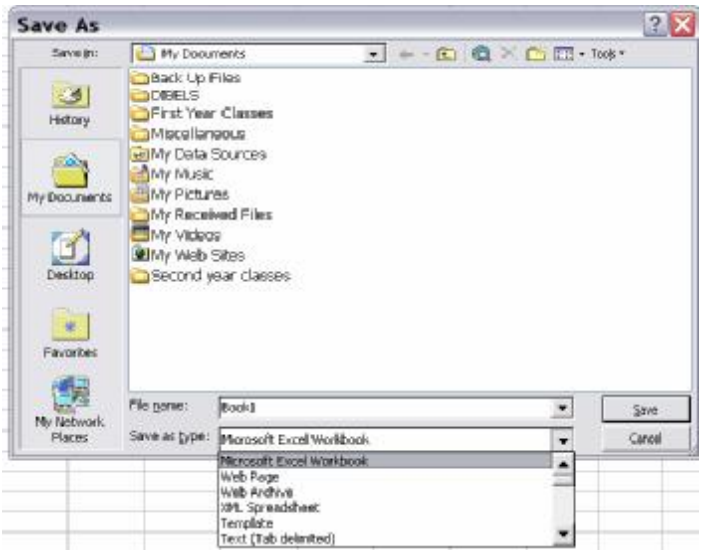
“Tricking it Out:” Tricks to personalize and customize your graphs.

Graphing templates may be used online without downloading them onto your own computer. However, if you would like to use the templates without internet access, you will need to download the templates.

- **To use a template while working online:**

  1. Click on the menu link to the template you would like to download
  2. Click the “Download Template” link
  3. Select “Open” in the menu that appears.
  4. Input your data into the template, and add any customizing you would like.
  5. Click on “File” at the top left hand side of the screen
  6. Choose “Save as” from the menu that appears
  7. Type in a name for your document in the “File Name” box toward the bottom of your dialogue box.
  8. In the “Save as Type” box, located below the “File name” box, choose “Microsoft Excel Workbook.”
  9. Be sure that you have selected the appropriate option in the “Save in” menu located at the top of the dialogue box. You may click on the arrow on the right hand side of the menu to select the appropriate folder for your graphs
  10. Click “Save”



- **To download a graphing template to your computer:**

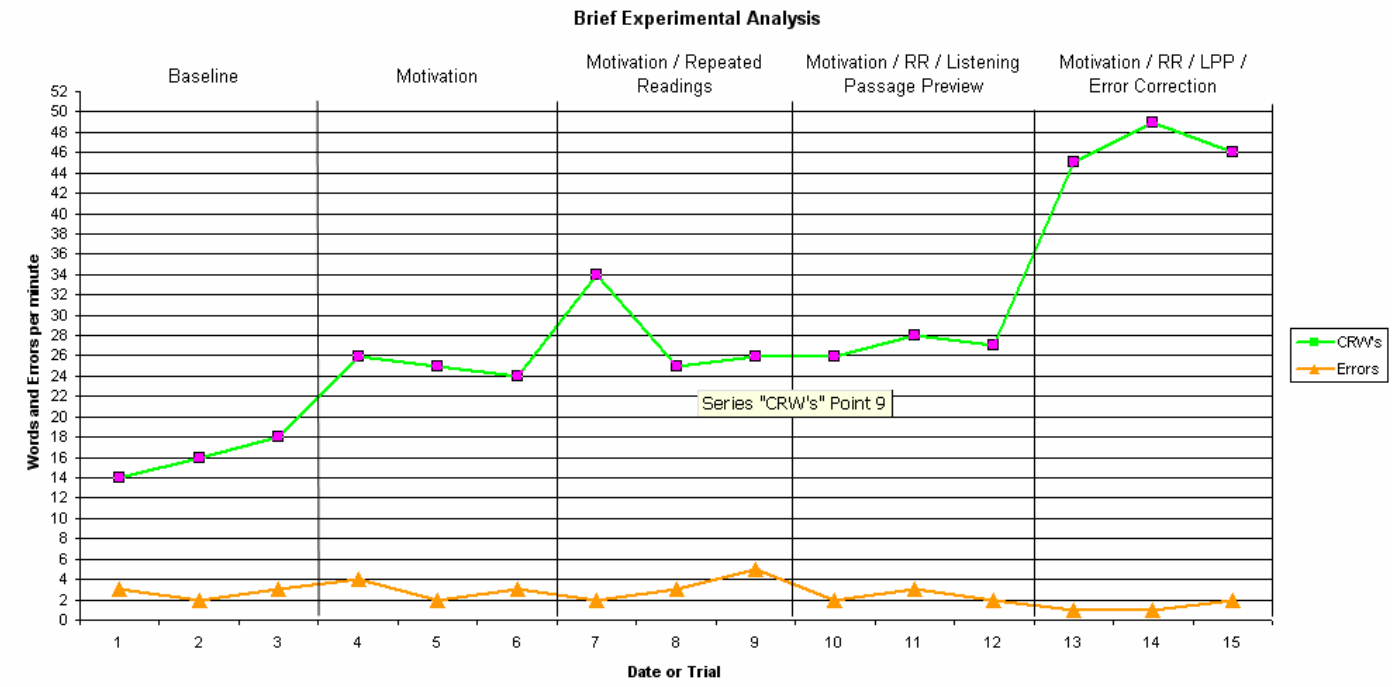
  1. Click on the menu link to the template you would like to download
  2. Select “Save,” in the menu that appears
  3. Be sure the default name for the template appears in the “File Name” box toward the bottom of the dialogue box, or type in the name you have chosen for the template.
  4. Be sure that you have selected the appropriate option in the “Save in” menu located at the top of the dialogue box. You may click on the arrow on the right hand side of the menu to select the appropriate folder for your graphs.
  5. Click “Save”
  6. Open the downloaded template: the document will open as “Document 1” rather than the template name. This is the beauty of using templates, in that the original document will not be lost when you open it to make modifications. This is also important to note when saving graphs created with the templates (see Saving Graphs section).

