

Digital Visualization

Lesson 3
Lab for Education and Advancement in Digital Research
leadr.msu.edu

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Questions to ask ourselves before we start a survey

- What question do I want to answer?
- What data do you need to answer this question?
- What population am I aiming to survey?
- Where am I going to disseminate this survey and how?
- What time period will the survey be open?

What can impact our surveys?

Data Visualization and Representations

Why do we visualize our data?

What does this do for us as researchers and for communication?

Can you think of any instances that data visualization was really impactful to you in understanding a phenomenon?

Thinking about Data Visualization

- <https://medium.com/@giorgialupi/data-memos-3927ab7e822a>
- Construction
 - Data isn't neutral, what is included and what isn't included in your visualization will tell a different story!
- Proportions
 - Ratio is often more important than the numbers themselves, especially when you are doing comparisons
- Context
 - What happened when you were collecting these data points? Relevant context with the numbers will tell you more about the phenomenon!

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- Frame:
 - Goes with context, but sometimes if you extend beyond the time-period you collected data in, it will tell a different story, or if you zoom in!
- Uncertainty:
 - Sometimes there is missing nuance in the data we are representing, incorporating some uncertainty or nuance into your visualization may tell a better story
- Blanks:
 - What about data we didn't collect, what does that say? It can still be valuable data to represent if you are missing some points, but including this can give a different message
- Traces:
 - Do you want to show in your visualization where you got this data from, or how it was processed before you got the final visual?

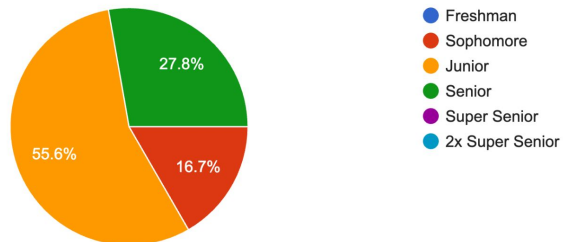
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- **Coherency:**
 - The same kinds of visualization will not work for every type of data you are trying to visualize or the audience you are trying to talk to!
- **Complexity:**
 - Need to balance out the commitment to representing the complex nature of the data we are visualizing with readability
- **Engagement:**
 - Who is the audience? Does it speak to a broader audience in its representation?
- **Stage:**
 - Where are you displaying this data??? What kinds of visualization suit it the best?
- **Humanity**
 - How do we preserve the individuality of humans that may make up these data points? Is this data relatable to people in their everyday lives?

Visualizing your charts in Google Forms

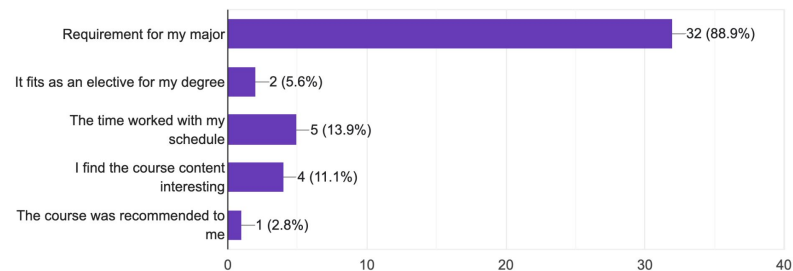
What academic year are you in?

36 responses



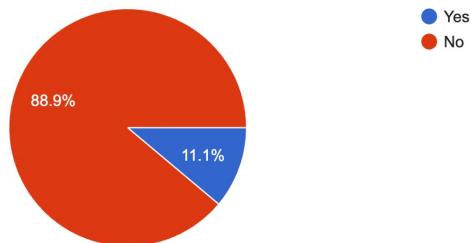
Why are you taking this course? Please select all that apply

36 responses



Have you taken an anthropology course before?

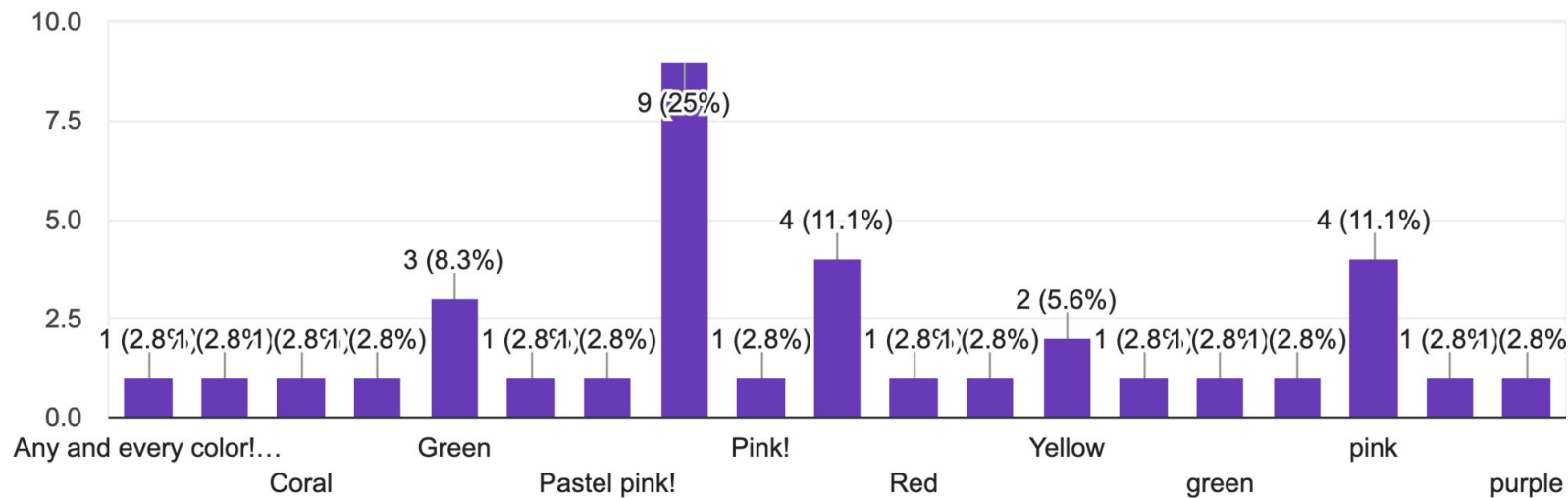
36 responses



A word of caution

What is your favorite color?

36 responses



Using Google Sheets

- Import to Google Sheets directly from Google Forms
- Change the chart visualization for any chart that you already have
- Use Pivot tables! - allows you to compare two questions at once

<i>What academic year are you in?</i>	<i>Why are you taking this course? Please select all that apply</i>	
Junior	Requirement for my major	12
	Requirement for my major, I find the course content interesting	2
	Requirement for my major, The time worked with my schedule	2
Junior Total		14
Senior	I find the course content interesting	1
	It fits as an elective for my degree	1
	Requirement for my major	6
	Requirement for my major, The time worked with my schedule	1
	The course was recommended to me	1
Senior Total		9
Sophomore	It fits as an elective for my degree	1
	Requirement for my major	3
	Requirement for my major, The time worked with my schedule	1
	Requirement for my major, The time worked with my schedule, I find the course content interesting	1
Sophomore Total		6
Grand Total		23

Let's Brainstorm!

Thank you!

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Office Hours:

Monday 10am - 3pm

Thursday 10am - 5pm

Fridays 10am - 1pm

Email policy: I am available through email during my office hours; if you email me at other times, I will do my best to respond within 24 hours during the work week.