

# CREATING **Bar Graphs** IN MICROSOFT EXCEL 2003

# Step 1: Set up the Variables AB Design

Use the top cells to Label the variables that will be displayed on X and Y axis of the graph

# Step 1: Set up the Variables

## X-Axis for AB design

	A	B	C	D	E	F	G	
1	<b>Variable(s) on Y axis:</b>	<b>Variable on X axis</b>						
2		<b>FAST</b>						
3	<b>Rater</b>	<b>Attention/Tangible</b>	<b>Escape</b>	<b>Automatic</b>	<b>Automatic Pain</b>			
4	<b>Teacher</b>							
5	<b>Parent</b>							
6								
7								
8								
9								
10								
11								
12								
13								

Enter Y-axis label in this cell  
For example: If you are graphing data obtained from a teacher and a parent for Y axis enter  
Teacher  
Parent

# Step 1: Set up the Variables

	A	B	C	D	E	F
1	Variable(s) on Y axis	Variable on X axis				
2		FAST				
3	Rater	Attention/Tangible	Escape	Automatic	Automatic Pain	
4	Teacher					
5	Parent					
6						
7						
8						
9						

Enter X-axis label in this cell

For example: If you are graphing data for a rating scale or test results enter the labels for the rating scale or the test

The Functional Analysis Screening Tool has four categories

1. Attention/tangible 2. Escape 3. Automatic, 4 Automatic Pain

If we were to graph the results of the FAST we would enter the above categories for X axis

# Step 1: Set up the Variables

The screenshot shows a Microsoft Excel spreadsheet titled "Multiple Baseline and prob Designs". The spreadsheet is set up to define variables for an experiment. The columns are labeled A through F. Row 1 contains the headers: "Variable(s) on Y axis" in column A and "Variable on X axis" in columns B through F. Row 2 contains the text "FAST" centered under the X-axis header. Row 3 contains the text "Attention/Tangible" in column B, "Escape" in column C, "Automatic" in column D, and "Automatic Pain" in column E. Row 4 contains the text "Rater" in column A, and "Teacher" in column B. Row 5 contains the text "Parent" in column A. Row 10, column B is highlighted with a black border. The Excel interface includes a menu bar (File, Edit, View, Insert, Format, Tools, Data, Window, Help), a toolbar, and a status bar at the bottom showing "Ready" and "NUM". The Windows taskbar at the bottom shows the Start button, several open applications (Gmail, Multiple Baseline and..., Paint, CREATING BAR GRAP...), and the system clock showing 6:54 PM.

	A	B	C	D	E	F
1	<b>Variable(s) on Y axis</b>	<b>Variable on X axis</b>				
2		<b>FAST</b>				
3	<b>Rater</b>	<b>Attention/Tangible</b>	<b>Escape</b>	<b>Automatic</b>	<b>Automatic Pain</b>	
4	<b>Teacher</b>					
5	<b>Parent</b>					
6						
7						
8						
9						
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12						
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22						
23						

# Step 2: Enter the Data

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F
1	<b>Variable(s) on Y axis</b>	<b>Variable on X axis</b>				
2		<b>FAST</b>				
3	<b>Rater</b>	<b>Attention/Tangible</b>	<b>Escape</b>	<b>Automatic</b>	<b>Automatic Pain</b>	
4	<b>Teacher</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>1</b>	
5	<b>Parent</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>	
6						
7						
8	<b>Enter the FAST results from parent and teacher reports (see below) as it is shown above</b>					
9						
10						
11						
12						

**For example; the FAST results from parent and teacher are shown below**

<b>Parent FAST</b>		<b>Teacher FAST</b>	
<b>Attention</b>	<b>1</b>	<b>Attention</b>	<b>2</b>
<b>Escape</b>	<b>4</b>	<b>Escape</b>	<b>4</b>
<b>Automatic</b>	<b>0</b>	<b>Automatic</b>	<b>0</b>
<b>Automatic Pain</b>	<b>1</b>	<b>Automatic Pain</b>	<b>1</b>

