Module 04 Lesson 05
Using Google Spreadsheets for Plotting Graphs
Transcript

Step 1: How to save a unique file for your work - Review
For any link throughout this course that opens up into a Google Spreadsheet the first thing that you should always do is:

1. Click on "File">"Make a copy"
2. At the end of the file name type in "_completenamenospaces" (your complete name with no spaces)
3. Click "OK" and this will save a unique file for you to do your work

Step 2: Summarize the data into a Mean and Standard Deviation - Review
The first thing to do when you plot a graph is to summarize the data into a Mean and Standard Deviation (the steps below review what you learned in Module 04, Lesson 1)

Calculating Mean

1. In the cell below your list of measurements, type in "=AVERAGE ("
2. Drag your mouse and highlight over the entire data range
3. Type in ")"
4. Click "ENTER" on your keyboard and the mean value will appear

Calculating Standard Deviation

1. Type in "=STDEV ("
2. Drag your mouse and highlight over the entire data range
3. Type in ")"
4. Click "ENTER" on your keyboard and the standard deviation will appear

Step 3: Reduce number of decimal places
In Google Spreadsheets, if you want to reduce the number of decimal places to make it easier to read,

1. Click on the "123" icon
2. On the drop down menu, choose "2 Decimals" and you will see it will become 2 decimals

Step 4: Plot a Graph

1. You will have already calculated/entered your before and after mean and standard deviation from Step 2 above. However, you need to type in the "Before" and "After" mean below your measurements.
2. Highlight the 4 cells.
3. Select "Insert" and choose "CHART."
4. **What type?:** Once you do that a window will open and you will see different chart types that you can choose. Whether you chose columns, bars, pie, line etc. you will see the graphs changing. The best graph for this particular data set (being a "Before and After" data set) is going to be a "column graph;" in this case, keep it on "column graph"

5. **Labels:** Put in the "Vertical Axis Title" (in this case, type in "Heart Rate"). Put in the "Units" (in this case, type in "beats per minute"). So, the Vertical Axis Title should read "Heart Rate (Beats per minute)."
6. We do not need a legend for the graphs that we are going to use in this course (besides pie charts), so click "No Legend"
7. **Axis:** You have the ability to change the axis scale. Make it a minimum of 40 and a maximum of 140 for this case.
8. **Preview:** You should now see the preview at the bottom. Once you are satisfied with the preview, select "Save Chart" and the chart appears within your Google Spreadsheet file.
9. Once you have the graph and you need to use it for any other purposes (as you will see later on in the course), click on the chart, you will then see a drop down menu. In the menu, click on "Save Image" and it will save an image file for you which you can later on insert into another Google Document file.

For more help, visit the **Docs Help for Google Spreadsheets**.