- **Saving Graphs created with downloaded templates:**

  1. Click on “File” on the top left hand side of the screen
  2. Choose “Save as” from the menu that appears
  3. Type in a name for your document in the “File Name” box toward the bottom of your dialogue box
  4. Be sure that you have selected the appropriate option in the “Save in” menu located at the top of the dialogue box. You may click on the arrow on the right hand side of the menu to select the appropriate folder for your graphs.
  5. Click “Save”
  6. You will notice that the original template is still in its original form, and that any changes you have made will only be present in the new document created.

- **Add a trend line:**

  1. In the "graph" worksheet, click on the series for which you would like to see trend line (i.e.: correctly read words, errors per minute, etc.) There will be highlighted dots on the series you choose.



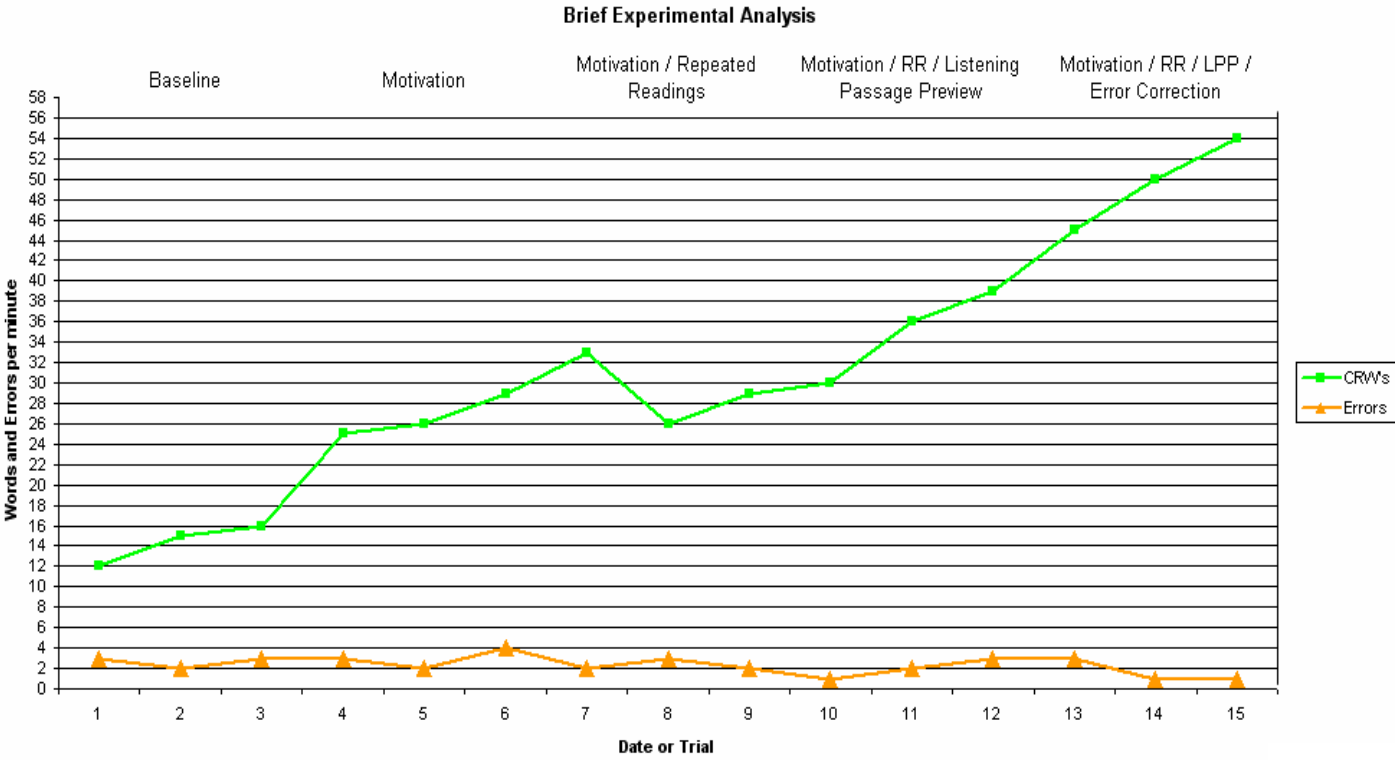
  2. Click on "Chart" in the top tool bar and then click on add a trend line, or right click and choose trend line from the menu.
  3. Choose linear
  4. Click ok

