Using Dashboards for Autonomy, Accountability and Achievement

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Outcomes

- Understand how dashboards can be used by schools to support accountability and achievement.
- Know how a dashboard can support school leadership and the board in using data to inform decision-making.
- Recognize the limitations of dashboards and the importance of good data and the right data.
- Begin to develop you own dashboard and learn ways to make developing a dashboard easier.

Agenda

1. Dashboard Basics (15 mins)
    a. What is a dashboard?
    b. How can dashboards be used?
2. Review a Model Dashboard (15 mins)
    a. How does a typical dashboard look, work, and function?
    b. What are key considerations when designing and building a dashboard in Excel to streamline the process?
3. Overview of Excel Tips and Tricks (30 mins)
4. Breakout Sessions/Discussions/Exploration (15 mins)
    a. Kevin: How do you set up a dashboard in Excel?
    b. Ryan: How can you make it more visually appealing and user-friendly?
    c. Terry: How do you strategically and successfully design and implement a dashboard?

What is a dashboard?

Data dashboards

display key indicators of school performance in an easy-to-read format that can be used to measure progress and identify trends.

	LAST REPORT	THIS REPORT	TARGET<	TREND	YEAR TO DATE
Excused Absences	160	74	266	↓	555
Unexcused Absences	92	72	53	↓	331
Unexcused Tardies	419	251	266	↓	1262
Truancy Notices	0	0	3	=	0
Chronically Absent Notices	0	0		=	0
Attendance Plans created					
Attendance Plans in non-compliance					

Current Enrollment (P-8) 760
% of Budgeted Enrollment 115%
Percent of Students FRL 55%

KEY
Increased	↑
Decreased	↓
95-100+%	✓
90-94%	!
<90%	✕

Enrollment By Grade AY 2014-2015

Grade	Enrollment	% of Enrollment Budget	Withdawals #	Withdawals %	% Retention from Previous Year
Preschool	74	82%	2	3%	N/A
Kindergarten	64	89%	8	13%	27.4%
First	85	118%	5	6%	79.3%
Second	85	118%	7	8%	85.5%
Third	84	108%	3	4%	85.4%
Fourth	86	110%	4	5%	91.6%
Fifth	87	121%	2	2%	86.0%
Sixth	61	85%	1	2%	71.1%
Seventh	76	106%	6	8%	82.4%
Eighth	58	81%	4	7%	89.8%
Elementary	491	111%	29	0%	75.9%
Middle	195	90%	11	0%	81.1%
All	760	115%	40	0%	77.6%

What can dashboards do?

Dashboards can:
1. Provide a concise and comprehensive summary of school performance data (including baseline data, performance targets, and results).
2. Present data in an easily understood (and visual) manner.
3. Help monitor changes in results and outcomes over time.
4. Communicate and clarify board priorities.
5. Provide information to various stakeholders.

Dashboards can support these actions:

A. Monitor performance
(#2, #4, #6, #7)

B. Increased accountability
(#2, #3, #4, #7)

C. Strategic planning
(#1, #2)

1. Developing and implementing a strategic plan.
2. Monitoring academic and operational goals and outcomes.
3. Establishing a School Accountability Committee (SAC), creating data reporting structures, and informing board decision making processes.
4. Ensuring completion, submission, and implementation of the assigned improvement plan type.
5. Streamlining authorizer data reporting processes.
6. Monitoring student enrollment and operational viability.
7. Evaluating school leadership.

Types of dashboards:

You can have academic, organizational and financial dashboards.

Examples of specific dashboards:

a. Student achievement data
   i. State assessments, interim assessments, formative/summative assessments
b. Financial data
c. Enrollment and demographic data
d. Transportation data
e. Human resource data
f. School culture data
g. Food service data
h. Contract and renewal data

How to determine the appropriate dashboard structure?

