Making the Most of Web Accessed Student Data

We have access to two types of data, achievement and value-added. Any data that is represented in a table can be copied and pasted into a spreadsheet for additional manipulation.

Achievement Data

Source: http://www.pearsonaccess.com

Achievement data consists of actual scores. It does not take into account the socio-economic status of students or the make-up of classes. It just is. If students are randomly distributed among classes then this data allows teachers to evaluate their strengths and weaknesses by comparing reporting categories with one another. It takes collegiality and humility to be able to use this data effectively.

Value-Added Data

Source: https://tvaas.sas.com/

Value-added data compares a student’s actual score with his or her predicted score. At the elementary and middle school levels each test score is given a Normal Curve Equivalent Score based on the percentile of the score. At the present time all NCEs are compared to the 2009 norm year. Theoretically, a year’s growth for a student takes place if he or she makes the same NCE as the previous year in a subject. If the NCE is higher, value was added to the student in that subject, presumably by the teacher. A lower value would indicate that value was lost.

We can get a feel for our value-added scores using TVAAS.

1. Once you login, select the Reports tab at the upper left.
3. On the tabs at the top, choose a desired subject and grade.

You now have a table and can now use Excel to manipulate the data. Open an Excel spreadsheet at this time and then go back to the website.

4. Click in the blank box to the left of student and above the check boxes and drag down and across the entire table.
5. Hold down the “Ctrl” key and tap “C” to copy the table.
6. Go to Excel, click cell A1 and then paste the data into the spreadsheet by holding down the “Ctrl” key and tapping “V”.

7. To make life easier, click on row 2, click on “Window” at the top and choose “Freeze Panes”. In later versions of Excel, choose “View”, then “Freeze Panes”, then “Freeze Top Row”.
8. At this point you will want to choose your students. Click cell I1 and type “My Students” or something equally as creative.
9. Scroll down column I and put an x in the cell for your students who had scores in each of the previous two years.
10. Select the entire spreadsheet by clicking the upper left hand corner of the spreadsheet.
11. Click “Data” and select “Sort” in Excel 2003. The later versions may require you to check the box that says “My data has headers”, you will want to sort by “My Students” and then click “OK”.
12. Eliminate your non-students by scrolling to just below your students, highlighting the other students, going up to “Edit” and selecting “Delete”. If you are looking at the whole school, sort by the previous year’s NCE then delete those students who don’t have two years of data.
13. Click cell J1 and then type “Difference” and hit “Enter”.
14. Type the following: “=d2-c2” and hit “Enter”.
15. Click back in J2, place the cursor in the lower right hand corner of the cell (it will turn into a + shape with points), click and drag down the column until you get to the end of your students.
16. You will get a variety of differences. You may want to sort the spreadsheet according to this column.

We will now create a graph of your students.

17. Highlight columns C and D for your students.
18. Click on the chart wizard (in the older Excels) and choose XY (Scatter), or Insert a Scatter Plot in the newer versions.
19. The rest is just making the graph more visually appealing.

<table>
<thead>
<tr>
<th>In Excel 2003:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Choose Next once, then twice, then change the title to “Year to Year NCEs” (or whatever suits you), then choose the Legend tab and deselect “Show Legend”.</td>
</tr>
<tr>
<td>21. Click Next again, then choose the Chart Location to be a new sheet and then click “Finish”.</td>
</tr>
<tr>
<td>22. To get a clear picture of the data, click on the horizontal axis, then right click to Format the axis. Click Scale and Choose the Minimum to be 0 and the maximum to be 100. Do the same thing for the vertical axis.</td>
</tr>
<tr>
<td>23. Go up to “View”, select “Toolbars”, and make sure that the “Drawing” toolbar is</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In Later Versions of Excel:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Under the Design tab at the top, choose the left-most graph with title and axis labels.</td>
</tr>
<tr>
<td>21. Change the title to “Year to Year NCEs” (or whatever suits you). Change the horizontal axis to “Last Year” and the vertical axis to “This Year”.</td>
</tr>
<tr>
<td>22. I usually click on the legend and hit delete.</td>
</tr>
<tr>
<td>23. I recommend right clicking on the chart and choosing to “Move Chart” to a New Sheet location.</td>
</tr>
<tr>
<td>24. To get a clear picture of the data, click on the horizontal axis, then right click to Format Axis. Fix the Minimum to be 0 and the maximum to be 100. Do the same thing for the</td>
</tr>
</tbody>
</table>
| 24. Draw a line from the lower left corner to the upper right corner. Do this by selecting the line on the drawing toolbar, clicking the lower left corner and dragging to the upper right corner. Any dot above the line represents a value-added while those below would be considered a value-subtracted. | 25. Go up to the Insert tab, choose Shapes, and grab a line.  
26. Draw a line from the lower left corner to the upper right corner by clicking near zero, zero and then 100,100. Any dot above the line represents a value-added while those below would be considered a value-subtracted. |