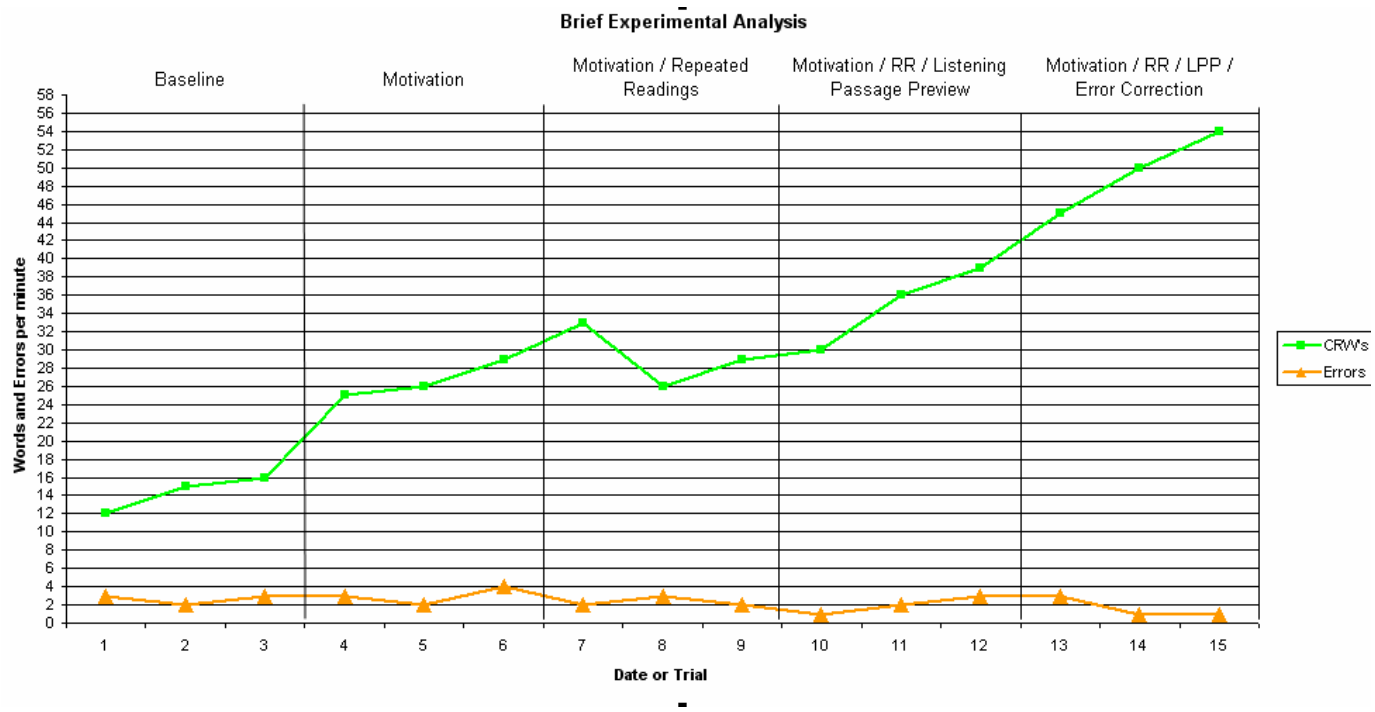
- **Add lines to separate the use of different interventions:** such as when using BEA, or to separate Baseline when using CBM. These lines are already made in the templates that have been constructed for your use, however the following instructions will aid you in adding any lines that you may desire to have on a graph that have not already been made for you.