How do you define success and what do you want to know:

    a.   What can you measure? What do you want to measure?

    b.   What data should be routinely presented to the board?

    c.   What is most important for the board to monitor?

    d.   How do you decide what to keep and what to exclude?

    e.   What data will let you investigate the root cause of your issues?

    f.   What data comparisons do you want to make?

    g.   How can you easily display and make sense of these data?

Dashboard limitations:

<u>Things to consider:</u>
1. Dashboards are only helpful if they add clarity.
2. Without clarity (and common language) data can easily be misinterpreted.
3. Dashboards are only as good as the data they use.
4. Some pieces of data can be updated frequently (daily attendance) while others are updated infrequently (annual testing data).
5. Start-up costs in terms of staff training and time can be significant (but in the long-term you should save time).
6. Dashboards require maintenance and continual inputs.

Questions to Get Started

- Why do you want a dashboard?

- How do you want to use a dashboard?

- What data do you want to include?

How do I create and maintain a dashboard?

Gather data
    a. Gather all of the data available relative to each goal
    b. Include current performance and historical data

Establishing reporting cycles
    a. How often do you want the dashboard updated?
    b. When is data most available?

Existing data resources

Staffing
    a. Staff interest/special project
    b. Accountability committee support
    c. School leader

Other considerations

Align dashboard to needs of the board and the yearly calendar
    a.   Topics become more relevant at different times of the year

Training for board to understand dashboard
    a.   Inclusion of a variety of measures provides an opportunity for board members to become more familiar with the included measures and to ensure that they all understand each measure and what success looks like (what is a "good" outcome for each measure)
    b.   Partner organizations or the school leader can be helpful to support this education

