
Lecture 1: What is Data?

Part 1: Understanding the Big Ideas

Answer the following questions in your own words.

1. What do we mean by the word *data*?
2. Why does the reading say that data by itself is not very meaningful?
3. What is the difference between collecting data and interpreting data?

Part 2: Data in Everyday Life

Think about one normal day in your life. Answer the following questions.

4. List three ways that data about you might be collected during a normal day.
5. For one of the examples above, explain who might collect that data and why they would want it.
6. The reading introduces the term *datafication*. Explain what this means in one or two sentences.

Part 3: Telling a Story with Data

Answer the following questions.

7. Suppose a student wants to show that dining hall lines are longest around noon. What data might they collect?
8. Who might be the audience for this data story?
9. What is one graph or chart that could help communicate this story clearly?
10. Why might the same results need to be presented differently to students than to campus administrators?

Part 4: Classifying Data

For each variable below:

- first classify it as **Quantitative** or **Qualitative**
 - then classify it more specifically as **Continuous/Discrete** or **Nominal/Ordinal**
 - briefly explain your reasoning
11. Number of classes a student is taking
 12. Time spent studying for an exam

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13. Favorite fast-food restaurant
 14. Class standing (First-Year, Sophomore, Junior, Senior)
 15. Letter grade in a course
 16. Number grade in a course

Part 5: Create Your Own Examples

Come up with your own example for each of the following. Try not to reuse examples directly from the notes.

17. A variable that is Quantitative Continuous
18. A variable that is Quantitative Discrete
19. A variable that is Qualitative Nominal
20. A variable that is Qualitative Ordinal

Final Reflection

21. What is one idea from this activity that still feels confusing or that you want to hear explained in the follow-up video?