20.2 Lesson Summary - Tableau My Mind

Tableau offers a number of different tools that allow you to group your data and your visualizations. You can perform complex calculations on your existing data to generate new data sets. Tableau provides mapping functionality to visualize any data you have location information for.

Concept: You can **group** data together in Tableau by selecting the data you wish to group. Right click the data and choose the 'Group' option. **Sets** in Tableau are more versatile than groups allowing you to view and dismiss them as needed. To create a Set, select the data you wish to target, right click and choose the 'Create Set' option. Give the set a meaningful name. Once you have created a Set the contents of that Set are indicated by a column designating In/Out of that Set.

* Activity: 02-Ins-Groups\_Sets, 03-Stu-Groups\_Sets

Concept: You can enhance your visualizations by creating **Calculated Fields** using formulas and boolean logic. To create a calculated field, choose the 'Create Calculated Field' option from the Analysis menu. Specify the formula the you want to use for your calculated field in the Calculated Field wizard.

* Activity: 04-Ins-Calculations, 05-Stu-Calculations

Concept: You can generate **maps** in Tableau by dragging longitude data into the Columns and latitude into the Rows. Then drag the data you wish to see overlaid into the Marks section.

* Activity: 06-Ins-Maps, 07-Stu-Maps1, 08-Stu-Maps2

Concept: **Dashboards** in Tableau can be used to group a number of similar worksheets. This can be used to collect multiple visualizations in one place. If the data is related you can manipulate the data in your Dashboard to illustrate paterns. To create a Dashboard, select the 'Create Dashboard' option in the lower middle section of the UI. Once you have created your Dashboard choose which sheets you'd like to visualize on your Dashboard.

* Activity: 09-Ins-Dashboard, 10-Stu-Dashboard

Concept: Tableau allows you to create Calculated Fields that change the **Level of Detail**(LOD) of the data you are working with. An example of changing the LOD of your data would be to convert city data to state data. To create data with a change in the LOD create a Calculated Field and use either the ***INCLUDE*** or ***EXCLUDE*** keyword to aggregate or granulate your data accordingly.

* Activity: 11-Ins-LOD, 12-Stu-LOD