  1. Once you have your graph made, check to make sure the drawing tool bar is visible at the bottom of the page.

If this toolbar does not appear at the bottom of your page click on “View” in the top menu, click on “toolbars”, then click on “drawing” and it should appear.

2. Click on the first line that appears on the toolbar
3. A little plus mark (+) should appear, place the plus mark on the point in the graph where you want to start your line.
4. Left click and hold the mouse at your starting point.
5. Drag the mouse to the point where you want to end the line (make sure the line is perfectly straight) then once you have found your end point release the mouse button. Move the cursor to any other spot on your graph and click; this will set your line. Here is an example of a BEA graph with and without lines.





Lines are useful in distinguishing instructional levels or frustrational levels for CBM monitoring, benchmark designations for the DIBELS™, or even goal areas for behavioral charts.

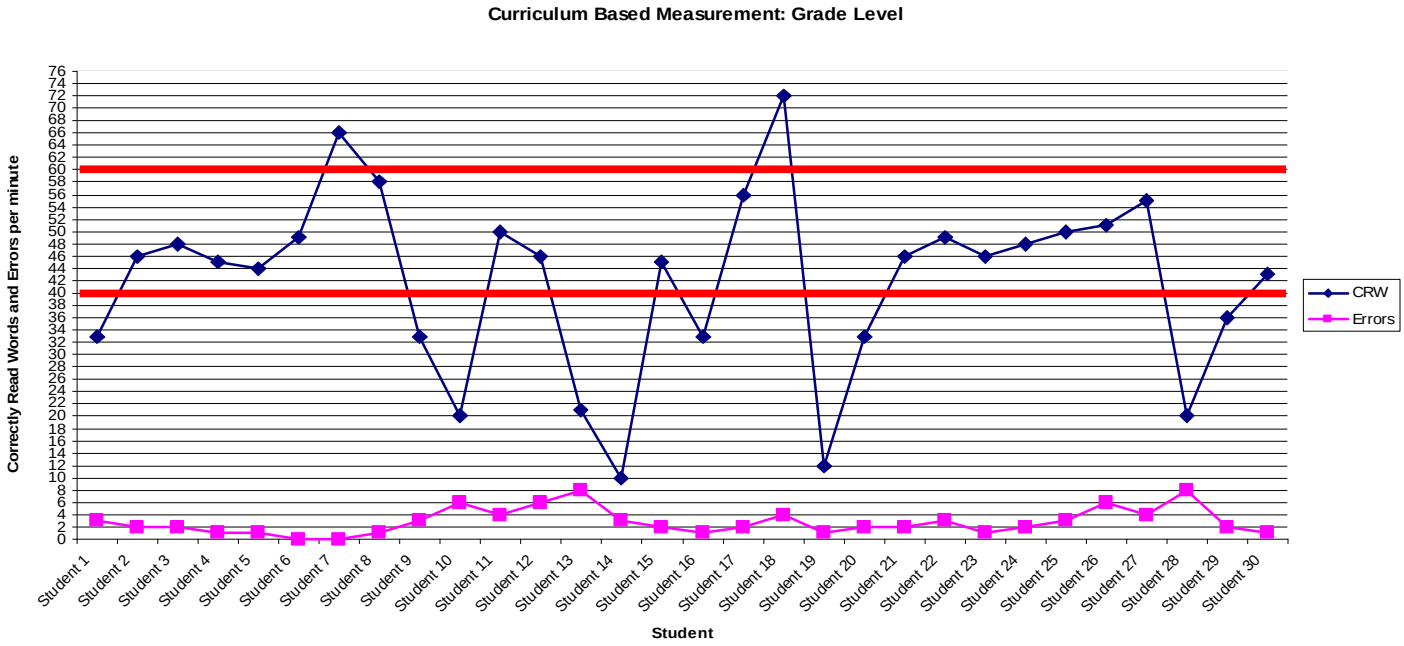
- **To remove lines that have been added to a template:**

  1. Place the cursor over the line you want to remove. The cursor will appear as crosshairs with arrows, and the text "Line #" will appear.
  2. When the crosshairs appear, right click on the line.
  3. Select "cut."
  4. You may now replace the line if you wish.

