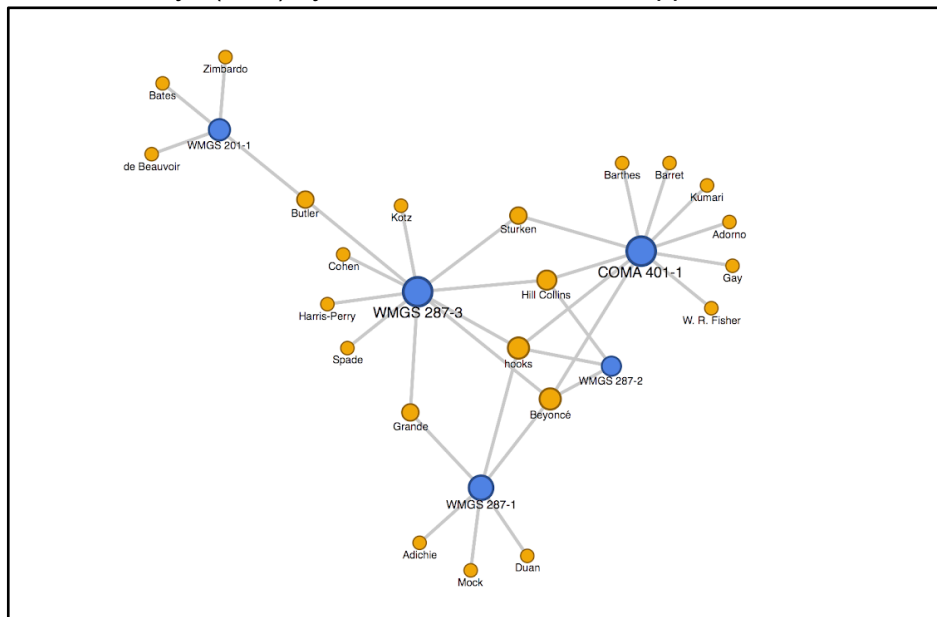


**PLU DH LAB — HOW-TO GUIDES**  
**Network Maps (Google Fusion Tables)**  
**Created by:** Matthew Salzano

**Difficulty:** Easy

**Overview:** Google Fusion Tables is a useful tool for creating visualizations of two types of data—e.g., sources and essays—to map how they are related. It could be used for a variety of pedagogical purposes, such as mapping an archive of a student’s work for a portfolio reflection or mapping related syllabi for planning a new course. These graphs create a picture of how intellectual work is interconnected.

**An example:** [View whole map interactively online here: https://tinyurl.com/PLUDHSample1](https://tinyurl.com/PLUDHSample1). A selection of WMGS essays (blue) by Matthew Salzano ‘18 mapped with authors cited (yellow).



**OVERVIEW OF STEPS**

1. Identify dataset
2. Create ‘edge list’ (a list of x and y values — e.g. essays and authors cited) in Google Spreadsheets.
3. Import spreadsheet to Google Fusion Tables
4. Create network map
5. Publish Fusion Table to the web or add to a shared Google Drive
6. Prompts for critical reflection on the map

**Want help? Contact the PLU DH lab.**

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## STEP 1 | Identify Dataset

Network maps link two different types of data to create a visualization of how these data are related.

Take, for example, this project's inspiration: [Yale Syllagraphics "Assigned Readings Network."](#) This network map linked courses and authorship, two types of data. With this kind of data, the network map can help a department, discipline, or major see which sources they are over/under utilizing, and what courses are outliers.

The PLU DH Lab has started this project with WMGS courses; there is a [draft available here](#).

But this tool is also incredibly useful for classrooms. Consider questions that could lead to identifying a paired dataset:

- How is a student's work in a certain major influenced by the discipline's canon? How is the student's work linked by similar schools of thought?
  - Essays and authors cited (see Salzano on page 1)
  - Essays and themes/topics
- How has a student's work methodologically changed? How do the methods used help understand the way disparate work is intellectually connected?
  - E.g. close reading, visual culture, ethnography, creative nonfiction, qualitative, quantitative, and so on.
- How does the curriculum in the WMGS program reinforce and scaffold across courses?
  - Courses and methods
  - Courses and authors read
  - Disciplines of faculty and courses taught
- How have the courses in a major or program encouraged student learning?
  - Data from a student survey that asked about central themes remembered (set 1) from each class (set 2)

Remember: it is only possible to identify one set for each map (e.g., you can't do essays and authors and methods as one chart).

