BI Training  
Tuesday, August 26, 2014

SYLLABUS

- **Welcome:** Good morning and welcome. My name is Maura Morin and I'm from Technology Services. With me today is Dynah Oviedo also from Technology Services. We are here this morning to do a brief training of TUSD's new Business Intelligence Dashboard. The technology we will be using this morning pulls data from Mojave. Data which is entered by school staff. The data is refreshed nightly.
  - BI incorporates so many different types of technologies. You may notice that some functions we go over may be unavailable/greyed out in other areas, this is due to the different types of technology used
- Is everyone logged on to their laptops.

- Explain Terminology (Optional also for reference)
  - BI (Business Intelligence) -- is a set of concepts, methodologies, designs, and technologies that transform raw data into meaningful and useful information through visualizations.
  - Visualizations -- Are a visual representation of data.
  - Data Dashboard – User friendly interface to access data, can combine data from multiple sources – has many tools depending on the type of technology used.
  - KPI (Key Performance Indicators or Quick Indicators)- are measures (usually tracked to determine success or failure, discover trends, draw comparisons).
  - Scorecard - card is a type of report that displays a collection of key performance indicators. (Many people use the terms "dashboard" and "scorecard" interchangeably, but there is a significant difference between them. A scorecard is a type of report that displays a collection of key performance indicators (KPIs) together with performance targets for each KPI. A dashboard, on the other hand, is a container for a related group of scorecard and report views that are organized together in a SharePoint site. In other words, a dashboard contains a collection of other items such as scorecards, reports, and filters.)
  - Filters - are the choices you make to narrow down the data in the report gallery.
  - Reports - gives the ability to change the type of visual representations. For example, changing a bar graph to a pie chart.

- Introduction to Technology – (5 mins)
  - With all participants logged on
  - Click on link that was emailed to them -- suggest they add to Favorites/Favorite Bar and remind participants this link will be removed after training today and a new production site link will be sent via email.
  - **NOTE:** reports may change or be removed as necessary

LINK:  [http://spbidev/sites/ln/StudentRecords/_layouts/15/start.aspx#/SitePages/Home.aspx](http://spbidev/sites/ln/StudentRecords/_layouts/15/start.aspx#/SitePages/Home.aspx) (show slide with link if necessary)

- Activities/Lesson – (with only 1 hour we'll just jump right in – most of you have seen the BI demo)
  - First click on Enrollment –
    - Click in the **School Capacity** scorecard-- make change and look hover over the data in the out of district area.
      - **NOTE clicking in the scorecard changes the KPI’s measures (show High School (hover over TUSD Enrollment and Out of District enrollment – also explain that School Capacity Scorecard is just that capacity of school)**
  - (make some selections and get acquainted with the technology) – **RESET VIEW**
- **Enrollment** (Decomposition Tree) – Technology Type - **Cube** - click on link – *(10 mins)*
  - Right mouse click Out of District – left mouse click Decomposition Tree
  - Note: where TUSD is getting our out of district students -
  - Left mouse click a specific district then select school and school again to display the School(s) where students from that DOR (District of Residency) are currently attending (spend a few minutes looking at the enrollment data and trying different criteria on the Decomposition Trees)
  - **NOTE:** *you can look at this data in many different ways and be as granular as you wish depending on your needs at the time.*

Now close this window and look at **Placement** *(hover over placement)* – now right mouse click on placement and left mouse click on the Decomposition Tree

- **DEMO GRID** - view w/Enrollment Demographics – Enrollment Trend –
  - Next right mouse click in the window and go down to Report Type – select Grid *(this will give you numeric view of your data)*
  - Now let’s reset the view - Find the Edit Web Part window by hovering over the down arrow in the right corner of the window – left mouse click on the arrow and then select reset view

- **Enrollment – Demographics** – *(7 mins)* *(again note: Hover)*
  - From an **Ethnicity type** right mouse click and select **Decomposition Tree** - left mouse click and select **Membership** left mouse click and select **Grade** and left mouse click again and select **School** – close the window and select other criteria.

- **Enrollment – Enrollment Counts** *(7 mins)*
  - Click on the chart – now reset the view
  - Click on High School either from the legend or the bar graph
  - Right mouse click on a Sahuaro High School
    - Select Decomposition Tree
    - How many 10th grade students at Sahuaro are in ExEd? *(49)*
    - Left mouse click on Sahuaro – select membership – grade – left mouse click on 10th – select membership - ExEd
  - **DEMO GRID again** view with Enrollment area - reset view by bringing up Edit Web Part window (left mouse click on down arrow)
    - In a blank area – right mouse click – left mouse click and select Report Type – then Grid. Grid will respond to selections of School Type.
    - Open all school types
    - Export to Excel *(remember where we reset view – select export to excel) don’t forget to enable editing (remember Data is static)*
    - Let’s reset our view – right mouse click on Middle Schools – left mouse click School – then Ade Grade *(who are the A schools – left mouse click on the A and then select school and school) check out the B and C
    - I’ll give you a few minutes to use the dashboard and ask questions.
Click on StudentRecords link to return to the Dashboard

- **Class Size** (Export) – Technology Type - Reports (12 mins) – class size chart is using SSRS (Sql Server Reporting Services) – Explain: measures will be set by TUSD

- **District Overview** - Click on one of the indicators NOTE: the status band and the values – (show Drill Up feature)

  Open all school types - Show Export to Excel – (Keep in mind if you export the data it becomes static and will not be refreshed automatically by the dashboard).