Dashboard Template
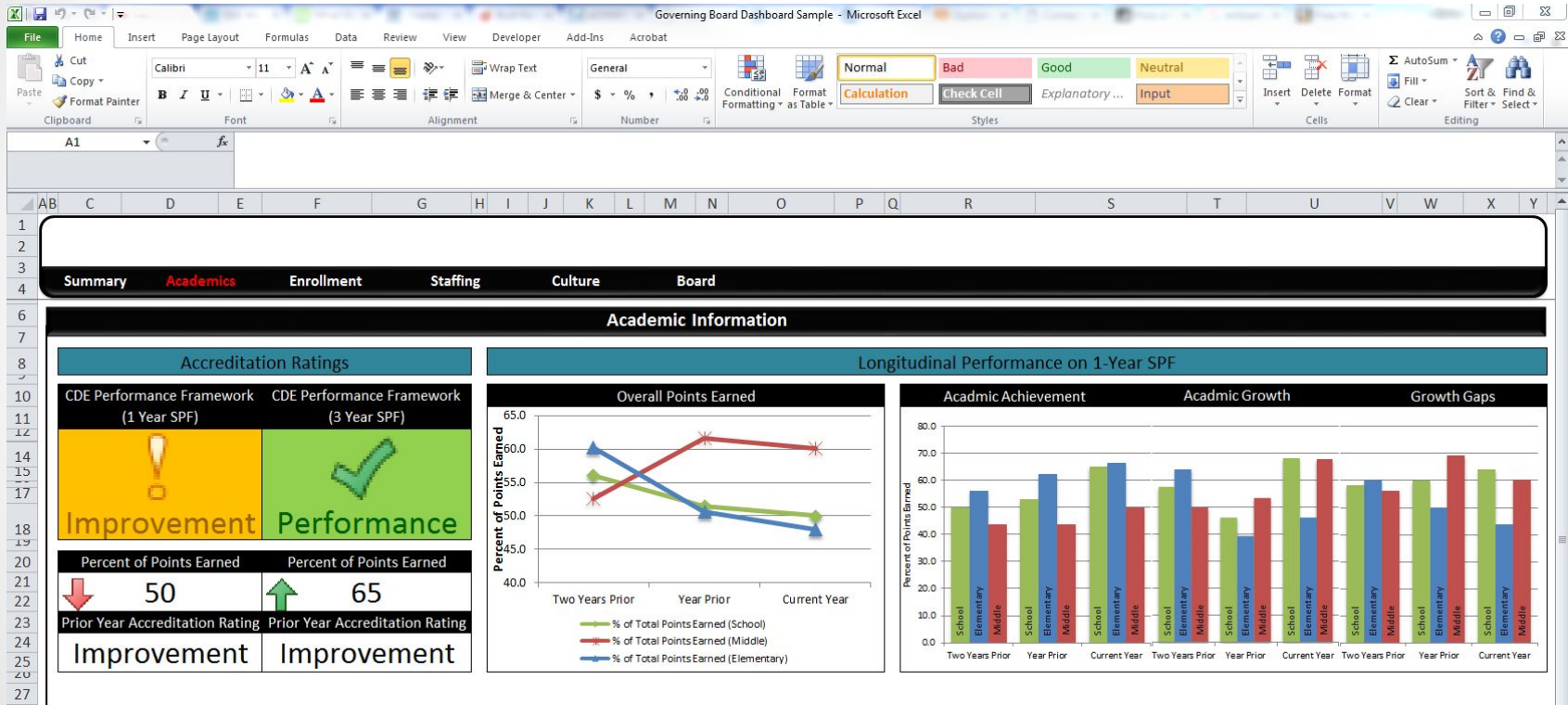
Dashboard Template

Enrollment Information

Longitudinal Enrollment (P-8) & Free and Reduced Lunch Qualification Rate
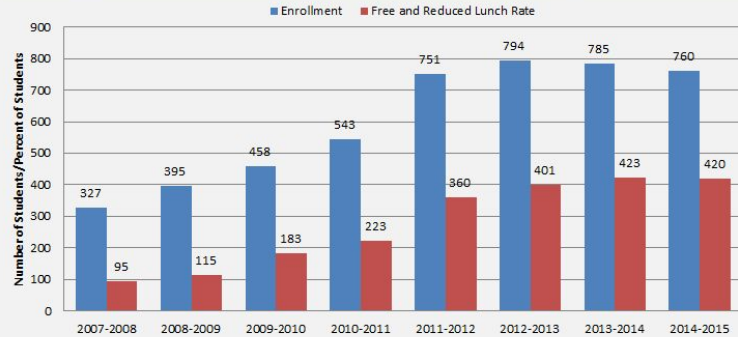
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↓	**760**

% of Budgeted Enrollment	
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Dashboard Template

- Barebones template
  - Can be expanded and modified to meet your needs
- Linking worksheets within the dashboard
- Dashboard tabs and data tabs
  - The separation of the data from the display allows for easy updates, minimizes chances of deleting/changing source data, and simplifies data entry.
- Data structure
  - Keep the data tabs simple.
  - Recommend using standardized names e.g. current year, prior year, two years prior and shifting the data within the dashboard to preserve the displays

Dashboard Template

- We'll explore a few features in the Excel template that we created for the session.

- There are two templates -
  - Governing board
    - This could be used to create a dashboard to share with a governing board
  - Interim data
    - This could be used to inform a dashboard showing student performance

Using Excel to Create a Dashboard

- Linking Cells and Workbooks
- Cell References
- Sort and Filter
- Data Validation
- Count Functions
- If Functions
- Creating Tables and Graphs

Using Excel to Create a Dashboard

- Linking Cells and Workbooks
    - Create a reference to another cell in a workbook or another worksheet.
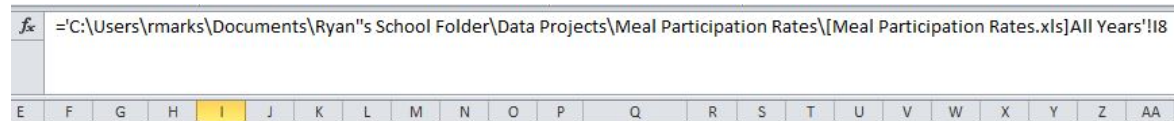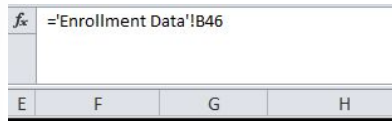
- Cell References
    - Restrict the cell to reference only that cell, corresponding cell columns/rows
        - C12 vs. $C12 vs. $C$12
- Sort and Filter

