

Digital Research Project: Creating and Analyzing Surveys

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SOCL 2321 Research Methods
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Sample: Food Survey

Take a few minutes to fill out this food survey created for your class. We will use this to point to examples:

<http://bit.ly/dti-marshall-food-survey>



Sample Food Survey: Analyzing Responses

You can create a Google Sheet that automatically inputs any responses from your Google Forms. This will allow you to analyze your responses in any way that interests you!

Together, let's look at different charts and analyses of your survey responses.



Workshop Agenda

- Why surveys?
- Introduction to Google Forms for survey-creation
- Google Sheets for Analyzing Surveys
- Activity: building and taking your surveys

Slides, handouts, and sample survey available at

<http://bit.ly/dti-fall2019-marshall-2>



Workshop Objectives

- Understand how to formulate different types of research questions, from open-ended to likert scale
- Understand how to use Google Forms to collaboratively create a survey and view/analyze the results
- Understand how to do follow-up questions for more interesting answers



Why Surveys?

Surveys are a great way to collect select information quickly from a lot of people! You can control the types of input data, whether those are words, numbers, controlled vocabulary (through multiple choice/drop boxes), and more.

Often, surveys have options for participants to do follow-up surveys or interviews.



Research Ethics

While doing official research, always:

1. Get IRB (Institutional Review Board) approval
2. Find the right, secure survey tool to use; Northeastern uses Qualtrix, which is secure for keeping your results private
3. Understand that your specific questions will gather specific answers. Try not to steer your participants in a particular direction, and always be wary of the vulnerabilities of the demographic(s) you're studying



Google Forms

While Qualtrix is a great survey option for more formal surveys, you will be using Google Forms for this project. It's easy to use, collaborative, and exists in the Google sphere that you all have access to.



Anatomy of Google Forms

Change overall survey options, like themes and adding plugins. Also find the survey link here when it's ready to be sent.

The screenshot shows the Google Forms editor interface. At the top, the title 'Favorite Foods Survey' is visible. Below the title, there are two tabs: 'QUESTIONS' and 'RESPONSES'. The 'QUESTIONS' tab is selected. The main content area shows a section titled 'Section 1 of 2' with the title 'Favorite Foods' and a description: 'Example survey created for Ineke Marshall's SOCL 2321 Research Methods course by the Digital Teaching Integration initiative at Northeastern University.' Below this, there is a question: 'Are you interested in participating in a follow-up interview? *' with two radio button options: 'Yes' and 'No'. On the right side, there is a vertical toolbar with icons for adding new questions, sections, and media. A 'SEND' button is also visible in the top right corner.

Favorite Foods Survey

Edit questions or look at responses.

Change overall survey options, like themes and adding plugins. Also find the survey link here when it's ready to be sent.

QUESTIONS RESPONSES

Section 1 of 2

Your title and description

Favorite Foods

Example survey created for Ineke Marshall's SOCL 2321 Research Methods course by the Digital Teaching Integration initiative at Northeastern University.

Your questions

Are you interested in participating in a follow-up interview? *

Yes

No

Adding new things to your survey, like a new question, different types of media, and a new section



Different Types of Questions

Short Answer: open-ended questions that usually invite a 1-5 word answer. For example “What is your favorite food?”

Paragraph: open-ended questions that usually invite longer prose. For example, “Describe your favorite memory while eating.”

Linear Scale: questions that invite users to choose from a lower to higher number that match their experience. For example, “How often do you eat sushi?”

Multiple choice: questions that only have specific answers and the user can only click one. For example, “What is your favorite food of the day?”

Checkboxes: questions that only have specific answers and the user can click multiple. For example, “select all the food types you’ve eaten in the past week”



If-Then: Go to Section Based on Answer

Because not all your survey participants will be interested in taking a follow-up survey, you want to specifically invite participants who *are* interested to provide their name and email.

