Excel Charts for LCAP Marin County Office of Education February 2015

GOALS



Starting with the data

DATA TABLES

Data Tables

- We have geared this workshop towards working with the data you may need to report out on during your Local Control and Accountability Plan Annual Update process.
- This workshop assumes the participants have had varying levels of exposure to excel and will therefore include some basic excel tips.
- Charting data to make it more comprehensible starts with a data set organized into a table.
- We will build some data tables and then learn how to create charts and graphs to visually communicate the information

Data Tables

- Open excel and you will be in a blank workbook named Book1
- Begin by saving your file to the desktop you can then email it to yourself at the close of the session using your web based e-mail. We will delete all files saved to the desktop once the session is over.
- Please save the file with your name and your district included in the filename.



| Add a footer to your file INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW A | e with the filepath and name |
|---|---|
| Colors * A Fonts * Margins Orientation Size Print Breaks Background Print Titles Page Setup Factors | C D L |
| Page Setup ? × | Footer ? × |
| Page Margins Header/Footer Header: (none) Custom Header Custom Footer Footer: (none) | Footer To format text: select the text, then choose the Format Text button. To format text: select the text, then choose the appropriate button. To insert picture: press the Insert Picture button. To format your picture, place the cursor in the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the Format Picture button. Image: Control of the edit box and press the format Picture button. Image: Control of the edit box and press the format Pictur |
| | OK Cancel |

Data Tables

- Label your worksheet and date it
- Set up your column headers and row labels
- Format for readability
- Populate

| | А | В | С | D | Е | F | G |
|---|-----------------------|--------------|----------|----------|----------|----------|-----------|
| 1 | School District Enrol | lment and At | tendance | | | | 2/27/2015 |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
| 5 | Enrollment | 1,261.00 | 1,331.00 | 1,401.00 | 1,508.00 | 1,556.00 | 1,565.00 |
| 6 | Attendance | 1,205.00 | 1,273.00 | 1,343.00 | 1,454.00 | 1,497.00 | 1,515.74 |
| 7 | | | | | | | |



- The Home tab provides formatting options to align information, add cell borders, set font style, size and effect, add colors, and set number styles
- Use the format painter to copy formats





Label cell A7 'Attendance rate' Add a formula in cell B7 =B6/B5 and format as % Label cell A8 'Target rate' Enter your target rate G В C D F F А Fill formula right School District Enrollment and Attendance 2/27/2015 2 [CTRL R] 3 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 4 Enrollment 5 1,261.00 1,331.00 1,401.00 1,508.00 1,556.00 1,565.00 Attendance 1,205.00 1,273.00 1,343.00 1,454.00 1,497.00 1,515.74 6 Attendance rate 95.6% 95.6% 95.9% 96.4% 96.2% 96.9%

96.0%

96.0%

96.0%

96.0%

96.0%

96.0%

Target rate

8

Data Tables - Recap

- These basic principles of clearly labeling your data hold true no matter the data you are working with
- The clearer you are about when you created the data file and what it represents the better your life is
- Formatting your data promotes excel's intuition to automate charts
- Including the footer to the file will save you hours of reconstruction because you couldn't locate the file

Communicating with pictures

LET'SCHARTIT!

- Highlight your data table row and column labels included
- Go to the Insert tab. Select Charts. Select a chart. OK button



• Et Voila!