- **To change the color of the lines added:**

  1. Right Click on the line once you have drawn (white circles should appear at each end of the line)
  2. Right click on the down arrow to the right of paint brush in your drawing toolbar choose the color you would like the line to be and click on it. Here is an example of instructional and

frustrational lines that were added to a CBM graph for reading to designate the respective areas for students reading at a first grade level.



Students reading in between the red lines are students that are reading instructionally at a first grade level (names have been omitted).

- **Adding Text:** As you can see, the first BEA graph without lines is also missing text. The templates that have been constructed have text available, but if you wish to change the text that is there or want to add text not previously formatted this can easily be accomplished.

  1. Once you have inserted your lines you can either click on "Insert" in the menu at the top of the page and then click on text box, or you can click on the insert text box icon on the drawing tool bar Crosshairs will appear.
  2. Place the crosshairs wherever you would like to place the text box.
  3. Left click and hold while dragging the mouse until the box is the desired size and type the text you want to appear inside.
  4. Type your text in the text box.

5. Format your text by highlighting the new text, choosing a font, size and color on the tool bars at the top of the screen.

   Text formatting works just as it does in Word.

- **Changing the Background Color in your Graph**: If you decide that you would like the background in your graph to be a different color then what will appear automatically (gray) you can change the color as follows:

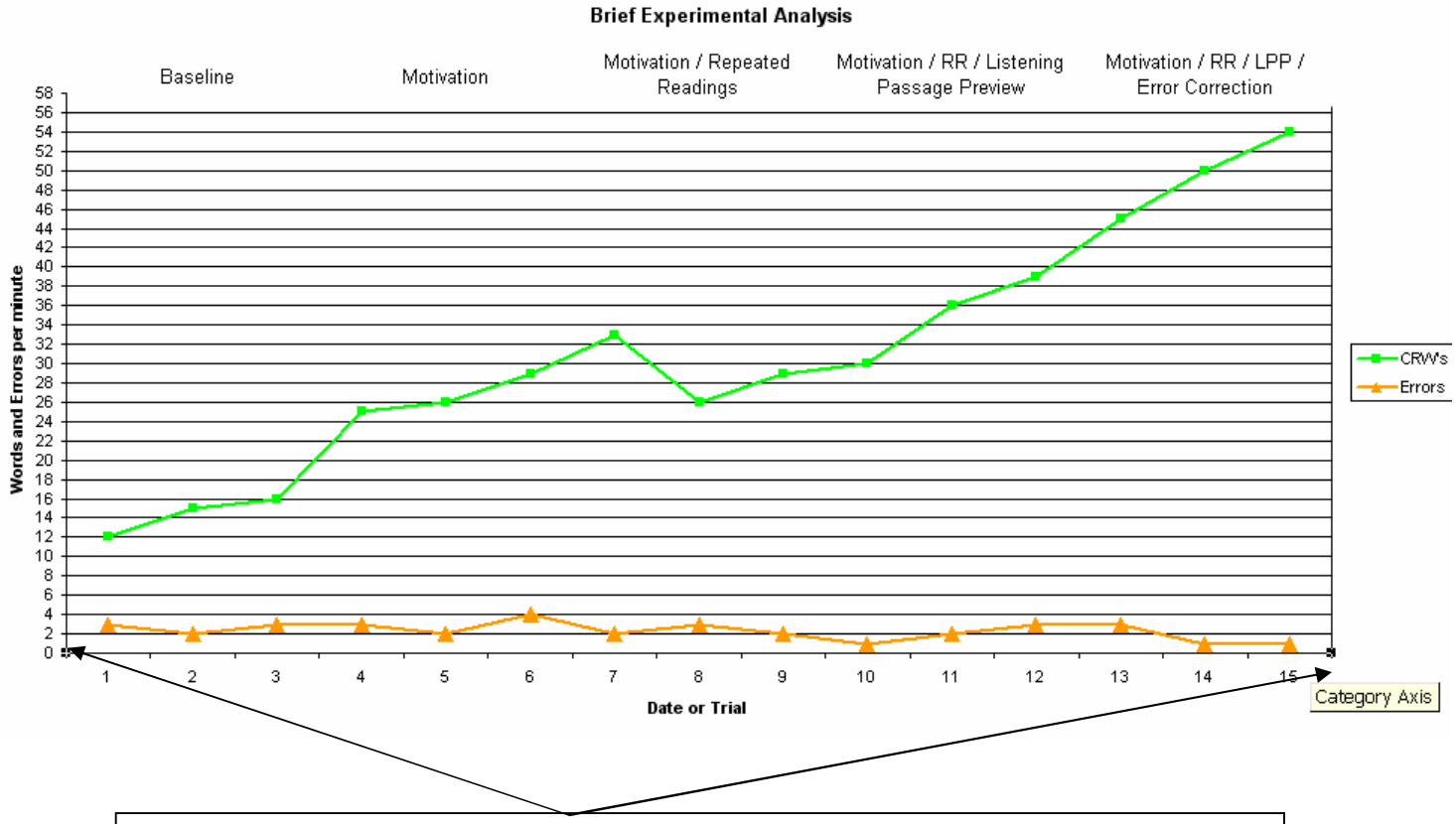
  1. Once you have made your graph right click on the middle of it between the gridlines.
  2. Click on Format Plot Area
  3. Click on the color you would like your graph to be from the color boxes on the right.
  4. Click Ok.