# Creating the Bar Graph

# Step 3: Create the Bar Graph

	A	B	C	D	E	F
1	<b>Variable(s) on Y axis</b>	<b>Variable on X axis</b>				
2		<b>FAST</b>				
3	<b>Rater</b>	<b>Attention/Tangible</b>	<b>Escape</b>	<b>Automatic</b>	<b>Automatic Pain</b>	
4	<b>Teacher</b>	2	4	0	1	
5	<b>Parent</b>	1	4	0	1	
6						
7						
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12						
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14						
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22						
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24						

- Position the mouse on cell A3
- Click and hold the left mouse button
- Move the mouse till all the data points are highlighted
- Release the left button



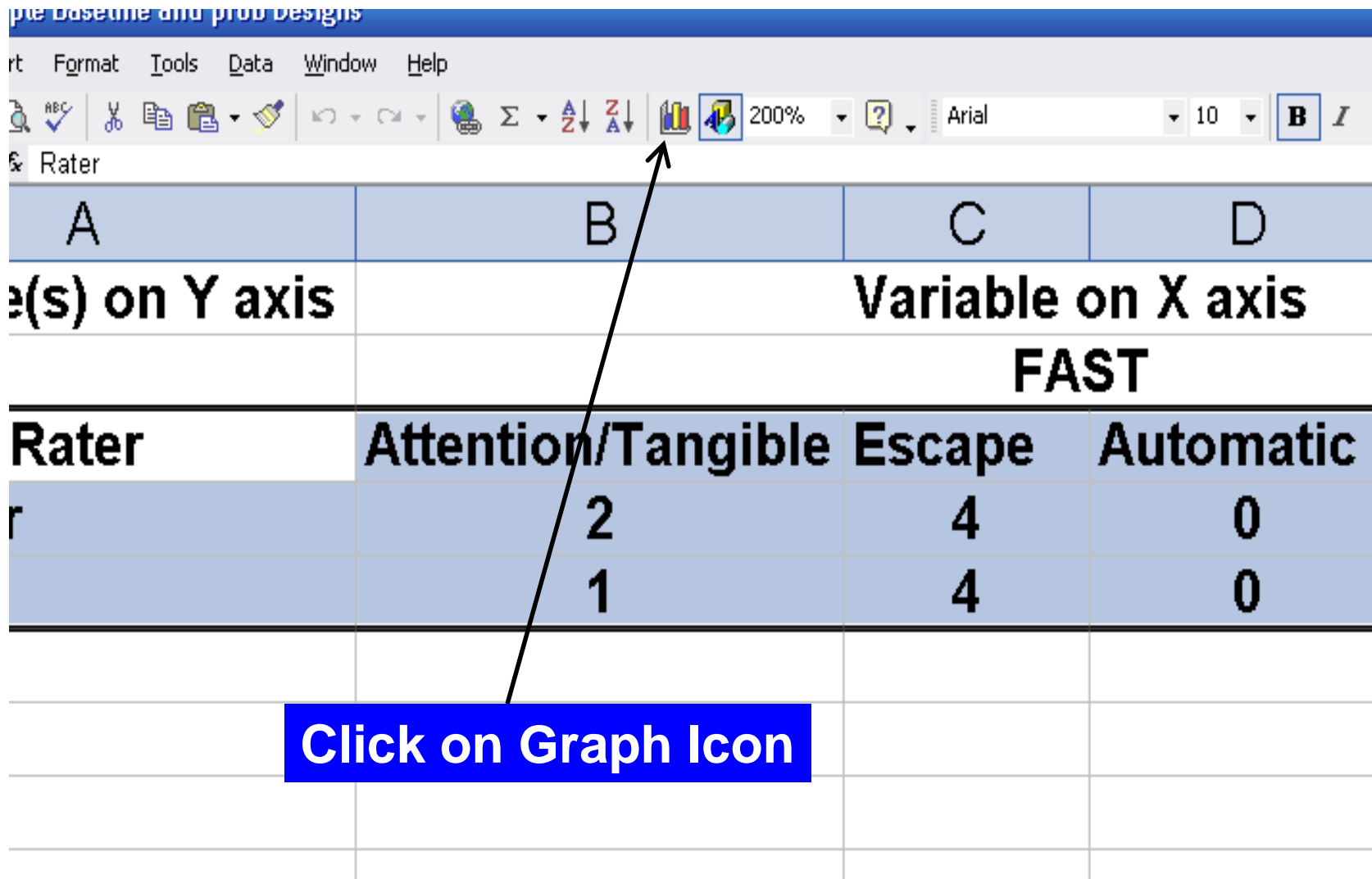
# Step 3: Create the Line Graph ABAB Design