Name	Previous Spring	Fall	Winter	Spring	Change in %ile
Marylee Lezama		67	52	29	-38
Donette Ahmed		40	31	20	-20
Valentina Skeens		43		24	-19
Cicely Morais		40		24	-16
Charlesetta Koller		52	19	37	-15
Felice Chavers		49	55	35	-14

Using Excel to Create a Dashboard

- Data Validation

Select the initial season you wish to compare.

Previous Spring
Fall
Winter
Spring

- Count Functions
  - Count [count if there is numeric data], Countif [count if meets a condition], Countifs [count if meets multiple conditions], Counta [count if there is any data] , Countblank [counts the empty cells]

=COUNTIFS('Teacher 1'!$H$12:$H$51, "b")

		Boys & Girls									
Teacher	# of Boys	# of Boys Proficient on Pretest	% of Boys Proficient Pretest	# of Boys Proficient on Posttest	% of Boys Proficient Posttest	# of Girls	# of Girls Proficient on Pretest	% of Girls Proficient Pretest	# of Girls Proficient on Posttest	% of Girls Proficient Posttest
Team	0	0	0%	0	0%	0	0	0%	0	0%
0	0	0	0%	0	0%	0	0	0%	0	0%
0	0	0	0%	0	0%	0	0	0%	0	0%
0	0	0	0%	0	0%	0	0	0%	0	0%
0	0	0	0%	0	0%	0	0	0%	0	0%

- If Functions
  - Can be simple if...then statements
  - Can be more complicated

=IF(C7=0,0,F7/C7)

D	E

Using Excel to Create a Dashboard

- Self-calculating tables and graphs using student data

- The summary data from each teacher file can then be linked to a school file and aggregated.

