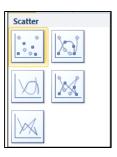# Microsoft Excel 2013: Scatter Chart

A scatter chart plots the values for two variables as a set of points on a graph. One variable controls the position on the x-axis of a point, while the other variable controls the position on the y-axis. If you're familiar with graphs, you might already understand that these points are referred to as (x,y) where x is the position along the x-axis and y is the position along the y-axis of each point.

So in a line chart the x-axis represents different categories, in a scatter chart it represents the actual values of the variable. Scatter charts are best understood by looking at examples. Here is some sample data that suggests that there is a relationship between the number of years people spend in education and their salaries. Let's copy & paste these into Excel.

Education in Years	Salary
10	$100,000.00
12	$115,000.00
15	$120,000.00
8	$70,000.00
20	$150,000.00
17	$130,000.00
19	$145,000.00
13	$120,000.00
16	$125,000.00
18	$140,000.00

Select all the cells click on **Insert**, in the **Charts** grouping, choose **Scatter.** I chose **Scatter with only Markers**. It is the first one listed. Hold your mouse over it to find the name of each type of chart.
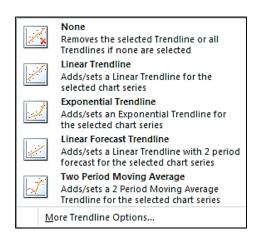

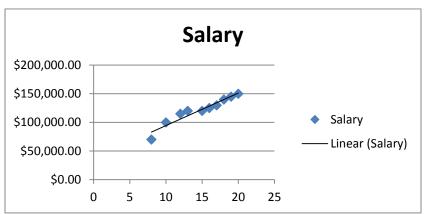See example Scatter chart below:

The scatter diagram, even in its current state shows us that there is a possible relationship between years in education and salary. You can see that as years in education increases, so does salary. We can make this relationship clearer by using trend lines.

Using Trendlines in Scatter Charts
Select our Scatter chart, under **Chart Tools**, click on **Layout** tab, in the **Analysis** grouping, **Trendline**. Let's try the **Linear** trend line and see example below.

Adding a Trendline to a Scatter chart is a good way of visually seeing the trend in data.