For example, in Salzano's chart, we can see how hooks, Hill Collins, and Beyoncé were sources he repeatedly used across courses and semesters. If the chart were to be by method, the essays may not be linked: some were lyrical close readings whereas others were from the perspective of visual culture.

Step 5 will explore potential ways this work can complement the inquiry of collecting an archive.

## STEP 2 | Create an edge list in Google Spreadsheets.

There are at least two options to creating a Google Spreadsheet:

1. Go to [drive.google.com](https://drive.google.com) and click new → Google Sheets, and create a two column chart by inputting your data.
2. Upload a Microsoft Excel file to your Google Drive (by drag-and-dropping a file from your desktop into your Google Drive, or clicking new → upload).
  - a. Double click on the file in your Google Drive.
  - b. On the top, click “open in Google Sheets.” This will create a Google Sheets version of your Microsoft Excel spreadsheet in your Google Drive. It will be in the same location and with the same name as the original, uploaded file.

A sample of the edge list used to make the example on page 1:

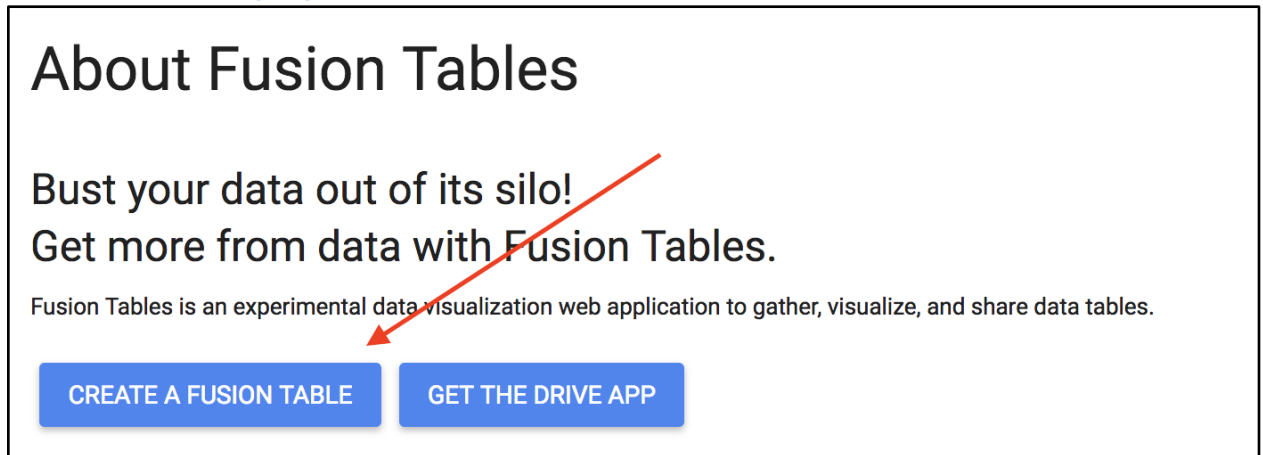
| <b>Essays</b> | <b>Sources</b> |
|---------------|----------------|
| ENGL334-1     | Warner         |
| PHIL 239-1    | Goldman        |
| PHIL 239-1    | Marx           |
| WMGS 201-1    | de Beauvoir    |
| WMGS 201-1    | Bates          |
| WMGS 201-1    | Butler         |

The student used a numerical system to shorten the length of essay titles, which is recommended. One could feasibly use the full name; it just may not appear when the map is zoomed-out to see all of it. This step is just a simple matter of coding all the information into two columns, whether you have essays/sources, essays/themes, or something else altogether.

Save this edge list in your Google Drive with a name you will remember. (You will select it by name, not in folders, on the next step.)