Using Excel to Create a Dashboard

- Once you have student data you can create more complex visualizations.
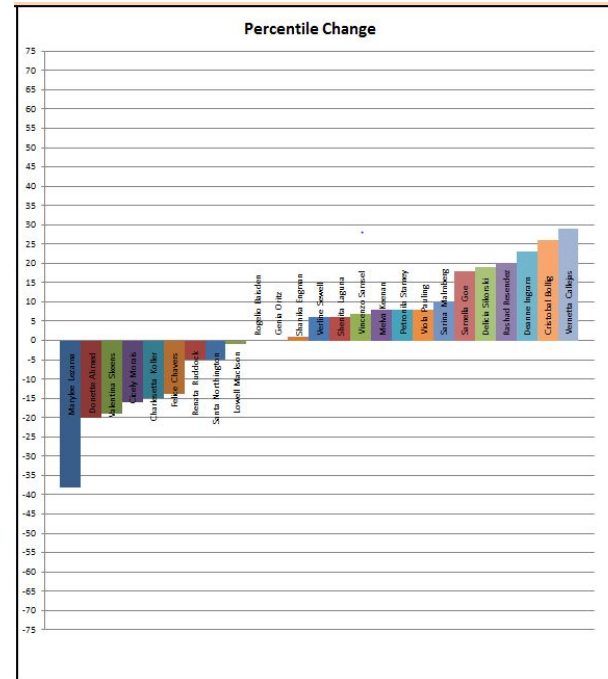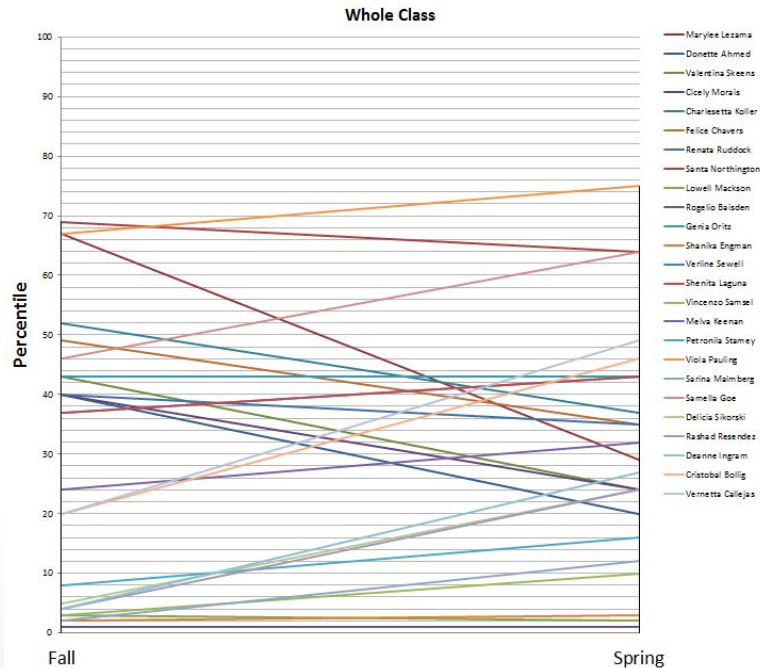
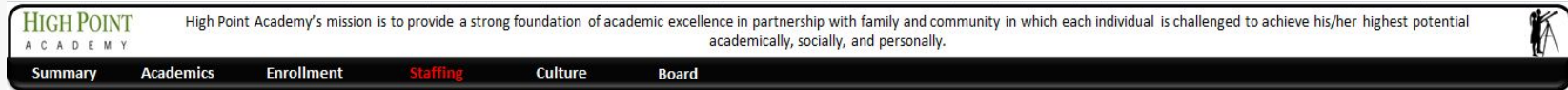# Using Excel to Create a Visually Appealing Dashboard

- Layout and Organization
  - Hyperlinked navigation
  - Color-coded headers
  - Font size, color, and icons
- Conditional Formatting
  - Color
  - Icons
  - Trends
- Graphs
  - Line vs. Bar
  - Labels
  - Adjusting graphs using formula bar

Layout and Organization

- Hyperlinked header
  - Easy to navigate between tabs

Summary	Academics	Enrollment	Staffing	Culture	Board

- Brand
  - Add your school logo and motto/mission to the top of the dashboard

HIGH POINT ACADEMY — High Point Academy's mission is to provide a strong foundation of academic excellence in partnership with family and community in which each individual is challenged to achieve his/her highest potential academically, socially, and personally.

Summary	Academics	Enrollment	Staffing	Culture	Board

- Fonts
  - Use simple font
  - Use font size and color to highlight important areas
- Layout and Relative Size
  - Use the layout to highlight the most important information
  - Make most important information larger/more noticeable

Accreditation Ratings	
CDE Performance Framework (1 Year SPF)	CDE Performance Framework (3 Year SPF)
✔ Performance	❗ Improvement
Percent of Points Earned	Percent of Points Earned
⬆ 66.5	⬇ 54.9
Prior Year Accreditation Rating	Prior Year Accreditation Rating
Improvement	Improvement

Layout and Organization

- Layout and Relative Size
  - Use the layout to highlight the most important information
  - Make most important information larger/more noticeable

AP Visits Month to Month Comparison			
April '13	and	April '14	
Elementary		Middle	
90	64	77	65
April '13	April '14	April '13	April '14

| Accreditation Ratings	
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✔ Performance	❗ Improvement
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⬆ 66.5	⬇ 54.9
Prior Year Accreditation Rating	Prior Year Accreditation Rating
Improvement	Improvement

Conditional Formatting

- Can be used to format cell appearance using values and text.