  - Find the Edit Web Part window by hovering over the down arrow in the right corner of the window – left mouse click on the arrow and then select Export to Excel – (data it becomes static)
  - Click Open and data can be view in Excel.

- **Teacher** – (SSRS based on a SSAS (Sql Server Analysis Services) cube with an integrated KPI which indicates whether the teacher has a period off target) – Palo Verde – user Nunes, Mary – ExEd teacher – let participants go to schools they wish, etc.

  - Type teacher name in Find Textbox and click Find or hit enter
  - Show sort Helpful to find teachers over consensus
  - Expand teacher

  - Show Parameters – change Credit area to show specific (language arts and math) (CLICK APPLY)

  - Show next page features, etc.

    - Click on Action menu allows you to:
      - Create a Data Alert
      - Subscribe to the report
      - Print
      - Export to multiple formats

- **Reset the view** - Find the Edit Web Part window by hovering over the down arrow in the right corner of the window – left mouse click on the arrow and then select reset view

- **Student** – (SSRS based on a SSAS (Sql Server Analysis Services) cube with an integrated KPI which indicates whether the teacher has a period off target) – Catalina – Find: Duran –

  - Note: Measures student has enough classes green, yellow, etc. let participants go to schools they wish, etc.
  - Type student name in Find Textbox and click Find or hit enter
  - Show sort – helpful when finding students with NO classes
  - Expand Student

    - Show Parameters - (CLICK APPLY)

      - Action menu allows you to:
        - Create a Data Alert
        - Subscribe to the report
        - Print
        - Export to multiple formats
Report Gallery (We will be creating further trainings) - Technology Type – Powerview (10 mins) Remember data is refreshed nightly and the reports we are looking at may change or be removed...

- Hover over reports and select desired report
- Show/Hide Slide Navigation or to go back to report
- User back arrow to return to PowerPivot Carousel

Power User Data (We will be creating further trainings) – Technology Type – Excel (brief overview)

- Click on report – it appears open in Excel –
- Click on the Open in Excel button next to File in green (I like to use the Edit rather than Read Only)
- Enable Content (note if you try to change something in the powerpivot you will get a message Cannot change this part of the PivotTable report -
- You can change specific areas – add formulas, etc.
- Notice when opening reports open in excel – most reports are in PowerPivot – if you do not have this upgrade in Excel, you will need to request it –
- Again exported data will be static.

Wrap Up

- Technology Services will be offering more BI training in the future
- Participants should have access to site after this training and you will be notified/emailed of a change in the link
- Other TUSD employees will eventually be receiving access and training

Q & A

1) Cube – Enrollment (Decomposition Tree) – Technology Type - Cube
2) Reports – Class Size (Export) – Technology Type - Reports
3) Powerview – Reports (We will be creating further trainings) - Technology Type - Powerview
4) Visualize – SQL (Enrollment Tools) – Grid
5) Excel – Power User

Teacher/Student – SSRS using cubes
## BI Dashboard Training SCS

**Date:** October 2, 2014  
**8:30-10:30**  
**Trainer:** Maura Morin

### Sign In Sheet

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<thead>
<tr>
<th>Name</th>
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<th>Signature</th>
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<td>School Comm Service</td>
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<td>Elaine Vickers</td>
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<td>Angie Mendoza</td>
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<td>Patty O'Hagan-Taylor</td>
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# BI Dashboard Training

**Date:** October 3, 2014  
**Time:** 8:30-11:00  
**Trainer:** Maura Morin

## Sign In Sheet

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<thead>
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<tbody>
<tr>
<td>George Kelly</td>
<td>Tucson High</td>
<td></td>
</tr>
<tr>
<td>Amy Tony</td>
<td>Doorn</td>
<td></td>
</tr>
<tr>
<td>Teresa Abbrud</td>
<td>Erickson</td>
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<tr>
<td>Christopher Gildin</td>
<td>Palo Verde</td>
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<tr>
<td>Tammy Langford</td>
<td>Sabino</td>
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<td>Emily Cupp</td>
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<td>Debra Wing</td>
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<tr>
<td>Miles Wood</td>
<td>Basha</td>
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</tr>
<tr>
<td>George Brown</td>
<td>Cholla/Catalina</td>
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