

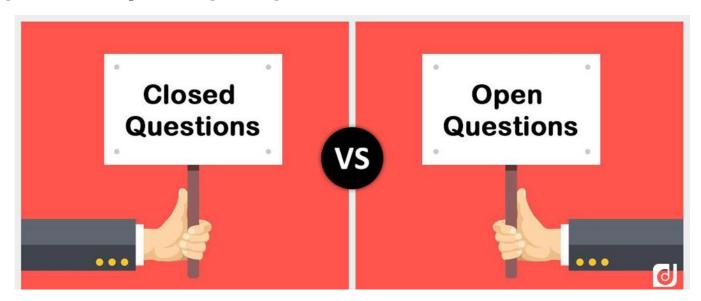
Closed-ended questions can be answered with a short or one-word answer. A verifiable fact. They usually provide evidence or data, and are often quantitative.

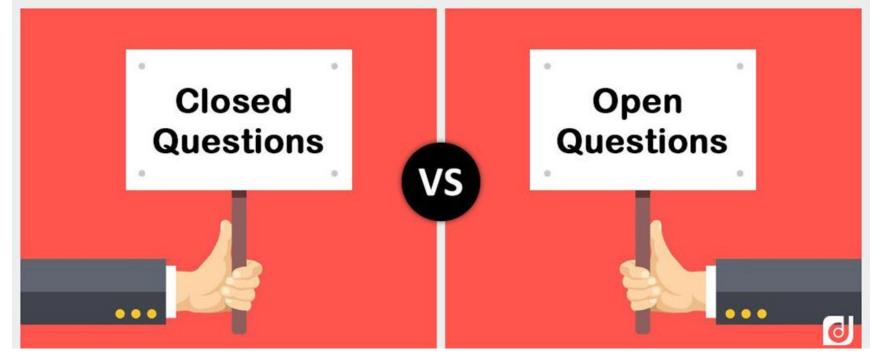
Open-ended questions require an explanation and cannot be answered with a "yes," "no," or with one-word. They often start with how, what, why.

The following slides show examples of closed and open questions.

Both kinds are needed when doing research. They work together.

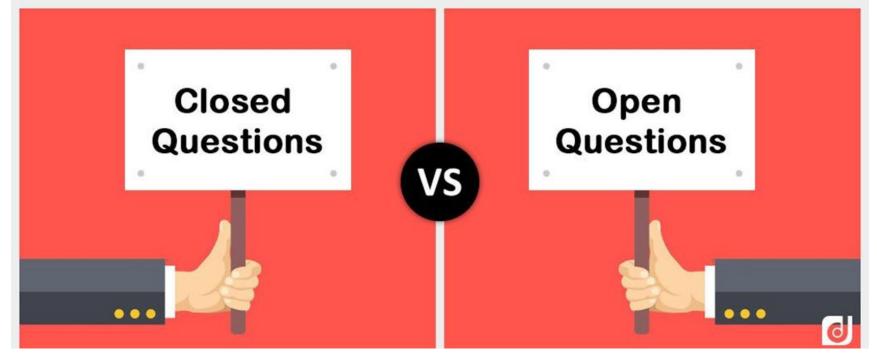
Closed questions help you gather the data/evidence you need to help answer your open questions.





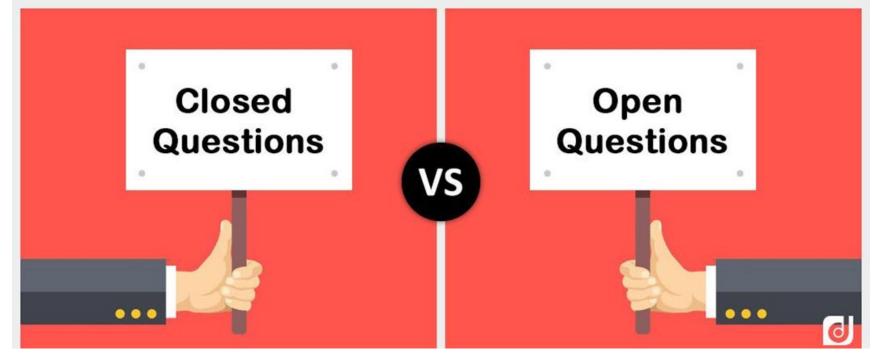
- Do all states have community colleges?
- What is the cost of attending community college vs. a 4 year college in NJ?
- What is the average family income of community college students?
- What percentage of community college students are working full-time?
- Are there more evening classes on average at NJ community colleges than at NJ 4-yr colleges?