Performance | **Improvement**

- Can be used to include icons based on values or text.

✓
Performance

- Can be used to show trends or changes over time.

Percent of Points Earned

↑ 66.5
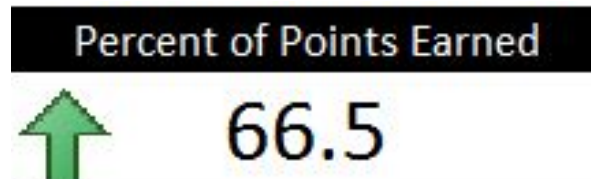
Conditional Formatting

- Progress towards goals
  - Data Bars

Grade	% of Enrollment Budget
Preschool	82%
Kindergarten	89%
First	118%
Second	118%
Third	108%
Fourth	110%
Fifth	121%
Sixth	85%
Seventh	106%
Eighth	81%
Elementary	111%
Middle	90%
All	115%

Color Scales

| Grade	% Retention from Previous Year
Preschool	N/A
Kindergarten	27.4%
First	79.3%
Second	85.5%
Third	85.4%
Fourth	91.6%
Fifth	86.0%
Sixth	71.1%
Seventh	82.4%
Eighth	89.8%
Elementary	75.9%
Middle	81.1%
All	77.6%

Graphs

- Line (change over time) vs. Bar (compare)
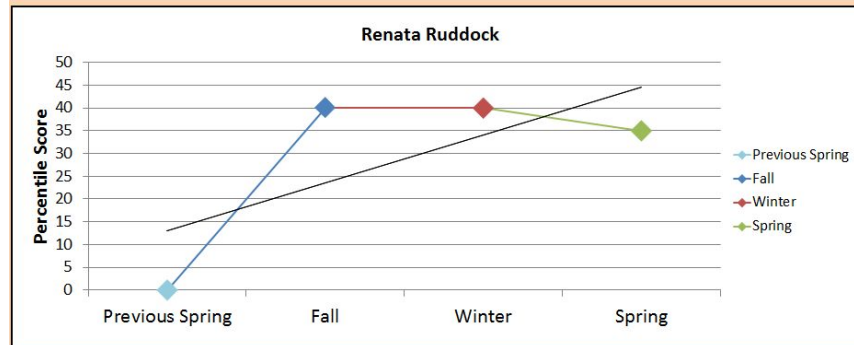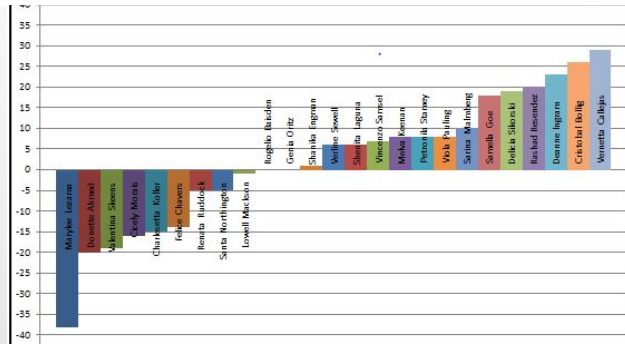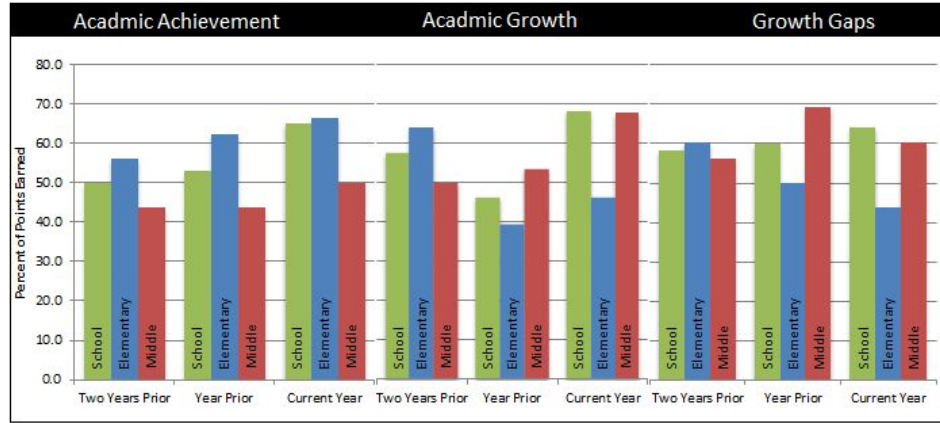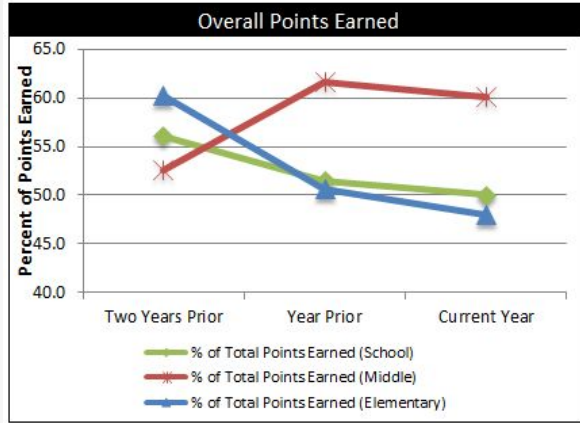
Graphs

