

## Constructing A Basic Graph with Microsoft Excel

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### Setup The Data

1. Open Microsoft Excel and select “New Workbook”
2. In cell A1 Type “Session”
3. In cell B1 Type “Baseline” This will be where you type in baseline data only.
4. In Cell C1 Type “Treatment 1” This will be where you type in Treatment 1 data only
5. In Cell D1 Type “Treatment 2” This will be where you type in treatment 2 data only
6. In Cell A2 Type “1”
7. In Cell A3 Type “2”
8. Highlight Cell A2 & A3 by clicking on cell A2 with the left mouse button and then holding it down as you drag on to cell A3 and then let go.
9. Grab onto the bottom right corner of cell A3 by left mouse clicking on it and holding it. Now while holding drag your cursor to cell A21 and then let go. This should have filled in all of your cells under the session column with a sequential list of numbers to represent session number.
10. In cell B2 type “#N/A” and hit enter.
11. Now right mouse click on cell B2 and choose “copy”.
12. Highlight all of the remaining cells (B2-B21 through D2-D21) and then right mouse click and choose paste.

You should now have “#N/A” in all of the cells. You now have a worksheet completed to graph baseline and treatment data for two treatments. **Always remember to input data in the appropriate column with appropriate session number.**

### Construct the Graph

1. Click on the “insert” tab and choose a “XY Scatter with straight lines and markers” from the “charts menu.
2. Right mouse click on the chart and choose “Move chart”.
3. Select “As new sheet” and give it a name (e.g. Graph).
4. If your data didn’t automatically pop up into your graph, click on this new sheet and right mouse click on the blank graph and choose “select data”
5. Click on the tab in the spreadsheet that has your data in it. This will open up the data and allow you to select what data you want graphed. Be sure that your cursor in the “Chart data range field is after an = sign.
6. In this case the data you want to graph are the Baseline data for the individual student you isolated. Simply left mouse click and hold and drag down through data points (A1:A20)
7. You also will want to graph the intervention data. Simply click “add” on the popup menu. In the next pop up dialogue box put your cursor in the Y values field and clear out anything that is in there. Now go back to your data tab and select all intervention data. (B1:B20). Click Ok.
8. Right mouse click on the series legend at the bottom of the graph and choose delete.
9. Now click on one of the horizontal grid lines in your graph and right mouse click and choose delete.
10. Now click on one of the numbers on the Y Axis. From the Add Chart Element Menu choose add axis titles and select Primary vertical”. You can now label your Y Axis.
11. Repeat step 10 on the primary horizontal axis.
12. By right mouse clicking on each of the Axis and choosing format axis you will have a menu on your right that gives you many options for formatting the axis to your needs.

### Extras

13. The “Insert” Menu allows you to choose “Shapes”. Here you can draw lines between your data phases by simply selecting the line shape and then on your graph hold the mouse button down and drag it into position. . You can do the same for arrows. The shape we are looking for is an arrow. By selecting arrow we can draw an arrow to point at series 1 and another arrow to point to series 2.
14. Under “layout” then “insert” you can choose the “text box” icon. Click on your graph and type inside this new text box “Baseline”. Repeat this step but in the second text box type “intervention”. If you need to move the textbox you can simply grab it and move it/resize it to label your phases.

Congratulations!