	A	B	C	D	E	F	G	H	I	J
1	Date	Baseline	NCR	Baseline	NCR					
2	11/10	2								
3	11/11	3								
4	11/12	3								
5	11/13	1								
6	11/14	2								
7	11/15		3							
8	11/16		3							
9	11/17		2							
10	11/18		1							
11	11/19		1							
12	11/20		0							
13	11/21		0							
14	11/22		0							
15	11/23		0							
16	11/24			1						
17	11/25			2						
18	11/26			3						
19	11/27			3						
20	11/28				2					
21	11/29				0					
22	11/30				1					
23	12/1				0					
24	12/2				0					
25										
26										
27										
28										

- Position the mouse on cell B1
- Click and hold the left mouse button
- Move the mouse till all the data points are highlighted
- Release the left button
- If data collection for re-implementation of the intervention is ongoing, highlight additional empty cells. For example: if the data collection for re-implementation of NCR is going to continue for additional 4 days, cells 25, 26, 27 and 28 will be highlighted as well.

} empty cells

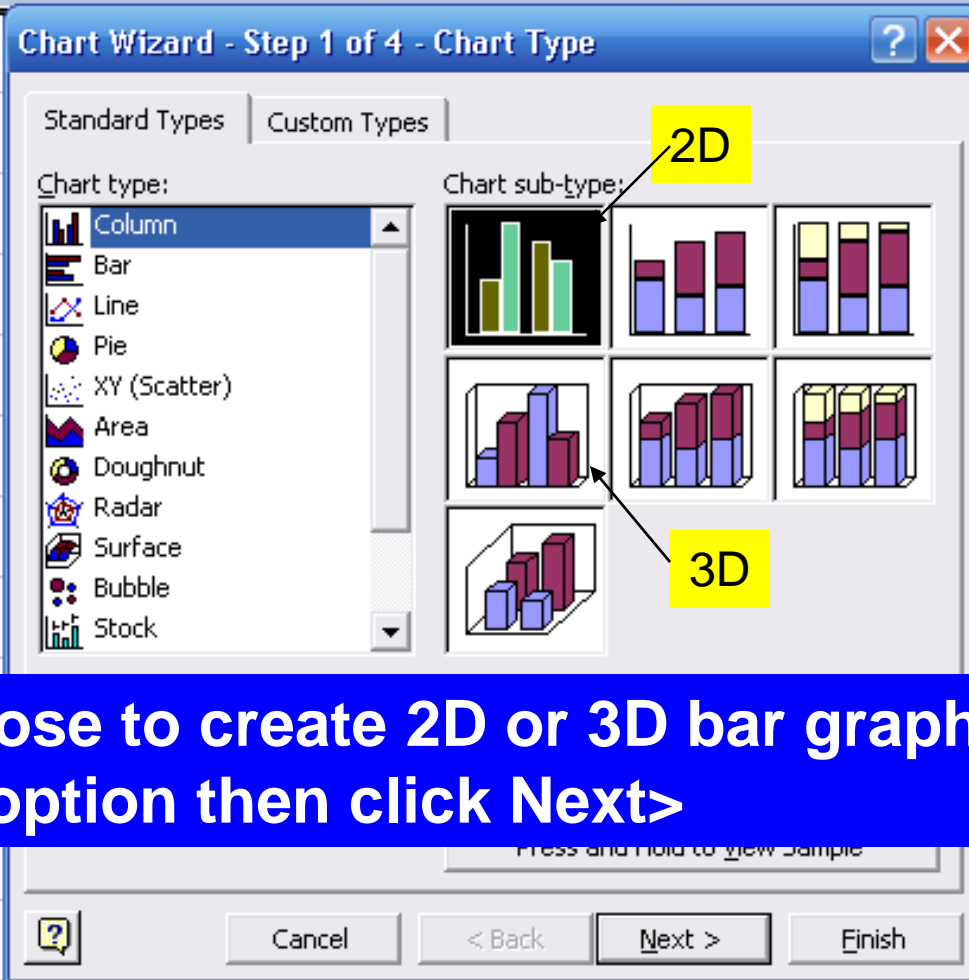
# Step 3: Create the Bar Graph



The screenshot shows a software interface with a menu bar (File, Format, Tools, Data, Window, Help) and a toolbar. The toolbar includes icons for undo, redo, and a graph icon. An arrow points from a blue callout box at the bottom to the graph icon. Below the toolbar is a data table with columns A, B, C, and D. The table is titled 'Variable on X axis' and 'FAST'. The rows are labeled 'Rater' and 'Attention/Tangible', 'Escape', and 'Automatic'. The data values are: Rater (2, 4, 0), Attention/Tangible (1, 4, 0).

	A	B	C	D
Variable on X axis				
FAST				
Rater		Attention/Tangible	Escape	Automatic
r		2	4	0
		1	4	0

**Click on Graph Icon**

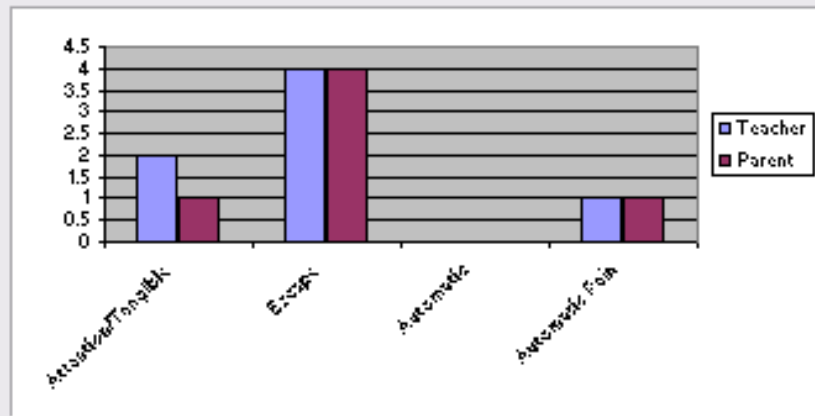


**You can choose to create 2D or 3D bar graphs  
Click on 2D option then click Next>**

## Chart Wizard - Step 2 of 4 - Chart Source Data

Data Range

Series



Data range:

Series in:

- Rows
- Columns



Cancel

< Back

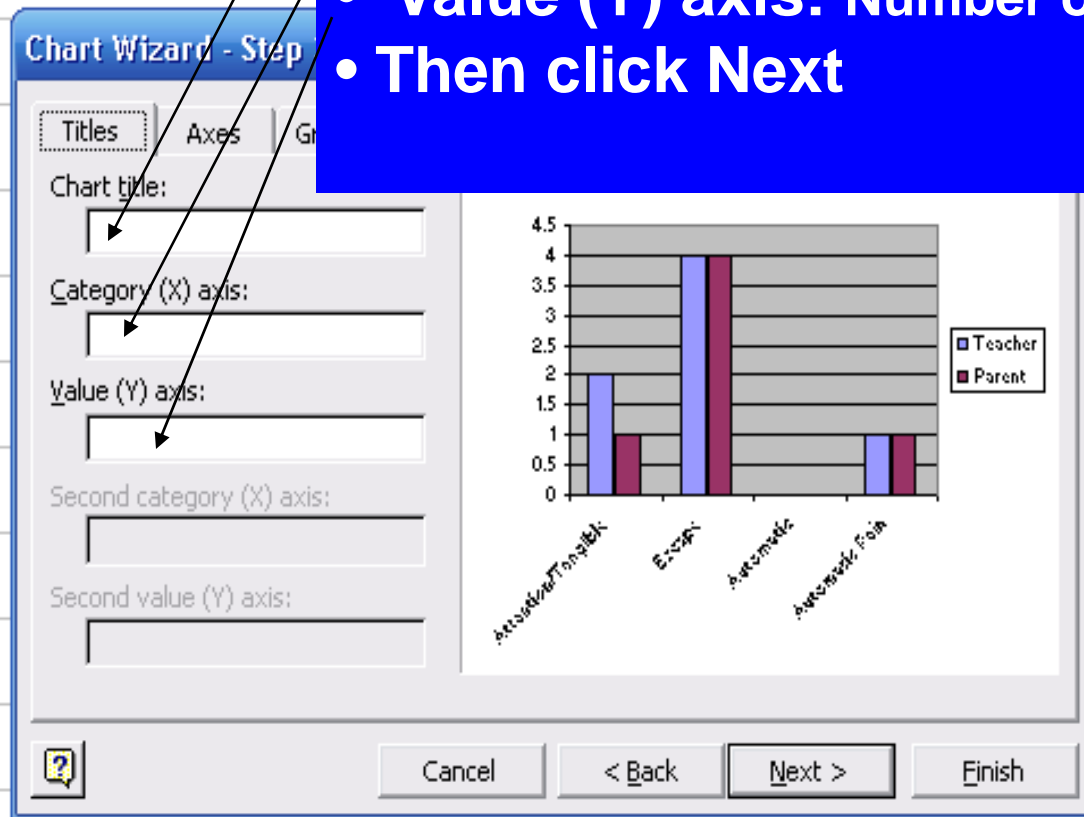
Next >

Finish

# Step 3: Create the Line Graph

Fill in the

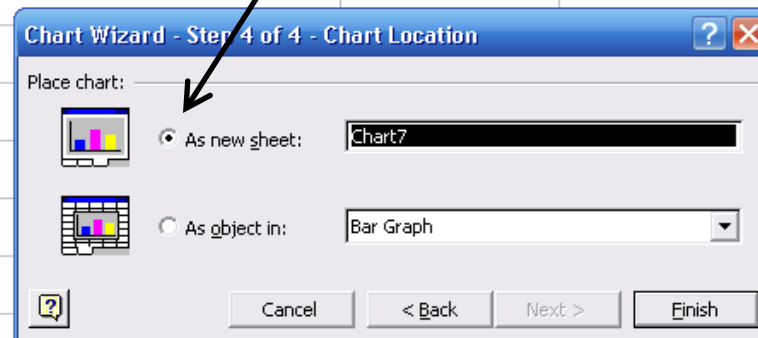
- Chart title:
- Category (X) axis: Possible Function
- Value (Y) axis: Number of "Yes" answers
- Then click Next