Why do many students choose to attend Community Colleges?



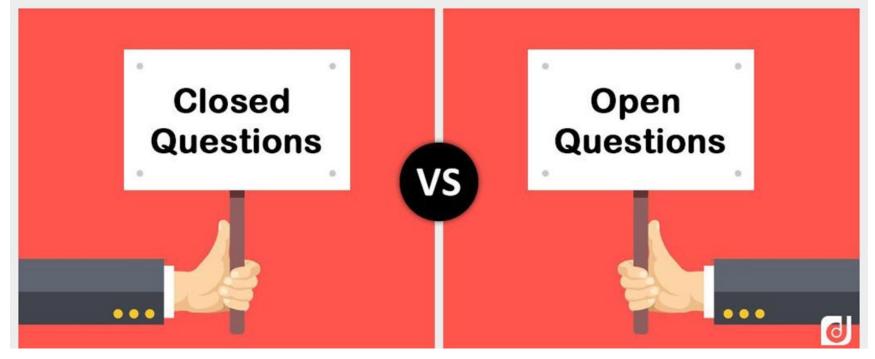
- What percentage of high school students play video games?
- What is the best-selling multi-player video games for high school students? What are their characteristics?
- Are there any correlations between the number of students who a) receive detention, b) have GPAs over 3.5, c) play sports, and those who play video games?

How does playing multi-player video games affect the social behavior of players at school?



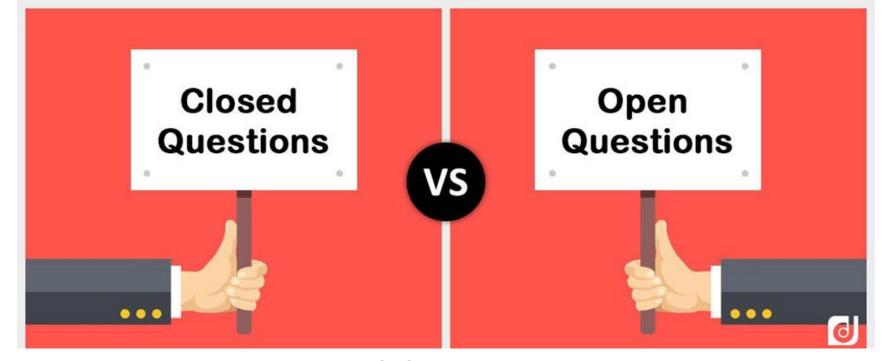
- When did the Internet become widely available to college students?
- How much time do current college students spend online--on social media, vs. on schoolwork?
- How much time did college students spend watching TV in the 1960s?
- How much reading/studying was typical for college students in the 1960s vs. today?

How is the Internet affecting the reading habits of college students?



- What is current rate of melting of the polar ice caps?
- What was the ice cover in 1960 vs. 2020?
- What was the population of polar bears in the Arctic in 1960 vs. 2020?
- What was the population of penguins in the Arctic in 1960 vs. 2020?
- If Arctic species are endangered today, when did they become recognized as endangered?

How is the melting of the polar ice caps affecting Arctic wildlife?



- How many people use Twitter daily (in the USA)?
- What percentage of tweets are negative vs positive?
- Are there any cases where tweets may have influenced the judicial process, medical decisions, consumer behavior?

How has social media affected what it means to be human?

Slides prepared by D. Scharf, New Jersey Institute of Technology as part of the Question Formulation Technique curriculum.

Please let me know if you add more examples; I can include them here. Contact scharf @ njit.edu

<u>Link to this presentation</u> and more materials on asking good questions at <a href="https://researchguides.njit.edu/researchgu



