

What is Data? Transcript

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We hear the word “data” all of the time. It is collected, analyzed, shared, hacked, bought and sold. But what exactly is data? [Data](#) are collected observations or measurements represented as text, numbers, or multimedia.

When we think of data we may immediately think of numbers but data can also be

- Field notes
- Videos
- Audio recordings
- Photographs
- Documents and
- Transcripts

What you consider to be data will be different depending on your area of research. For example, if you’re researching the impact of wildfires on national parks your data may be satellite maps and images. But if you’re researching graduation rates of college students with faculty mentors your data might be the number of graduates each year and the amount of time taken to earn their degree. Data will be different based on what you study.

Data can be broadly categorized as qualitative or quantitative. Quantitative data can be expressed as a number, and counted or compared on a numerical scale. This would include such things as rating scales from surveys, temperatures observed, or measurements gathered. It could also include things like counts of words used in a book or the number of attendees at an event.

Qualitative data are information about qualities or characteristics that cannot be expressed as a number. They aren't easily measured. Qualitative data include things like textual descriptions of events, maps, pictures, or transcripts. There are other ways to categorize data, but most fall in one of these two broad categories.

Data are not the same as statistics. Statistics are the result of data analysis and interpretation, so be sure not to use the two words interchangeably.

Analyzing and interpreting data can help you identify patterns and trends, offer solutions to complex problems, or better understand scientific phenomena. Data are powerful aids in our attempt to understand the world.

If you want to learn more about finding, accessing, and using data, visit the UH Libraries Finding Data Guide (<https://guides.lib.uh.edu/data>).

Sites consulted:

<https://libguides.macalester.edu/c.php?g=527786&p=3608639>

<https://www.lib.umn.edu/datamanagement/whatdata>

<https://www.lib.ncsu.edu/do/data-management/defining-research-data>

<https://libguides.macalester.edu/c.php?g=527786&p=3608657#:~:text=The%20Difference%20Between%20Data%20and%20Statistics&text=data%20are%20individual%20pieces%20of,analysis%20%2D%20its%20interpretation%20and%20presentation.>