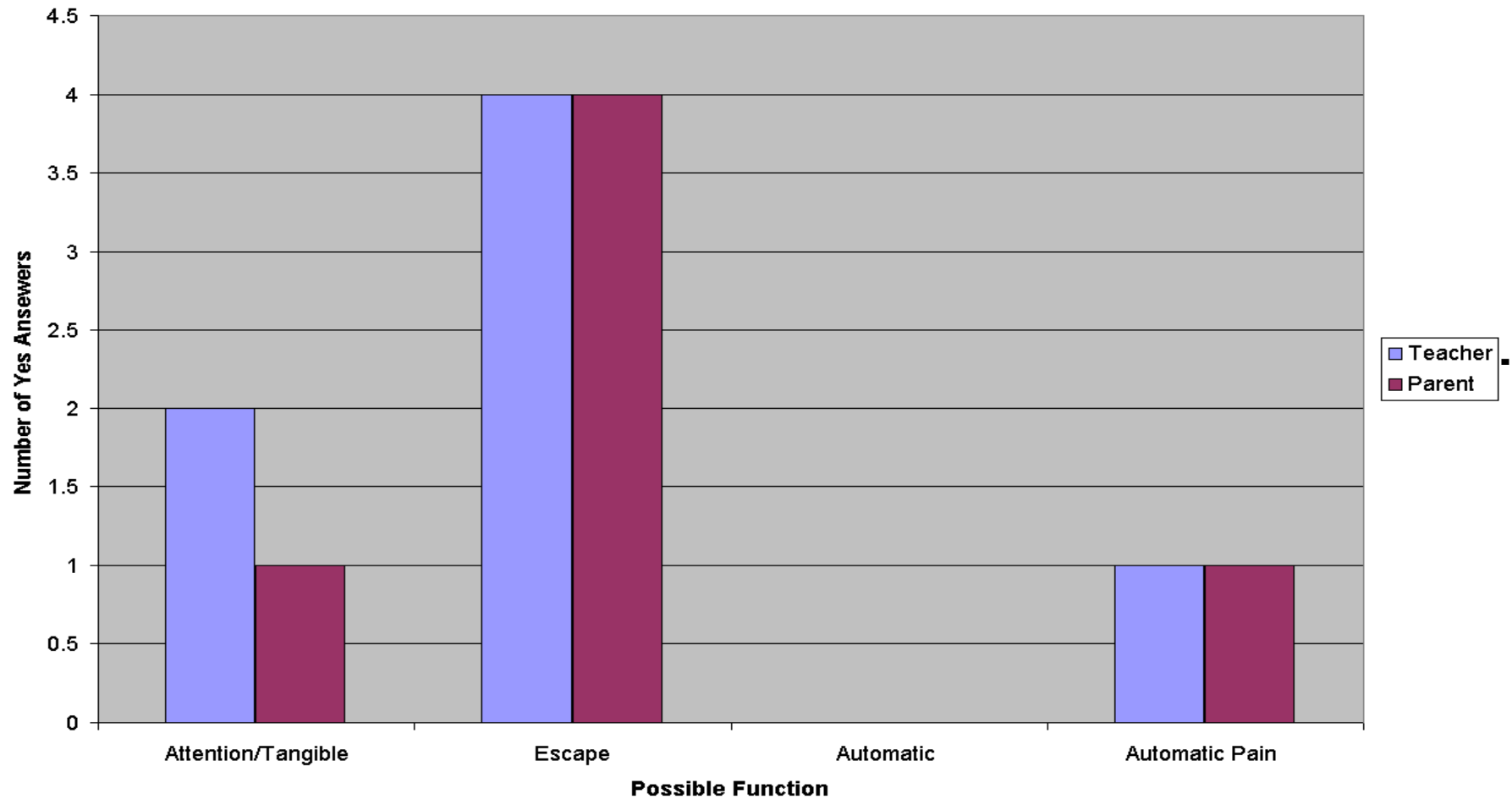
# Step 3: Create the Bar Graph

	A	B	C	D	E
1	<b>Variable(s) on Y axis</b>	<b>Variable on X axis</b>			
2		<b>FAST</b>			
3	<b>Rater</b>	<b>Attention/Tangible</b>	<b>Escape</b>	<b>Automatic</b>	<b>Automatic Pain</b>
4	<b>Teacher</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>1</b>
5	<b>Parent</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>