- Edit graphs using the formula bar for greater control.
- Data label
- X-axis range/data
- Y-axis range/data
- Order

- Adjust your data to span various years/time frames
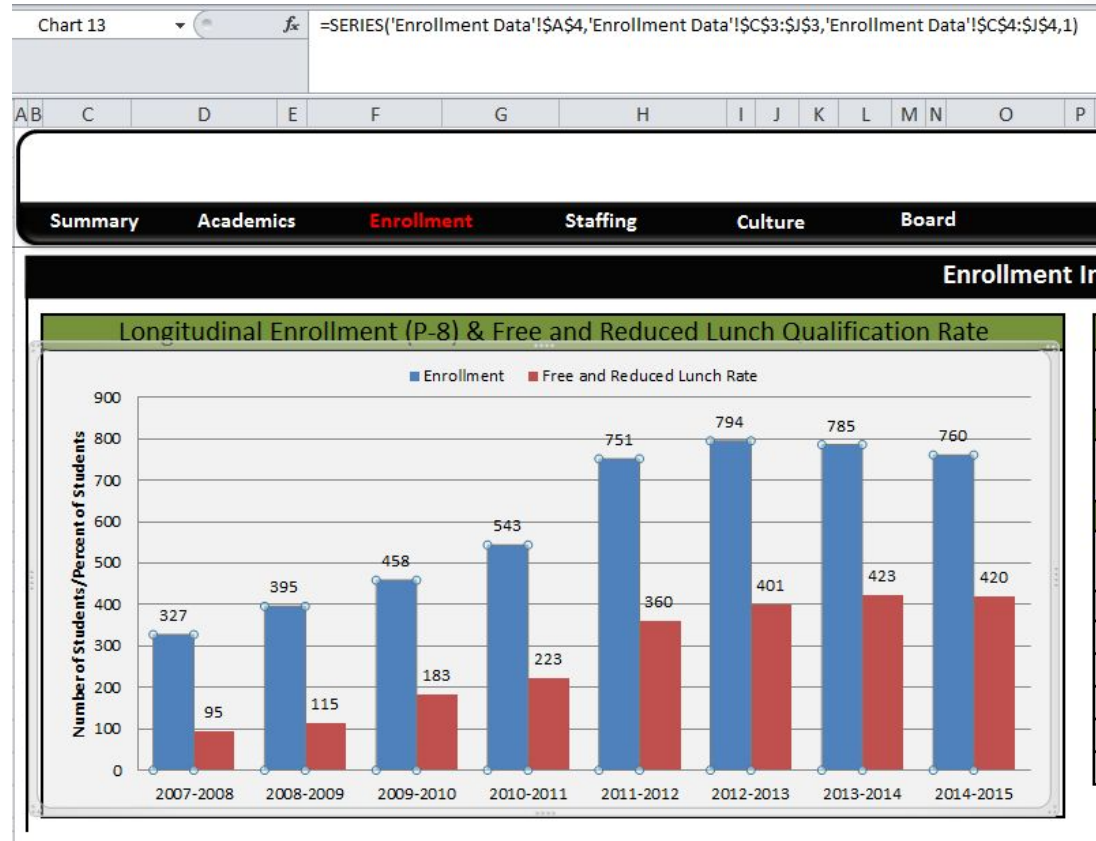
Graphs