- **Changing the color of the series lines in your graph.**

  1. Right Click on the line you would like to change the color of (such as the target student or correctly read words).
  2. Click on "Format Data Series."
  3. Click on the down arrow on the left side next to the color box and choose the color that you would like.
  4. Click on the down arrow on the right side next to the Foreground box and choose the color you would like.
  5. Click on the down arrow on the right side next to the Background box and choose the color you would like.
  6. It works best to pick the same color for all of these.
  7. Click ok.

- **Axis Formatting:** Once you put your data in the spreadsheet and click on the graph, your graph may not look exactly how you like. This is usually an automatic formatting function or your computer program. It will display only every other point of the data or only some of the data. If you wish to change this you need to change the formatting of your axis.

  1. Right Click on the axis you want to change either the X (horizontal) or Y (vertical) or both.



The axis you have highlighted will have black dots on each side.

  2. Click "Format Axis."
  3. Click on "Scale."
  4. If Changing the X axis you may need to change the number that appears by the box labeled Number of Categories Between Tick Mark Labels (if you are missing data points on this axis type in 1 and it will read every data point)
  5. If changing the Y axis you may need to change the number that appears by the box labeled Major Unit (if you have a lot of data points ranging in large numbers you may want to change it to 5 or 10, if you have data points ranging from 1 to 40 you may want to change it to 1 or 2). You may

also need to change the number by the box labeled Minor Unit. If you are missing points after a certain predetermined number just change the number that appears by the box labeled Maximum to the number of your last data point. If you are missing data points before a certain number make sure the number by the box labeled Minimum is either 0 or the number of your lowest data point.

- **Inserting a graph into a Word document:** It is easiest to work with the formatting of your graph while it is still in Excel. Once you have finished your graph and you want to copy it into a Word document to add to a report, simply click on your graph (black dots will appear in all corners). In order for the black dots to appear, you must click on a part of the graph that is outside of the axis lines.

  1. Click on "Edit" in the top menu.
  2. Click on "Copy," minimize your file by clicking the minimize button on the top right hand side of the screen.
  3. Open Word document, position the curser in the document where you wish to paste the graph.
  4. Click on "Edit" in the top menu and then click on "Paste."
  5. If you want to change the size of your graph once in Word, right click on your graph, click on "Format Picture".
  6. Click on "Size".
  7. Use the up and down arrows by the boxes labeled Height and Width to change the size.
  8. If you need to make additional changes to your graph once moving it right click on it, click on "Edit Graph" and you can make any changes you would like.

- **Printing:** You can print your graph while in Excel; be sure to change your options in print to landscape, or you can move it to Word and create a report and print it as normal.

- **Email:** Once saved, you can also now email your graph or report with your graph as an attachment to almost anyone!!

- **Correcting an error:** if you make an error in formatting, you can click the "undo" button on the tool bar at the top of the screen.

