



# **DFWI Report Using Power BI User Guide**

Version 1.0  
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# DFWI Report

The purpose of this report is to answer questions concerning retention and the grades students received. It's of interest to identify top classes (course sections) with high D level (D), Fail (F), Withdrawal (W), or Incomplete (I) grades to understand if those grades put students at a higher risk of dropout.

## Data overview

Data available in this Power BI report extends back to 2008-09 academic years to the current (2019-20) academic year, and is available for every term, including summer. Information on classes (course academic level, course level, course section name, class size, faculty, instructional method) is displayed for each term as well as longitudinally. By-offering school/offering department information is also available for this period of time, also per term or for a series of terms/years. Class information is listed with an order from having the highest percentage of D, F, W, I grades to the lowest.

## Methodology

The data used in this report come from Institutional Research's 10th day course registration data snapshots. The 10th day of the term is used since it occurs after the last add/drop day of the term. The result is a consistent view of the data as of the start of each term.

# Power BI Building Blocks

**Microsoft Power BI** is a collection of software services, apps, and connectors that work together to turn diverse sources of data into coherent, visually immersive, and interactive insights.

Power BI relies on basic set of building blocks to create these insights:

- **Datasets:** A **dataset** is a collection of data that Power BI uses to create its visualizations. The Power BI desktop tool provides an extensive set of data connectors and tools to extract, transform, and integrate data for reports. ITS and IR will provide datasets curated for reporting for most users, although we anticipate that there will be a group of power users who will opt to construct and integrate their own datasets.
- **Reports:** In Power BI, a **report** is a collection of visualizations that appear together on one or more pages. The visualizations in a report in Power BI are collection of data elements and themes that are related to each other.
- **Visualizations:** **Visualizations** can be simple, like a single number that represents something significant, or they can be visually complex. The goal of a visual is to present data in a way that provides context and insights, both of which would probably be difficult to discern from a raw table of numbers or text.
- **Slicers:** **Slicers** are visualization designed specifically for users to select and filter into relevant data.
- **Dashboards:** A Power BI **dashboard** is a collection of visuals from one or more report onto a single page that users can share with others. Dashboards allow for quick insight across multiple reports and provide users an easy way to navigate to different reports.

# Report Views

## Visualizations, Slicers, and Interactions

Class information is listed with an order from having the highest percentage of total D, F, W, I grades to the lowest in both the bar chart and the table in this report. The table also lists the percentages of D, F, W, I grades individually for each class.

### Slicers


Slicers in this report are organized into lists on top two rows of the page. Users can make selections of interest using the slicers to filter data. Class Size Group slicer is pre-selected to show only classes with more than 10 students, and Class Instruction is pre-selected as the Instructional Method Group but they are changeable by users.

### Highlighting and Interactions

Visualization tiles (non-slicers) cross-highlight the data. Selecting an element within a visualization will highlight the associated records with data on the adjacent fields. Users can select anywhere within the visual element on most tiles to highlight data. This includes fields on the axes. Clicking on the white part of the tile to un-select any category/characteristic that has been selected in a tile or any other visualization.

For example, selecting a class in the stacked bar chart on the left highlights the class related information such as term this class was offered and the faculty member who taught this class in the table to the right. This gives users a quick access to the details of a highlighted class. Clicking on the white part of the tile to un-select any category/characteristic that has been selected in a tile or any other visualization.

### Additional Options

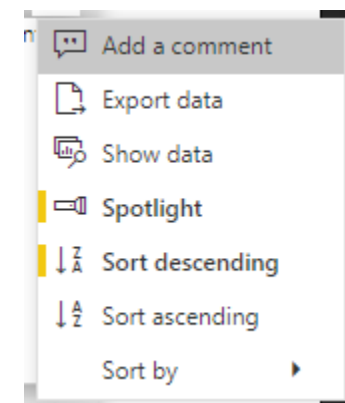
Selecting the ellipsis opens a dropdown with  additional options.

**Add a comment:** This allows users comment and share on any part of the report. InformSU is currently evaluating this new feature.

**Export data:** See below

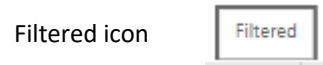
**Show data:** Opens a visual in focus mode and includes the data table

**Sorting Data:** User can sort the visuals by variable using the Sort by option and then select descending or ascending order for the data

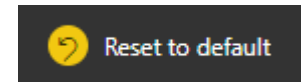


## Filtered Views

One of the challenges in Power BI is understanding if a visual is filtered. From slicers, cross-highlighting data from another visual, and drill downs, it is easy to lose track of exactly what is being presented on a report.



To address this issue each report has a small tile indicating if the data is unfiltered or filtered. Rolling over the tile will provides users an option to reset the visual to the default view.



## Resetting Visuals

To reset to the default view, select Reset to default in the ribbon

## Exporting Data

### Export data

Which data would you like to export?

- Summarized data
- Underlying data

File format:

.xlsx (Excel)

- ⓘ Data exports with all applied filters.
- ⓘ For large data models, only a limited number of rows can be exported. [Learn more](#)



Power BI App Space, users can define **Personal Bookmarks**. Personal Bookmarks save the view exactly how the user has defined. These provide a quick way to return to interesting insight or a commonly used view of the data.

✕ Power BI enables users to export the underlying data in two ways.

**Export Data** within a visual is a quick to extract the underlying, summarized data used to create a visual. The data are exported into either an Excel file along with the slicers applied or a Comma Separated Value (CSV) file. There is currently no way to export the visual to Excel.

