Design Document: Microsoft Excel – Charts & Graphs

Class Description

Learn how to add visual interest and tell stories by displaying numbers and data sets in chart or graph format in this class.

**Curriculum Track**

Microsoft Tools

**Audience**

Adults

**Course Length**

90 minutes

**Training Method**

Instructor-led hands-on

**Purpose**

To show users how to create graphical and representations of their data

Equipment Requirements

Projector and projection screen; computers with internet access for the instructor and each participant; laser pointer (recommended)

Software Requirements

Windows 7, Microsoft Excel 2013

Material Requirements

Pens or pencils, handouts, *Chart Types* Quick Reference Guide, *MS Excel Charts & Graphs* Practice File

**Learning Objectives**

At the end of the session, learners will be able to:

* Add a **Currency** symbol, **Percent** symbol, **1000 Separator**, and adjust **Decimal places** within cells
* Add and remove cell borders
* Identify the appropriate type of chart for a specific data need
* Create a basic chart from a range of cells
* Resize, move, edit, and print a chart

**Assessment Technique(s)**

Successful completion of class activities

Content Outline

**Agenda (2 mins.)**

* Outline the following topics that will be covered in class:
  + Formatting Numbers
  + Using Borders
  + Types of Charts
  + Creating Charts
  + Modifying and Printing Charts

**Topics, Talking Points, and Activities (85 mins.)**

* Formatting Numbers
  + Explain that there are a variety of number formatting options in Excel while hovering over the buttons in the **Numbers** group; common ones include:
    - **Accounting Number Format**, which allows users to display the numbers as currency values ($)
    - **Percent Style**, which allows users to display the numbers as percentages (%)
    - **Comma Style**, which allows users to display the numbers with comma separators for the thousands
    - **Decimal Increase**/**Decimal Decrease**, which allows users to show more or less precise values by adding or removing decimal places
  + Next, use the **Dialog Box Launcher** to access the **Format Cells** box and discuss the following options:
    - **Date**, which provides users with options for displaying dates
    - **Time**, which provides users with options for displaying times
    - **Fraction**, which provides users with options for displaying fractions
    - **Text**, which allows users to display cell content exactly as entered whether or not it contains numbers
    - **Special**, which provides options for displaying data as zip codes, phone numbers, or social security numbers
* Using Borders
  + Point out the **Border** button in the **Font** group and explain that it provides various formatting options for placing lines around cells.
  + Share that the easiest way to add a border to a cell or cells is to complete the following steps:

1. Highlight all the cells around which you want to place a border
2. Click on the down arrow next to the **Border** button to access the **Borders** menu
3. Click on the button with the desired border to apply the style to the highlighted cell(s)
   * Share that to remove a border, users follow the same steps except that they will click on the **No Borders** button to remove them

**ACTIVITY**: Have participants open *Practice File-* *MS Excel Charts & Graphs* and insure they are on the **January Budget for Editing** tab. Ask them to use it to complete **Activity** **#1** on the *Activity Sheet*.

* Types of Charts
  + Explain to participants that while they may prefer the visual look of one specific type of chart, there are actually six types of charts in Excel, each one designed to highlight a particular type of data or data pattern. Ask participants to follow along while you discuss the types of charts listed on the *Chart Types Quick Reference Guide*

**ACTIVITY**: Ask the participants to look at the *Chart Types Quick Reference Guide* and tell you which type of chart would work best for the **January Budget**. Ask them to explain their answer. (The answer is **Column** **Chart**, which is best for illustrating how values change over time)

* Creating Charts
  + Explain that once users determine which type of chart best illustrates their data, they will use the following steps to create one:

1. Select the cells that contain the data and text they wish to include in the chart
2. Click on the **Insert** tab and then click on the button for the desired chart type
3. Click on the desired chart subtype

**ACTIVITY**: Ask participants to complete **Activity #2** on the *Activity Sheet*

* Modifying and Printing Charts
  + Share that once a chart is created, there are options for modifying it that include resizing, moving, changing the design, and formatting various elements. Outline the following for participants:
    - To Resize a chart, click on a blank area inside the chart so the handles appear in the corners, then click on one of the handles and drag it to the desired size
    - To Move a chart, click on the blank are inside the corner and drag it to the desired location
    - To change the chart design, follow these steps:

1. Click on the chart
2. Click on a button in the **Chart Format** group to change the individual color aspects (such as the color of one set of bars or the background). Note: If you’d like the change the chart color scheme as a whole, use the **Change Colors** button in the **Chart Design** tab.
3. Click on a button in the **Chart** **Design** group to change the arrangement of different elements of a chart.

**Note**: To see additional options in each group, click the down arrow in the lower right-hand corner of each box

* + - To format elements within a chart, click on the element you wish to change and then apply the desired formatting option on the **Home** tab (such as bolding the text or changing the font)
    - To modify specific chart elements—such as the legend, axis titles, or data labels—click on the **Chart Tools** > **Design** tab and then click on the button of the element you wish to change to review and select the appropriate choice. Note: This can also be done by selecting the specific element in the chat and right-clicking to access the **Format Chart Area** pane.

**Note**: If unsure of the name of the element, hover over it and the name will appear

* To print a chart and its accompanying spreadsheet, click on an area outside of the chart and then follow your normal printing process
* To print a chart by itself, click on the chart and then follow your normal printing process

**ACTIVITY**:Ask participants to complete **Activity #3** and **Activity #4** on the*Activity Sheet* and then compare their work to the example chart on the **January Budget (Edited)** tab within the *Excel Charts Practice File*. Except for color and size differences, the charts should appear the same.

**Wrap Up/Closing (3 mins.)**

* Highlight the upcoming technology classes and share the types of topics that will be covered
* Ask if there are questions and answer any that were “parked” during the session
* Thank participants for coming and ask them to complete the class survey before leaving