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| | Α | | В | С | D | E | F | G | Н |
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| 5 | Enrollment | i | 1,261.00 | 1,331.00 | 1,401.00 | 1,508.00 | 1,556.00 | 1,565.00 | |
| 6 | Attendance | | 1,205.00 | 1,273.00 | 1,343.00 | 1,454.00 | 1,497.00 | 1,515.74 | |
| 7 | Attendance rat | te | 95.6% | 95.6% | 95.9% | 96.4% | 96.2% | 96.9% | |
| 8 | Target rate | | 96.0% | 96.0% | 96.0% | 96.0% | 96.0% | 96.0% | |
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| 13 | | 1,600 | .00 | | | | | 100.0% | |
| 14 | | 1,400 |).00 | - | | | | | \square |
| 15 | | 1,200 | 0.00 | | | | | 80.0% | |
| 16 | | 1,000 | 0.00 | | | | | 60.0% | |
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| 18 | | 600 | .00 — — | | _ | | | 40.0% | |
| 19 | | 400 | .00 | | | | | 20.0% | |
| 20 | | 200 | .00 | | _ | | | 20.0% | |
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| 24 | | | | | | | | 8-11-010 | 13 |
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 Click anywhere on your chart to bring up the Chart
 Design and Format menus



Design Menu:

- Change Colors dropdown
- Quick Layout dropdown
- Add Chart Element dropdown



CHART TOOLS

DESIGN FORMAT

Add Chart Element dropdown

- Add legend
- Add axis titles
- Add Chart title
- Add data labels
- Add the data table
- Change axis options



Add Chart Element •

Chart La

Design Menu:

Browse Chart styles

- Data dropdowns
 - Switch Row/Column
 - Select Data
- Change chart type
- Move chart





Select data



Use this to change the data source – very helpful when adding another year's data

| | А | В | С | D | E | F | G | F |
|----|--------------------------------|---|----------|-----------------|----------------------------|----------|-----------|------------|
| 1 | School District Enro | School District Enrollment and Attendance | | | | | 2/27/2015 | |
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| 3 | | | | | | | | |
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| 8 | Target rate | 96.0% | 96.0% | 96.0% | 96.0% | 96.0% | 96.0% | 1 |
| 9 | | | Calaa | Data Carrie | | | 2 X | - 80 |
| 10 | | | Selec | t Data Sour | ce | | | |
| 11 | Chart data range: | =Sheet1!\$A\$4:\$ | G\$8 | | | | | |
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| 20 | Attendance ra | ate | | 20 | 11-12 | | | |
| 21 | ✓ Target rate | | | 20 | 12-13 | | | |
| 22 | | | | 20 | 13-14 | | | |
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| 24 | Hidden and Empty | Cells | | | | ОК | Cancel | |
| 25 | | | | | | | | |
| 26 | | | 11988 | 18 | | 1000 | - 1 | 1 |

18

Change Chart Type

- You can select different chart types for each series
- We used Clustered Column for Enrollment & Attendance
- Line for Attendance & Target rates on a secondary axis



• Format menu

CHART TOOLS

DESIGN FORMAT

Series "Attendance"

Format Selection



• OR from the format window that opens on the right

🔠 Reset to Match Style

Current Selection

Format Data Seri... • * SERIES OPTIONS • \land \land \blacksquare \checkmark FILL \bigcirc No fill

20

Format the data series

- Select the series you want to format -
- Click to open the format window on the right side of the screen



Format Chart Area ▼ × **CHART OPTIONS** ▼ | TEXT OPTIC



Format menu

 Change the width of the gap between your data series





Format Axis

• Change the scale on your axis



Chart Title

| AXIS OPTIONS - TEXT OPTIONS | | | | | | |
|------------------------------|--------------|-------|--|--|--|--|
| | | | | | | |
| | | | | | | |
| Bounds | | | | | | |
| Minimum | 0.9 | Reset | | | | |
| Maximum | 1.0 | Reset | | | | |
| Units | | | | | | |
| Major | 0.01 | Auto | | | | |
| Minor | 0.002 | Auto | | | | |
| Horizontal axis crosses | | | | | | |
| Automatic | | | | | | |
| ○ Axis valu <u>e</u> | | 0.0 | | | | |
| ○ <u>M</u> aximum axis value | | | | | | |
| Display <u>u</u> nits | Non | e 🔻 | | | | |
| Show display units label | on chart | | | | | |
| Logarithmic scale | <u>B</u> ase | 10 | | | | |
| Values in reverse order | | | | | | |

