

Pre-Work / Heads-Up

Have students brainstorm on their topic in advance (maybe in groups)

- Discussion board prompt; submissions can be used to form groups
- Can ask students to connect this to their current / future lives
- Or we have them form their own groups, and within the groups decide on a question

(Optional) Warm-Up:

Post a few questions and ask students which ones would be appropriate to answer with a confidence interval.

Include questions from a variety of topics to get them thinking about different themes: the environment, social justice, sports, music, movies, etc.

Examples:

1. What proportion of students at (institution) identify as male?
2. How many hours do students spend, on average, volunteering in the community?
3. Which type of smartphone is most popular among students at our college?
4. What is the average number of course units/credits that students take per semester?
5. What proportion of college students think that climate change is a real problem?
6. Do humanities majors spend more time at the campus library, on average, than other majors do?

Main Activity:

Students work in groups of 3-5. Their task is to choose a topic that is of interest to them, and pose a question that can be investigated using confidence intervals. They gather data (directly or from an online source), construct a CI, and interpret their results.

Deliverable: a PPT/Google Slides "proposal." They work on this in class, and submit the final version as a HW / extra credit assignment. Students who miss class either do this on their own or are placed in a group with other absent students to complete the work.

[Link to Google Slides template](#)