

Nationally known educational data expert Victoria Bernhardt advocates using multiple measures to analyze school data. These measures include demographics, perceptions, student learning and school processes, collectively known as the four domains or four circles (see diagram).

In this activity your administrative team has become aware of the increased number of absences at all grade levels. Now the question has been asked – does attendance affect student achievement on standardized language arts tests? Stated another way, you want to see if there is any correlation between days absent and test scores.

In Victoria Bernhardt’s diagram this question looks at an intersection of two data domains: demographics (attendance) and student learning (test scores). Finding a relationship in data intersection is valuable.

Start by creating a query showing total days absent statewide. Rather than looking at total days absent by the individual count, it is more effective to create a distribution from 0 to 40 days absent in 5 intervals

- Click the Ruler icon and click add
- Type of Measure – Distribution
- Object – Attendance Summary
- Attribute – All-day K – Grade 12 Total Days Absent
- Minimum 0.00 – Maximum 40.00 Intervals 5

Drag NSRE ELA Performance Level into the rows

- Run
- This shows the number of scores at each performance level distributed by days absent
- Right-click in a cell and choose % of Grid Down
- This Shows percentage of each level in days absent interval –
- Note how student performance is declining with increased absence

The screenshot shows the EASE-e Data Analyzer interface. The main window displays a data table with the following structure:

- Rows:** NSRE ELA Performance Levels: Performance Levels;
- Columns:** Distribution [Linked];
- Background:** % of Grid Down; All Time;
- Constraint:**

NSRE ELA Performance Lev...	Measures				
	[0.00,8.00]	(8.00,16.00]	(16.00,24.00]	(24.00,32.00]	(32.00,40.00]
Little Evidence of Achi...	0.50 %	0.92 %	1.32 %	2.41 %	2.70 %
Below the Standard	10.90 %	13.53 %	16.85 %	21.33 %	25.23 %
Nearly Achieved the S...	30.21 %	32.41 %	34.91 %	36.54 %	36.64 %
Achieved the Standard	45.33 %	42.60 %	38.18 %	33.15 %	28.23 %
Achieved the Standar...	12.81 %	9.98 %	7.67 %	4.38 %	3.90 %
Testing Incomplete	0.25 %	0.56 %	1.06 %	2.19 %	3.30 %

The interface also shows a left-hand navigation pane with categories like Disability, SPED - Other Info, EL/Immigrant, Enrollment, Educator, DRA, and NSRE ELA Performance Levels. The bottom taskbar shows the Windows Start menu and several open applications including Firefox and EDW.

Right-click in the query and choose create graph



What do we learn from this data?

Observe the trends – increases of scores in the 'Little Evidence', 'Below the Standard' and 'Nearly Achieved' with increased absence and decreases in both 'Achieved the Standard' levels with increased absences.

The trend is dramatic.

To look at an individual school, drag Organizational ID into the Rows and run the query

Choose organization ORG0206 – select it and CTRL-click each of the levels to select all of the levels for ORG0206

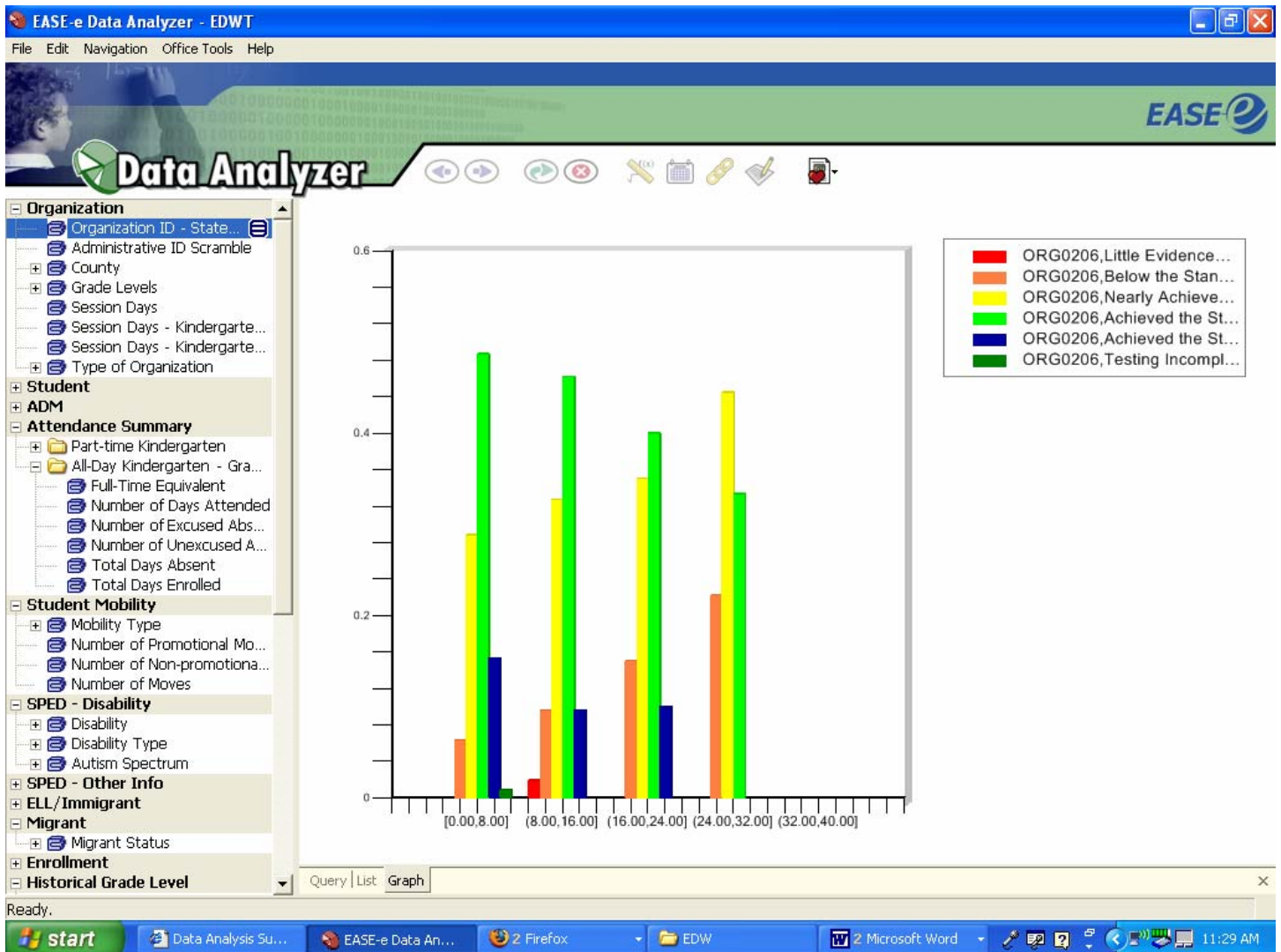
Right-click in ORG0206 and choose Isolate

View the graph to see a similar result

In the fully functional Vermont EDW you will see your own Organization and schools by name and be able to run this query to see this trend in your own schools

drag your school onto rows

does your school reflect the state level decline in scores with increased absence



Advanced
Constraints and distributions

Add count
Click drop-down menu to choose distribution

Object – attendance summary
Attribute – all-day kindergarten-grade12 total days absent
Intervals 0 – 100 in increments of 20 days
Intervals = 5

(do you always get 2 decimal places?)

Is there a relationship between days absent and math scores?
Count – attendance summary – full-time k -12
Distribution 0 – 100 5 intervals

When – 2004-2005
 Choose a school – Franklin central –
 Admin id scrambled
 Or County
 NSRE performance levels