  1. Click once to undo one action, use the pull down arrow to the right of the icon to see which additional actions may be undone.

- **Making your own graph from start:**
  1. Open a new Excel document
  2. Decide what your variables or categories will be.
  3. Put Y axis variable data in column A, and X axis variable data in the column B. (You can label your categories in this spreadsheet if it makes it easier for you as was done in the templates, or you can label them when you construct your graph).
  4. Excel automatically formats cells to accept general data, so you may wish to format the data cells to accept a specific type of numeric data (such as dates or numbers). To do so, highlight the column and click "Format" in the toolbar. Click on cells, and choose the number tab in the menu. Choose the format type ("Date" for dates, "Number" for other numeric data,) and click "Ok."
  5. Once your data is in, you may change the name of the tab from "sheet 1" to "Data" by right clicking on the tab labeled "sheet 1" and clicking "rename."
  6. Now highlight your data by placing the mouse over the cell in the upper left hand corner of the spreadsheet. Hold the mouse button down as you drag the mouse simultaneously to the right and down across the page. The cells you are highlighting will change colors on the screen.

7. Click on the chart/graph wizard icon at the top of the page.
8. Choose the graph type you want and click next.
9. Click on the series tab at the top of the page if you want to name the series lines that will appear in your graph (for example, in a CBM graph correctly read words and errors are your series lines)
10. Click on "series 1" and click your cursor in the name field box that appears to the right in type in what you want to name your series.
11. Do the same for series 2, 3 etc. When finished click next.
12. Click on the "Title" tab at the top of the dialogue box and type in the title of your graph, tab and type in what you want to name your x axis and y axis, click next.
13. Click the "Legend" tab and choose the placement of the legend within your graph. Click "Next"
14. Choose save as new sheet. Click "Finish"
15. Now you can rename this sheet (chart 1) as you did above with your data.

- **Modifying an existing template**: This is useful if you are using the templates provided, but do not have enough data to fill in the entire graph. For example: the CBM template is designed to allow for 30 data points. If you are only graphing 16 data points, you will want to modify the data series to the number of data points you need. This is easily accomplished by doing the following:

1. Insert the data you wish to graph in the data sheet.
2. Click on the graph tab to display the graph.
3. Click the "Chart" menu at the top of your screen
4. Choose "Source Data" from the menu
5. Click once inside the "Data Range" box that appears in the dialogue box. The curser will be blinking in the "Data Range" box.
6. Click on the data tab to open the data sheet

7. Click and drag to highlight the cells in which your entered data and data labels appear.

8. The source data will automatically appear in the “Data Range” box.

9. Click “Ok.” If you make a mistake, click “Cancel” and try again!

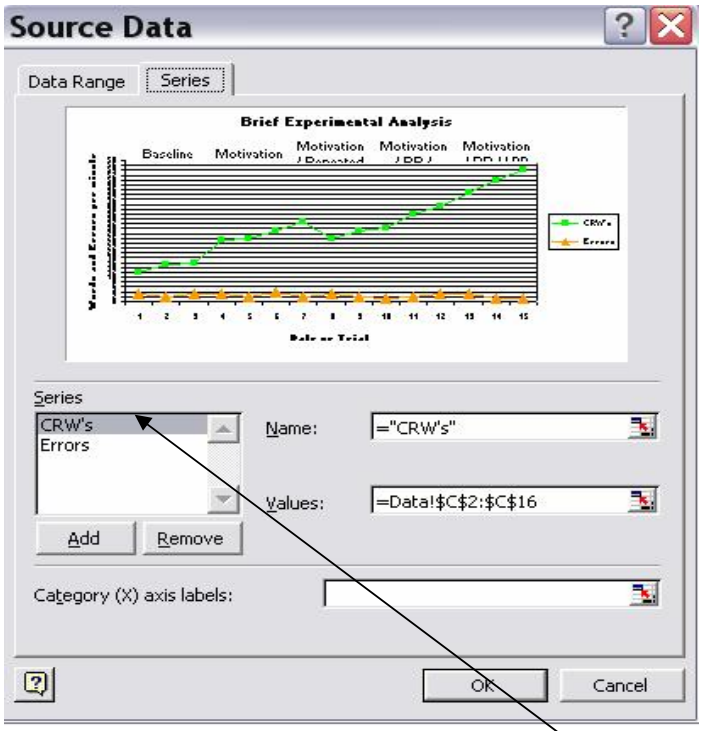
10. You may need to edit the lines provided for baseline data, etc., as outlined in the “removing lines” section.