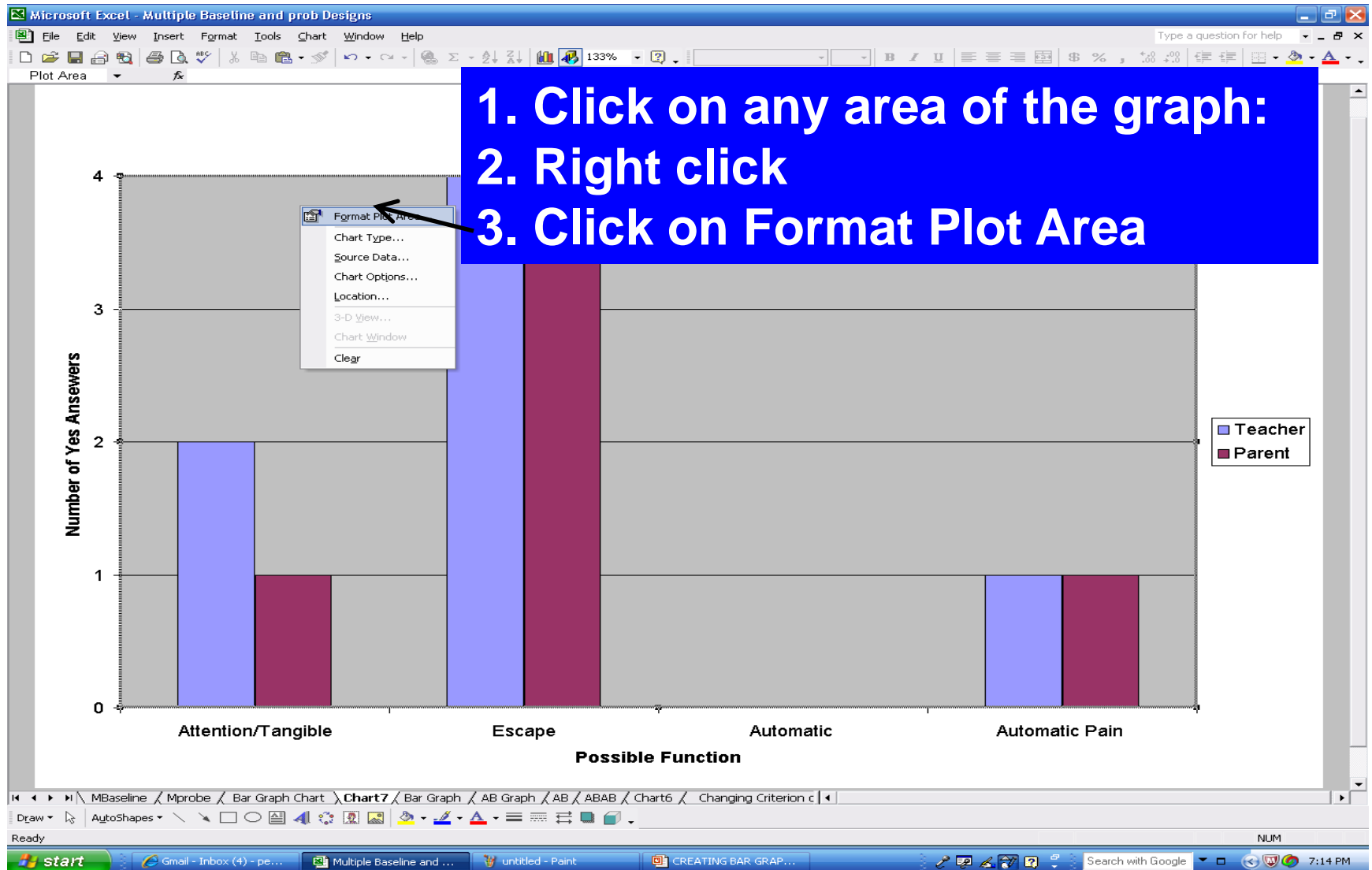
**Click As new sheet then  
Finish**



### Example Bar Graph



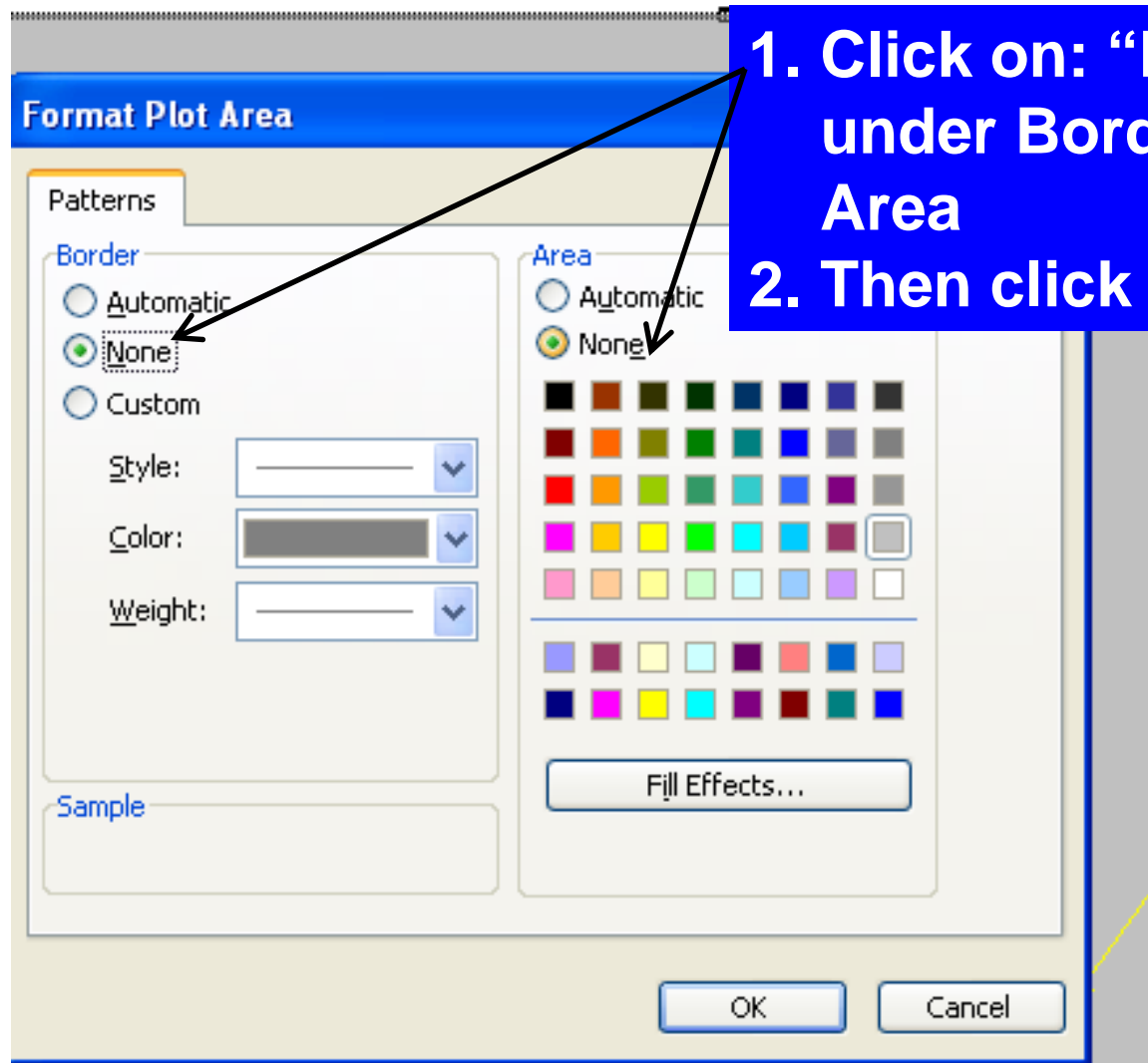
# Step 3: Create the Bar Graph Adjust the Plot Area of the Graph





# Step 3: Create the Bar Graph

## Adjust the Plot Area of the Graph



### Example Bar Graph

Chart Area

