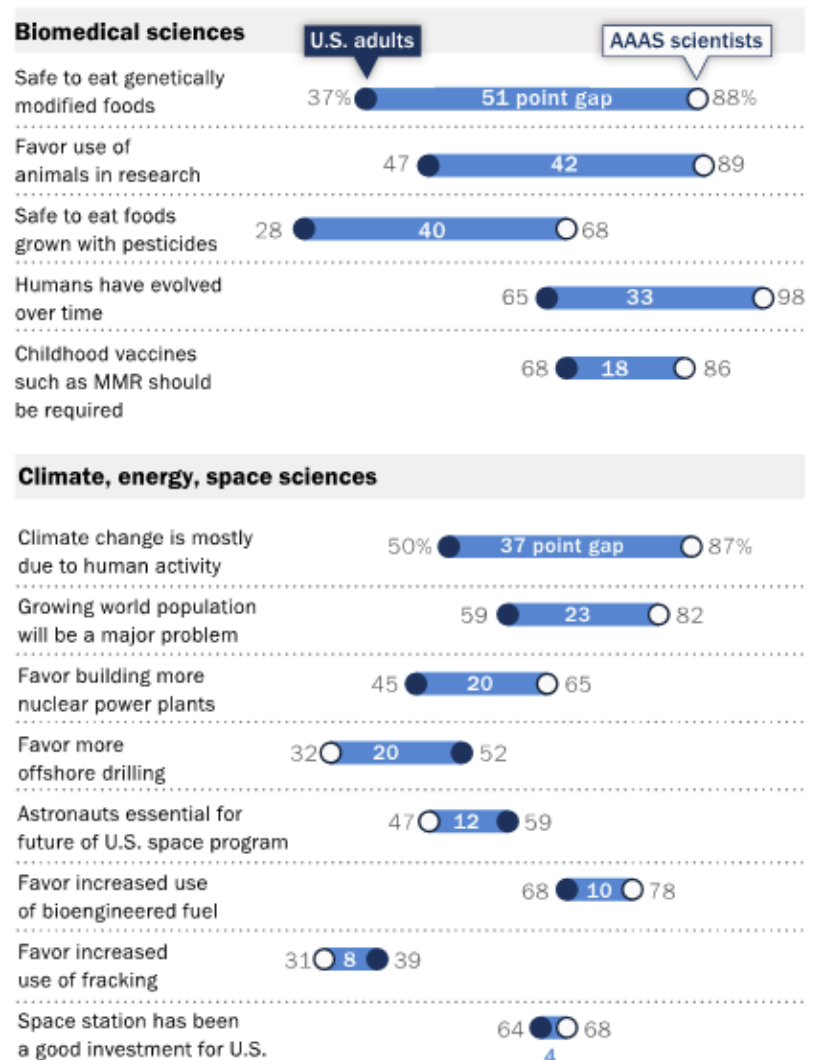
- 88% of scientists say that it's safe to eat genetically modified foods. Only 37% of US adults think so.
- 87% of scientists say that climate change is mostly due to human activity. Only 50% of US adults think so.
- etc

I'm attracted to the romantic notion that **improvements in science literacy** can be helpful in **closing these gaps**, but **Dan Kahan's research** has shown that there are **cultural factors** that need to be understood if we want those efforts to be successful.

His article, titled "**What Is the Science of Science Communication**"? is attached.

Opinion Differences Between Public and Scientists

% of U.S. adults and AAAS scientists saying each of the following



Survey of U.S. adults August 15-25, 2014. AAAS scientists survey Sept. 11-Oct. 13, 2014. Other responses and those saying don't know or giving no answer are not shown.

PEW RESEARCH CENTER

What Is the “Science of Science Communication?” (Dan Kahan)

On a separate sheet of paper, write short answers to the questions below. On Monday you’ll bring to class this assignment sheet, with your answers, stapled as a unit. Be prepared to discuss the questions in groups.

Question 1:

What is the “**science communication paradox**”?

Question 2:

One popular explanation of the science communication paradox is what Kahan calls the “public irrationality thesis” (PIT).

What is the “**public irrationality thesis**”, and how does it explain the paradox?

Question 3:

Kahan prefers what he calls the “cultural cognition thesis” (CCT) over the public irrationality thesis, to explain persisting gaps between what the public believes and what scientists believe.

What is the “**cultural cognition thesis**”? How does it explain the paradox?