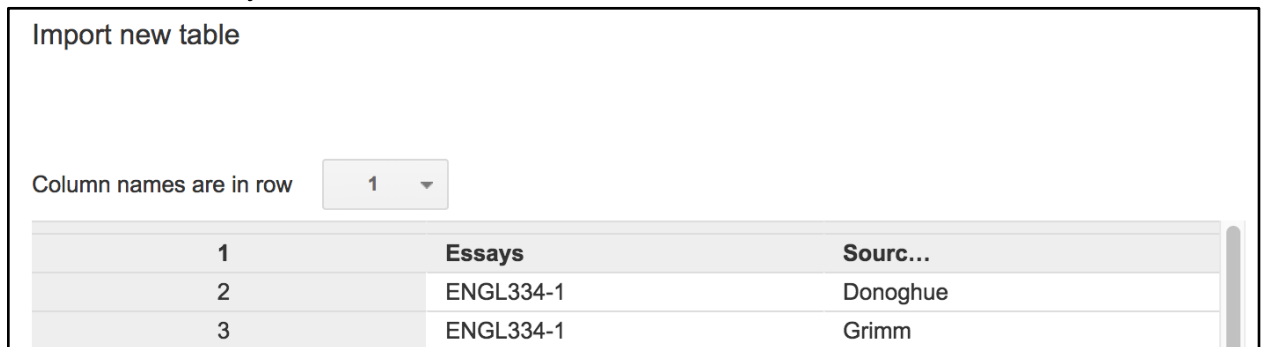
### STEP 3 | Import edge list to Google Fusion Tables.

- (1) Go to [fusiontables.google.com](https://fusiontables.google.com) and click 'Create a fusion table.'



- (2) Select "Google spreadsheets," and in the on-screen window, search for and select the edge list you created.

- (3) On import new table, make sure the drop down in "column names are in row []" is correct. Your column names are typically in row 1 ("Essays," "Sources"). These names will be bold. Once you are sure this is correct, click next.



(4) Name your table and attribute the data correctly. **Note:** this will only be public if you make it so—see step 5.2.

Import new table ✕

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**Table name**

---

**Allow export**  [?](#)

---

**Attribute data to**  [?](#)

---

**Attribution page link**

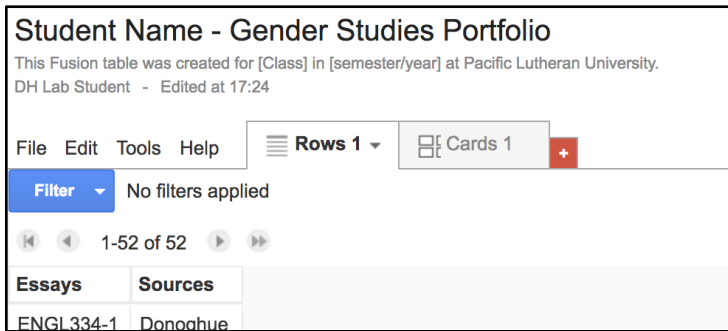
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**Description**

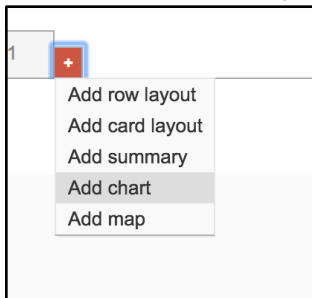
For example, what would you like to remember about this table in a year?