11. You will also need to rename the series in the legend of the graph; please refer to the section of this document titled “Changing the legend.”

- **Changing the legend**: when modifying a template, (i.e.: using the frequency template to track test scores,) you may need to change the legend. You will also need to rename each series in the legend when you modify the data range of your graph.

1. In the “Graph” sheet, click the “Chart” menu at the top of your screen

2. Choose “Source data” from the menu.



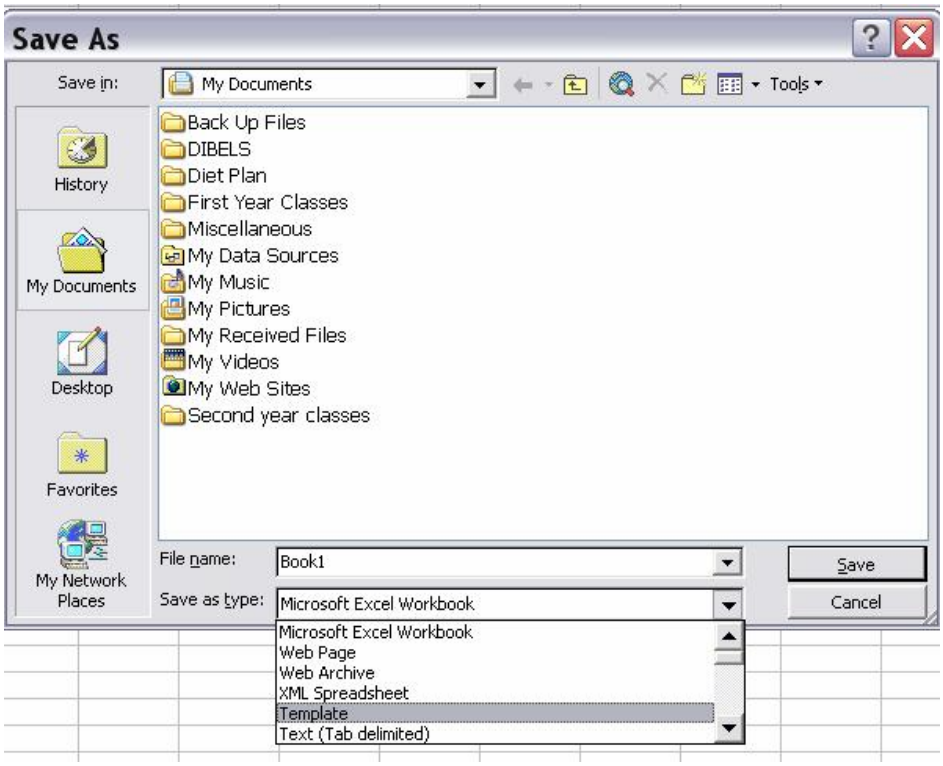
3. Click on the “series” tab

4. To rename a series, highlight it by clicking once on the name of the series. If you have modified the source data, the program will automatically rename the series “series 1,” “series 2,” etc.

5. The name will appear in the “name” box to the right of the highlighted text. Highlight the existing name in the “name” box and type in the new name of the series.
6. Repeat this for each series you wish to rename.
7. Click “ok.”

- **Building your own template:** Once you have constructed a graph that you like and would like to use again, you may wish to save time by making the graph into a template. To do so:

1. Construct your spreadsheet by inputting your data and make a graph as instructed above. If you want to save the data, save the document and then delete the data you have entered. In the file menu choose save as.
1. Click “File” and choose “Save As” from the menu
2. In the “Save as Type” box, located below the “File name” box, choose “Template.”



3. The “Save in” menu will automatically change to “Templates.” You may wish to use the arrows to select the folder in which you want to save your templates.
4. In the “File name” box, type in whatever you choose to name your template.

5. Click “Save.”
6. If you want to make your template more creative you can change the look of the blocks in the spreadsheet by using the format menu at the top. You can change the width and height of columns and row and even add color by choosing border and patterns.

Now that you have the tools to quickly create more professional, exciting graphs, you are well on your way to becoming a more effective practitioner. As you become more familiar with the graphing function provided by Microsoft Excel, you too may catch the “graphing bug,” and benefit from the endless possibilities for presenting a variety of data! Enjoy!