- Create a new section that asks for the survey-takers' name and email
- Click the three dots in the question that will direct your user to another question
- Choose the “Go to Section Based on Answer” option
- Choose the answer that will take the person to the next portion of the survey



Go to Section Based on Answer

3. Choose which answer points to the proper section. If they click "No" and you want to end the survey, click "submit form"

1. Create a new section of the survey

2. Choose this option to point to your new section

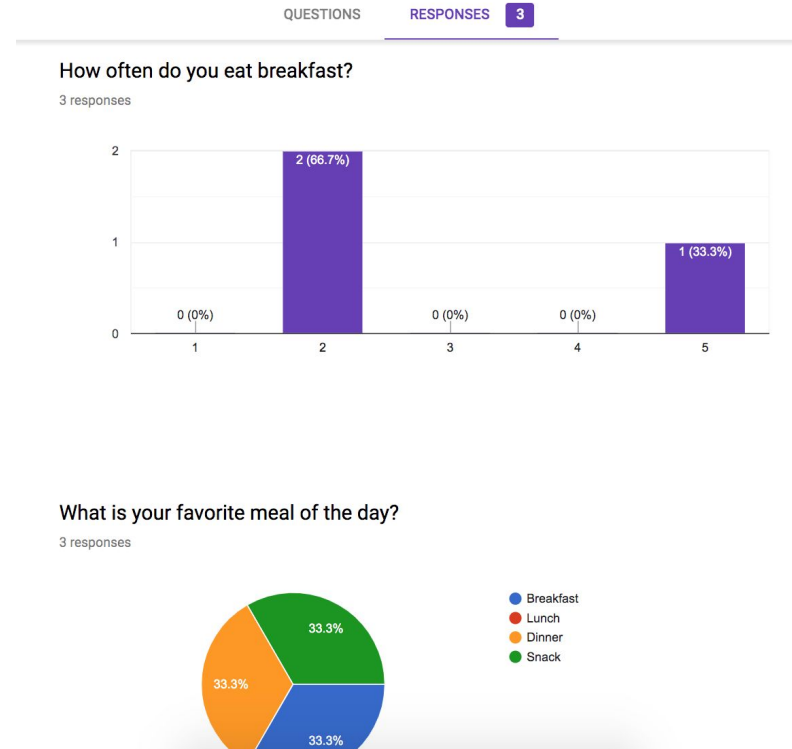
4. Click "submit form" instead so the survey does not automatically take them to the section for follow-up interviews.

The screenshot shows a survey editor interface. At the top, a question is displayed: "Are you interested in participating in a follow-up interview?". Below the question, there are two radio button options: "Yes" and "No". To the right of each option is a dropdown menu. The "Yes" option is currently selected, and its dropdown menu is open, showing two choices: "Go to section 2 (Interview Interest)" and "Continue to next section". A red box highlights the "Yes" option and its dropdown menu. A red arrow points from the "Yes" option to the dropdown menu. Another red arrow points from the "Continue to next section" option to the dropdown menu. Below the "No" option, there is a link that says "Add option or ADD 'OTHER'". To the right of the question, there is a sidebar with various icons. A red box highlights the "Add new section" icon (a plus sign inside a square). A red arrow points from this icon to the sidebar. Below the question, there is a section titled "After section 1" with a dropdown menu set to "Continue to next section". A red box highlights this dropdown menu. A red arrow points from this dropdown menu to the section titled "Section 2 of 2". At the bottom right, there is a dropdown menu with the title "Show". It has two options: "Description" and "Go to section based on answer". The "Go to section based on answer" option is selected and has a checkmark next to it. A red box highlights this option. A red arrow points from this option to the section titled "Section 2 of 2".



Analyze Results

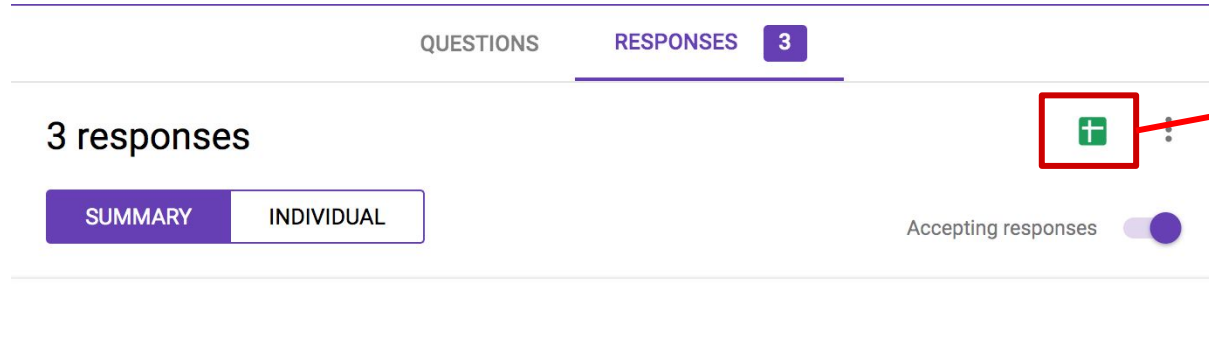
If you go to “responses,” you will see that Google Forms has already created a bunch of tables and charts for you! You can use these visualizations to help interpret your results.



