# Build a Better Lit Review: Introduction to VOSviewer

Navari Family Center for Digital Scholarship September 23, 2019



## 1.) Install the program

- a. Visit vosviewer.com > Proceed to Download menu.
- b. Download and install the appropriate version for your laptop.

## 2.) Open the program

a. Find and open the VOSviewer program.

# 3.) Find some Web of Science records to export and graph

- a. Visit **Web of Science** from the Libraries' Research Menu.
- b. Search for a topic of interest.
- c. Find a "golden ticket" article, one that works for your topic.
- d. Click its **Times Cited** link.
- e. Click the **Export** button at the top of the page.
- f. Within the dialog box that appears, choose to export all records available, from 1 x. For record content, choose **Full Record and Cited References**. For File Format, choose **Other Reference Software**.
- g. Save the file with a name that makes sense.

#### 4.) Map those citations within VOSviewer: Citation Map

- a. Return to VOSviewer.
- b. Under the File menu, click **Create**. We'll be making a map based on bibliographic data. Then click **Next**.
- c. Because we're mapping Web of Science data, we're already on the correct tab. Click the ellipsis (...) button to browse for a file. Find the file that you just exported from WoS. Click **Next**.
- d. First, let's make a **Citation** map. Click **Next**.
- e. We can skip the rest of the options, so click **Finish**.
- f. You might see a dialog box telling you that not all your exported citations cite each other. It will offer to map just that smaller number. <u>Click No</u>.
- g. Stand in amazement at the information displayed in this map.
  - i. What does this map tell us?

## 5.) Map those citations within VOSviewer: Bibliographic Coupling Map

- a. Once again, under the File menu, click **Create**. Map based on bibliographic data. Then click **Next**.
- b. Again, we're using Web of Science data. It probably remembered the file from last time, but if not re-select it.
- c. This time, let's make a **Bibliographic coupling** map. Click **Next**.
- d. We can skip the rest of the options, so click **Finish**.
- e. Stand in amazement at the information displayed in this map.
- f. Note that the colors in this graph indicate clusters. Under the Items menu, observe the clusters and which sources are in which cluster. Clustered items have the most overlap between their References lists, which indicates likely schools of thought. (If you return to our previous map, you'll see that our clusters were slightly less useful in a Citation map.)
- g. Let's re-create this map, but this time, let's change our unit of analysis. Repeat the steps, but this time, change the **Unit of Analysis** to **Sources**.
  - i. For minimum number of documents of a source, choose 1.
  - ii. Click Finish.
  - iii. Again, the evil dialog box will ask you to compromise with a lower number. Click **No**.
  - iv. What does this map tell us?

# 6.) Map those citations within VOSviewer: Co-Citation Map

- a. Once again, under the File menu, click **Create**. "Map based on bibliographic data." Then click **Next**.
- b. Again, we're using Web of Science data. It probably remembered the file from last time, but if not re-select it.
- c. This time, let's make a **Co-Citation** map. Our unit of analysis is Cited References. Click **Next**.
- d. For Minimum number of citations, let's choose 3.
- e. We can skip the rest of the options, so click **Finish**.
- f. Stand in amazement at the information displayed in this map.
  - i. What new information does this map tell us that the previous ones did not?

#### 7.) Just for fun, create a **Co-Occurrence** Map

- 8.) If you want, you can repeat this process in a different database, **Scopus**.
  - a. From a list of citing documents, click **Export**. When exporting, be sure to check the box for Include **References**.
  - b. When creating your maps within VOSviewer, be sure to move to the Scopus tab.

Go forth and write better literature reviews! As you have questions about WoS, Scopus or VOSviewer, reach out to Mark. His email address is **librarianmark@nd.edu**.