- Data label and values can be added or removed and adjusted within the graph

- Data series vs. data value
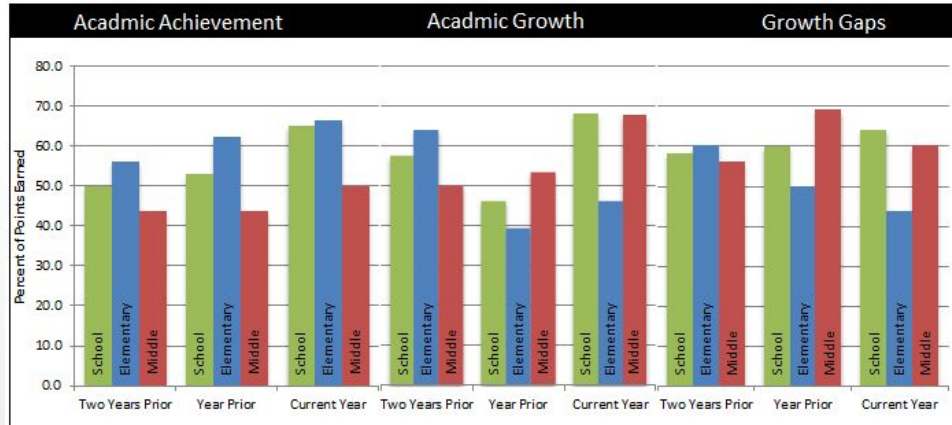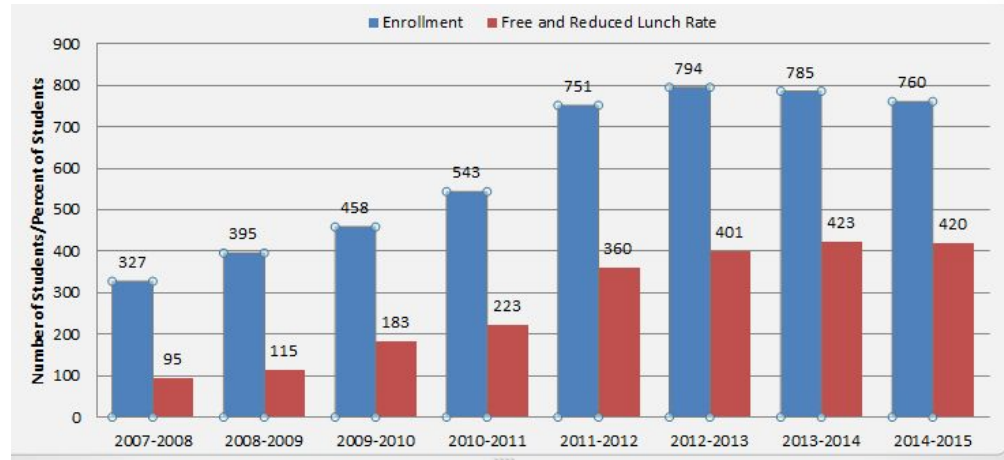
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