## STEP 4 | Create network map

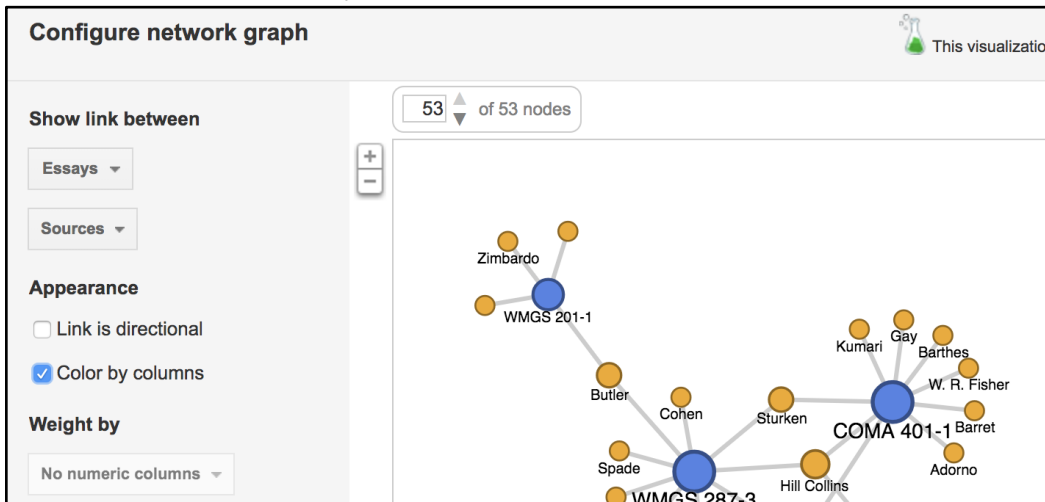
(1) Your document should now look like this:



(2) Select the red plus sign to reveal a drop down menu. Select “add chart.”



(3) You should now be presented with a network graph. Select “Color by Columns,” if you wish to make your graphs coloration demarcate the different types of data (essays v. authors cited, in this case.)



(4) Huzzah! You can now zoom and pan about your map. Enjoy this unique way of reflecting on your work!

## STEP 5 | Publishing

It is up to the instructor to determine how exactly they would like students to display their work. We recommend one of the following ways to do this. Both are relatively easy.

On Sakai: Making the Google fusion table into a webpage.

1. In Google fusion tables, select File → Share.
2. Change the link-sharing access to “anyone with link can view,” which will make anyone with the link able to view it.
  - a. If you’d like to require sign-in, select “Anyone at PLU with the link.”
  - b. If you’d like the table to be searchable on Google (i.e. anyone can find it, select “Public on the web.”
3. Return to the network map. Select the dropdown menu on your chart, and click “Publish.”



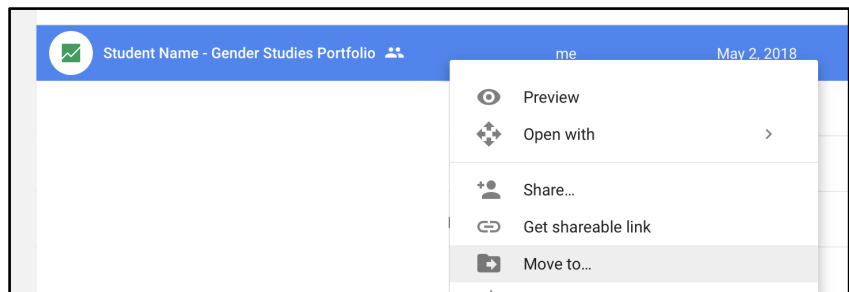
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dropdown that appears, change the “Width and Height” so that your map can fill a page appropriately. We suggest Width: 1920; Height: 1080.

5. Then, direct students to copy and paste the page URL generated in the top box into a Sakai assignments box.

On Google Drive: Share the Fusion table document in a group folder.

1. After creating the Google Fusion table, direct students to their Google Drive. The fusion table should be in their main Google Drive folder.
2. Right-click on the fusion table document and select “move to...”
3. In the window that appears, select the shared Google Drive folder the class is using.
4. Alternatively, have the student share the folder with the instructor/TA, and the instructor/TA can share a complete folder later.



## STEP 6 | Prompts

Here are some ways to reflect on what these network maps can tell us about the methods and materials in curriculums and student archives:

- What themes can you identify in the networked connections?
  - How does this help you thematically organize your work? What does this tell you about the topics to which you are drawn?
- Where did border crossing happen?
  - When did seemingly-incompatible disciplines, classes, authors, and/or methods overlap?
- What types of authors or methods did you use?
  - What positions did they occupy (race, gender, sexuality)?
  - What politics or ideologies?
- Which authors or methods did you find were most influential in developing your work? Is that reflected in your map? Why or why not?
- Were there any connections you were surprised by?
  - How does your map compare to what you expected?
- What don't you see in the map — who/what has been left out?