• Change the coloring, line weight, line type etc. for line graphs

Change fill color, outline color, fill pattern or texture for block graphs

| | Format Data Seri • 3 SERIES OPTIONS • | × Dz- |
|---|--|----------|
| | ~ LINE / MARKER | |
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| | ○ <u>N</u> o line | |
| | Solid line | |
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| | <u>C</u> ompound type | |
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Determine the axis to plot the series on

Format Data Seri... ▼ SERIES OPTIONS ▼ ③
②

- SERIES OPTIONS
 Plot Series On
 - <u>Primary Axis</u>
 - Secondary Axis

Add special effects

Format Data Seri... • ×



*

Let's practice!

LCAP metric – All staff highly qualified or exemplary

- Qualified staff
- Non-credentialed staff
- Mis-assigned staff

Data Source – Latest SARC

Credentialed Teachers

— With Full Credential

competence

Without Full Credential

— Teaching outside subject area of



Build your data table:

- Go to your district website and get the information from one or more of your SARC reports
- Highlight the data set

| Data Source - 2013-14 SAR | | | |
|---------------------------|---------|---------|---------|
| Teachers | 2012-13 | 2013-14 | 2014-15 |
| With Full Credential | 4 | 5 | 4 |
| Without Full Credential | - | - | - |
| Teaching outside subject | | | |
| area of competence | 2 | 1 | 1 |

- On the INSERT tab
- Click the arrow for the Charts menu
- Select the chart type – Line with Markers
- Click OK
- Done!



Let's practice!

LCAP metric – x% of students will score proficient or advanced on assessments

Data Source: Latest SARC Alternate: Ed-data.k12.ca.us



Build your data table:

- Retrieve the data from your SARC or Ed-data.k12.ca.us
- Determine your target rate
- Highlight the data set

| Mathematics | 2010-11 | 2011-12 | 2012-13 |
|-------------|---------|---------|---------|
| School | 70% | 72% | 64% |
| State | 49% | 50% | 50% |
| Target | 51% | 51% | 51% |

- On the INSERT tab
- Click the arrow for the Charts menu
- Select the chart type – Clustered Column
- Click OK



Click on the chart

DESIGN FORMAT \$ Select Switch Row/ Change Move Column Data Chart Type Chart Data Location Type 2 Change Chart Type ded Charts All Charts cent mplates lumn Custom Combination e Percent of Students Scoring Proficient or Advanced ea Mathematics (Scatter) 80% ock 60% 40% rface 20% dar 096 2010-11 2011-12 2012-13 School State - Target Choose the chart type and axis for your data series: Series Name Chart Type Secondary Axis 🔺 Clustered Column School State Clustered Column \sim Target \checkmark \square Line OK Cancel 33

- From the Design menu, select Change Chart Type

• Change the series 'Target' to a Line graph

Don't reinvent the wheel...

READY MADE CHARTS & GRAPHS



Enrollment

Dixie Elementary 21-65318-0000000

This graph displays the total enrollment for this district. Enrollment is measured by counting the number of students enrolled in school on a particular day in October.

> 800 400

> > 0



- Or share the graph in a host of media
- Watch the site new data sets coming soon

- DataQuest for Enrollment series:
- http://dq.cde.ca.gov/dataquest/

Select Year of Data and County

1) Determine a time frame.

● Single year -- select year: 2013-14 ∨

 \sim

2) Select County.





| [| 1. Select Level: |
|---|---------------------|
| | Level: County 🗸 |
| [| 2. Select Subject: |
| | Subject: Enrollment |
| | 3. Click Submit: |
| 1 | SUBMIT RESET |
| | |

• Select the time-series

County Selected: 21 MARIN

Select a Report

- O County Enrollment by Ethnicity
- County Enrollment by Ethnicity (with district data)
- \bigcirc County Enrollment by Grade
- County Enrollment by Grade (with district data)
- O County Enrollment by Gender, Grade & Ethnic Designation
- Enrollment in Educational Options by Type
- Enrollment in Educational Options (with district data)
- Time Series Public School Enrollment Graph!