Analyze Results with Google Sheets

Go to “responses” and click the Google Sheets icon. This will create a Google Sheet that you can now use to analyze your results!

The Google Sheet will also input any new data from your survey.



Create a new Google Sheet to show your results



Google Sheets

Google Sheets is Google's spreadsheet software; it's like Excel. You can create spreadsheets and use functions to collect, organize, analyze, and interpret data (both numerical and textual data).



Google Sheets Anatomy

Title of
the file

Example Sheet

Toolbar

Rows
(numbers)

Columns
(letters)

Cell (B2)

To add more sheets in one file



Functions

When you're finally done collecting all your writing data, what do you do with it? You can use **functions** to summarize your data!

Example:

- Average number of roommates participants had in their first year
- Total number of courses participants took in their first year
- Total number of clubs participants belonged to
- Average number of miles Northeastern was from their hometown



How to do Functions

1. In a blank cell (preferably at the bottom of your data), type =
2. You will be provided options for different functions!
 - a. To do a total, type =SUM(
 - b. To do an average, type =AVERAGE(
3. Select the cells you would like to be included in the total
4. Voila! You have your function that will also update if you update cells!

11	
4	
6	
7	
15	
23	
7	
2	
2	
2	
2	
90	
2	
30	
32	
10	
11	

B	
	23
	7
	2
	2
	2
	90
	2
	30
	32
	10
	11

269 ×
=SUM(B2:B19)

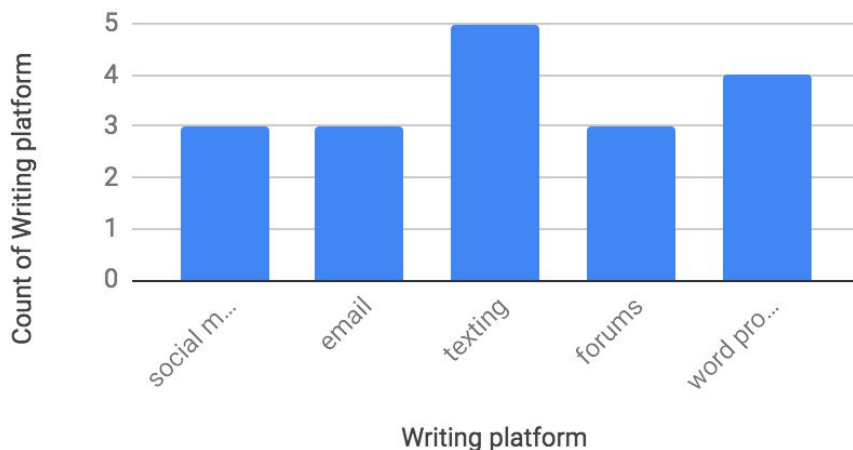
14.94444444 ×
=AVERAGE(B2:B19)



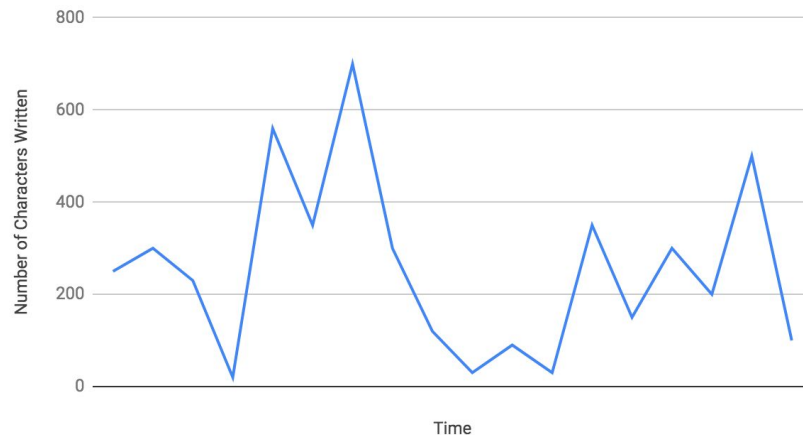
Charts

Similar to functions, charts allow you to summarize your information as well as visually present it. You can also use charts for your “data validation” sections!