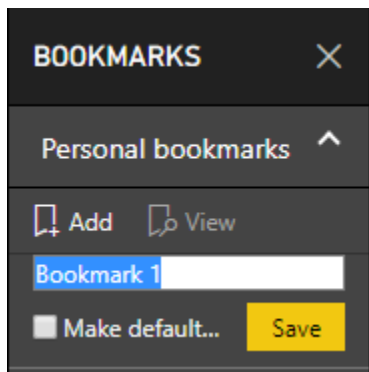
The **Analyze in Excel** option downloads an Open Database Connectivity (ODBC) linked excel file. An ODBC connection is a Microsoft interface that allows applications to access data in database management systems using SQL as a standard for accessing the data. This option will link an excel file to the Power BI data model. Users can then use Power Pivot Tables to build their own tables and views within Excel. Only fields available in the data model will appear in the excel file. Updates to the data model will appear within Excel file when the file connection refreshes.

## Personal Bookmarks

Bookmarks are the way to save a view in Power BI. In the

### Quick Tip: Export to .xlsx (Excel)

Exporting to .xlsx (Excel) will also export the applied filters to the data. This information is critical for troubleshooting data issues and replicating logic. Use this option to replicate previous data extracts.



The bookmarks are associated with each page of the report and can be used to navigate to different visualizations. These bookmarks can be used to navigate around the report during a presentation or create a custom ordering of the visualizations.

The Personal Bookmarks are only visible to each user.

When a report is updated with updates or changes, Personal Bookmarks will remain. However, if an element saved in the bookmark is removed or changed, the bookmark may not render the visualization.

### Managing Personal Bookmarks

To **update** Personal Bookmarks, select the ellipsis and select update. Updating a bookmark will overwrite the bookmark to current view. Use this option to make adjustments and changes to an existing bookmark.

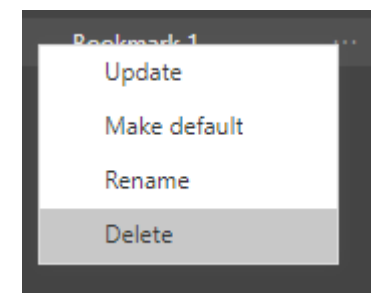
To **delete** Personal Bookmark, select the ellipsis and select delete.

### Default Personal Bookmarks

Use the **Make Default View** option to set the book as the default view of the data when opening report.

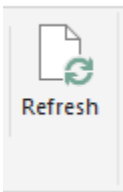
**Quick Tip: Name Your Bookmark**

Bookmarks are users best way to save views. Because bookmarks save the visuals exactly on user selection and are page specific, it is *strongly recommended* to clearly name the bookmarks.



# Power BI Desktop connection

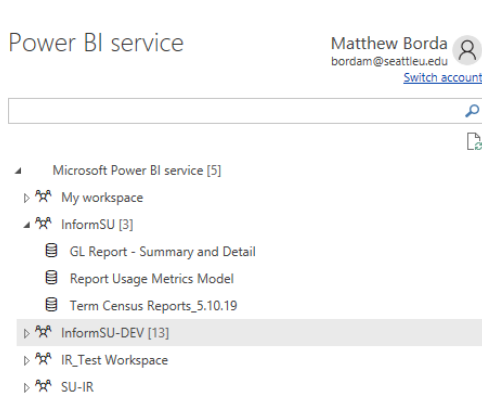
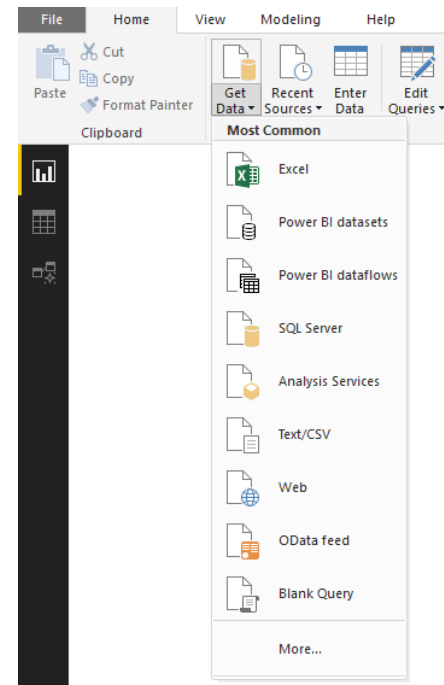
The workspace does not allow users to made edits to the report or build custom visualizations. The data are available to connect to a live excel file, see Analyze in Excel above, or through the Power BI desktop.



These data connection will connect the Power BI data model. Changes or updates to the models will also appear in the connected versions when the user **Refreshes** the data.

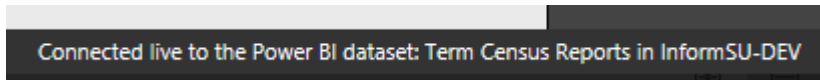
This connection method does not allow users to integrate additional data into the model.

To get data in Power BI, select **Power BI datasets** from the **Get Data** on the home tab of the ribbon.



Next, users will see a list of workspaces. Select the InformSU workspace and the name of the report to connect to the data.

Power BI will automatically connect to the data. Once the connection is made, save the file and the .pbix file will retain that data connection. A confirmation will appear at the bottom of the report page.



## Resources

### InformSU Resources

InformSU: <https://www.seattleu.edu/ir/informsu/>

Training Resources: <https://www.seattleu.edu/ir/informsu/about-power-bi/training-resources/>

Power BI Seattle University FAQ: <https://www.seattleu.edu/ir/informsu/about-power-bi/>

Project Updates: <https://www.seattleu.edu/ir/informsu/informsu-updates/>

### Microsoft Resources

Learn Power BI: <https://powerbi.microsoft.com/en-us/learning/> or <https://docs.microsoft.com/en-us/power-bi/guided-learning/>

Power BI Documentation: <https://docs.microsoft.com/en-us/power-bi/#pivot=home&panel=home-all>