Submit

• Insert to your application using Insert, Screenshot, Screen clipping



Screenshots

- Screenshots are your friend
- Great visual tool for e-mails and PowerPoint presentations
- Works in <u>all</u> Office applications
- Insert\Screenshot\Screen Clipping

| | | | | | | 1 | Α | |
|------------|------------|-----------------------------------|----------------|---------|-----------|---|----------------------------------|-----------------|
| lip Art | Screenshot | Photo Album * | Shapes SmartAr | t Chart | Hyperlink | Action | Text Box | Heade & Foot |
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Use Data bars and conditional formatting to highlight data quickly and easily without charting

| Other Recommendations | | | | | | | | |
|---------------------------------------|----------|--------|----------|----------|----------|----------|----------|----|
| | Dist C | Dist H | Dist I | Dist J | Dist M | Dist O | Dist S | |
| Criteria #1 - Adheres to Template | | | | | | | | |
| Section 1: Stakeholder Engagement | | | | | | | | 2 |
| Section 2: Goals & Progress | | ¥ | ~ | | | | ~ | 4 |
| Section 3: Actions, Services & Exp | | | | | | | | 6 |
| Criteria #2 - Sufficient Expenditures | v | | | ~ | v | | v | 9 |
| Criteria #3 Part 1 (Section 3C) | v | ¥ | | | v | | v | 13 |
| Criteria #3 Part 2 (Section 3D) | v | ¥ | | ~ | | ~ | v | 8 |
| | | | | | | | | |



Conditional Forma Formatting Table Styles Highlight selection, use drop down to select Data Bar and choose color

Color!

Coloring the title header is an easy way to pull your data together

Conditional formatting can be used to provide color

Data bars provide a quick and easy way of highlighting a set of numbers

- Data tables can be made more user friendly without charting by using Conditional formatting
- Allows you to set conditions to highlight data and bring them to the forefront with formatting options





Use drop down to select <u>Highlight cell rules</u>, Choose from pre-set options. or create custom formula at Manage Rules

DATA SOLRES

Data Sources

- Marin County LCAP Metrics
- Student Information Systems
- Pupil Counts (SEIS, CalPADS etc.)
- QCC for budget, financial and HR data
- Budget, Interims, Unaudited Actuals (SACS)
- Your SARC reports published in February 2015 provide data for each of the State Priorities associated with the LCAP
- Where else do you maintain data in your district?

Data Source

• DataQuest has historical data for

- School Performance
- Test Scores
- Student Demographics
- Postsecondary Transition
- School Staffing
- Student Misconduct and Intervention
- California Healthy Kids Survey
- California School Climate Survey
- California School Climate Report Card
- School Quality Snapshot
- Subject Area Courses



- Default View shows Average/Count/Sum
- Select an array of cells, then look at the lower right hand corner of your screen
- Quick method for double checking data entry

| | А |
|---|---|
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| 2 | : |
| 3 | : |
| 4 | |
| 5 | |
| _ | |

| | | | - | | | | _ | - |
|------------|----------|---------|---|------|---|-----|---|---|
| | 1111 | | | | | | • | 1 |
| Average: 3 | Count: 5 | Sum: 15 | | 120% | Θ | -0- | (| ÷ |

Keyboard Shortcuts

- Selecting Arrays
 - Control + Shift + Down
 - Control + Shift + Right
 - Control + Shift + End
- Fill
 - Control + D (to fill down)
 Control + R (to fill right)
- Navigation - Control + End (to last cell) - Control + Home (first cell) (add Fn key if in Windows 8)
 - Carriage Return Alt + Enter Sum Alt +