Count of Writing platform

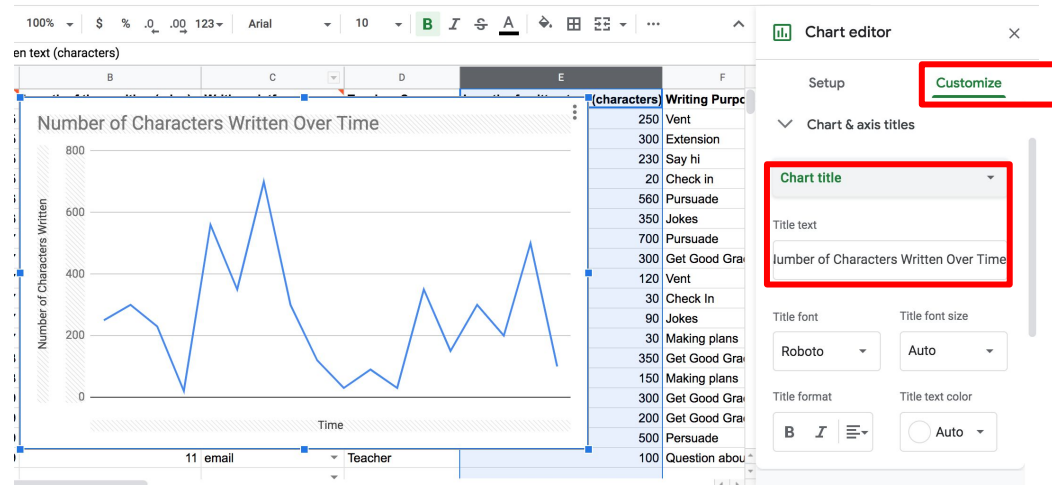
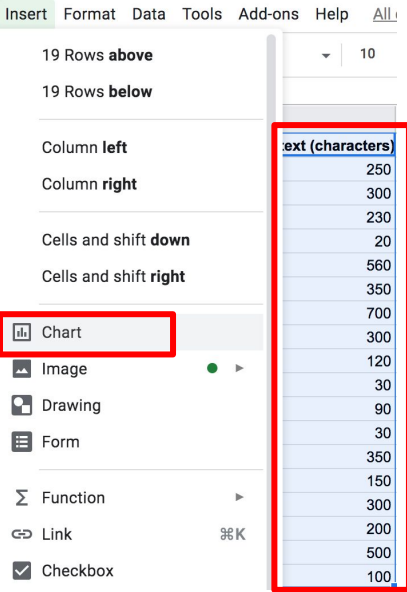


Number of Characters Written Over Time



How to Add a Chart

1. Select the data you want to chart
2. Click “Insert” then “Chart”
3. Customize your new chart using the “Chart Editor”
4. Add labels (the title, x and y axis, etc) in “Customize” > “Chart & Axis Title”



Activity: Create Surveys

Break into your assigned groups and start creating your surveys! Think about what your groups' overall goal is, what types of experiences you're interested in measuring and tracing, and how your questions can get at those.

1. **One** person create the Google Form and share it with everyone. Then, you can all collaborate on that form
2. Include at **least** 10 questions of all different types
3. Include another section to retrieve information for potential interviews

For access to these slides, visit <http://bit.ly/dti-fall2019-marshall-2>



Class Discussion

What did you find challenging or easy about Google Forms?

How about collaborating?

What types of questions did you include?

What types of results do you think you will receive?



Take Each Other's Surveys!

In order to send the links around to each other, copy your survey link (under “Share” and then “Link”) and use this Google Doc to paste your groups' survey link:

<http://bit.ly/dti-marshall-survey-links>



Next Steps

For our next meeting (October 28), follow these next steps:

- The group choose **one** participant to interview
- Create 2-3 short interview questions as a follow-up to the survey. Maybe ask them about a particular experience. Interviews should be **no longer than 5 minutes**.
- **Transcribe** the interview and bring the transcription to class on 10/28



Thank you!

If you have any questions, contact us at:

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Slides, handouts, and data available at

<http://bit.ly/dti-fall2019-marshall-2>

DTI Office Hours: Tuesdays, 1–3PM in 409 Nightingale Hall



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*Feel free to ask questions at any point
during the presentation!*