Tableau User Guide

How to use AEL report dashboards

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# Overview

As part of our mission to continuously improve our reporting processes, the Division of Operational Insight (DOI) has developed new versions of Adult Education and Literacy (AEL) reports using Tableau. Tableau is an interactive, data visualization tool accessible online.

This document will walk you through the basic information you need to effectively navigate AEL reports in Tableau. In general, AEL Tableau reports accessed online will include five sections: Tableau controls, header, filters, visualizations, and footer.

Additional information for each dashboard can be found in the dashboard’s “User Documentation.” Please review the user documentation for more information about the methodology applied to, fields used in, and download instructions for the dashboard.

# Tableau Controls

Tableau dashboards include a series of controls when viewed in a web browser (Figure 1). Dark gray buttons are available to use while light gray buttons are unavailable. The Tableau controls will be at the top or the bottom of the page.

Screenshot of Tableau dashboard controls. 

Figure 1. Full Tableau controls bar

The group of Tableau controls on the left side of the bar allow you to undo your last action, redo an undone action, revert the dashboard to its original state, refresh the data, or pause a data refresh (Figure 2).

Screen grab of the left side of the Tableau control bar. Includes a left-facing arrow with text "Undo," right-facing arrow with text "Redo," left-facing arrow pointing to vertical line with text "Revert," cylinder with circular arrow symbol with text "Refresh," and cylinder with two parallel lines with text "Pause."

Figure 2. Left side of the Tableau controls bar

The group of Tableau controls on the right side of the bar allow you to save a custom view of the dashboard; set up alerts for when the dashboard is updated; apply metrics to a visualization; edit, share, or download the dashboard; or view the full screen version of the dashboard (Figure 3).

Image of the right side of the Tableau control bar. Includes a bar chart symbol with the text "View: Original," a bell symbol with the text "Alerts," a line chart symbol with the text "Metrics," a pencil symbol with the text "Edit," a share line symbol with the text "Share," a symbol for Download, and a button to open the dashboard in full screen.

Figure 3. Right side of the Tableau controls bar

## Tabs

When published online, a Tableau workbook will include tabs for each dashboard at the top of the page. For example, a workbook that includes four dashboards will have four tabs (Figure 4).

Four tabs are visible: Getting Started, Enrollments, Performance, and Participant View.

Figure 4. There are four dashboard tabs in this Tableau workbook

# Header

The header section in DOI AEL Tableau publications includes a title for the dashboard currently being viewed, icon links for quick access to additional information, and the DOI logo accompanied by “Division of Operational Insight.”

Division of Operational Insight

Figure 5. The DOI logo

## Header Icons

Each of the icons included in the header are linked to either an action in Tableau or an external webpage. More information on each icon’s specific use can be found below.

The “Information” icon links to either a page of additional information in the dashboard or an external document (Figure 6).



Figure 6. The “Information” icon

The “Keyboard Controls Shortcut” icon opens a link to a Tableau webpage listing controls for keyboard navigation.



Figure 7. The “Keyboard Controls Shortcut” icon

The “CSV” icon will download a .csv file of the dataset for the visualization that is currently selected. Once downloaded, the .csv can be opened and used as needed.



Figure 8. The “CSV” icon

The “PDF” icon will download a .pdf file of the current view. The .pdf file will be an image of the dashboard as it appears on screen.



Figure 9. The “PDF” icon

# Filters

Filters in Tableau allow you to dynamically change the data being used to generate the visualizations in a dashboard.

## Filter Cards

The type of filter you will use the most in Tableau dashboards is the filter card. A filter card is an element of a dashboard, typically placed just below the header, that includes a single field’s name as well as the filter options. The options available will depend on the type of filter.

There are four general types of filters in Tableau: lists, dropdowns, sliders, custom lists (search bars). The appearance and functionality of these filters will be influenced by the type of field, dimension (discrete values) or measure (continuous values), and whether they allow the user to select a single value or multiple values. A single value filter only allows one option to be selected while a multiple value filter allows multiple options to be applied.

### Lists

List filters display all value options for the field and can be either single value with radio buttons (Figure 10) or multiple value filters with checkboxes (Figure 11).

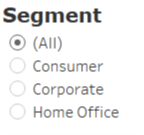


Figure . Single value list filter with radio buttons

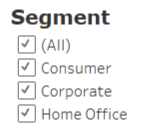


Figure . Multiple value list filter with checkboxes

### Dropdowns

A dropdown filter lists the filter value options when the dropdown box is clicked. Single value or multiple value dropdown filters will look identical until the dropdown box is activated (Figure 12). Both single and multiple value dropdowns will list options when activated, but the multiple value filter will include checkboxes for selecting multiple options.



Figure 12. Dropdown filter showing currently selected option

### Sliders

Single value sliders allow a single value to be selected from a range of values (Figure 13). Using the half circle on the left side of the value range bar, the bottom value in the range can be adjusted.

Single value slider for a field named Discount. The bottom range is 0.0 and the top range is 0.8. The half circle is on the left side of the range.

Figure 13. Single value slider

Multiple value sliders allow both ends of the slider bar to be adjusted (Figure 14). The half circles on both sides of the range bar can be used to set a custom range.

Single value slider for a field named Discount. The bottom range is 0.0 and the top range is 0.8. There are half circles on both sides of the range bar.

Figure 14. Multiple value slider

### Search Bars/Custom List

A custom list or search bar filter allows the user to type in a value (Figure 15). As characters are entered into the text box, potential matches from field’s value options will display. Multiple values options can be entered to filter by multiple values.

Search bar filter for Segment field. Below the field name "Segment" is an empty box for typing in search terms.

Figure 15. Search bar filter

## Alternative Ways to Filter

In addition to filter cards, some visualizations will also allow you to filter by selecting an element in the visualization, right clicking, and then choosing either “Keep only” or “Exclude.” If the visualization has been set up to act as a filter, selecting “Keep only” will filter the data in the visualization based on the selected field. Please review the user documentation for the dashboard you are using to see if this functionality has been enabled.

# Visualizations

Much of the space in the dashboard will be occupied by visualizations. These visualizations will come in a variety of forms including line charts, bar graphs, maps, tables, and many more. As the filters related to visualizations are changed, the data powering the visualizations will change, and, as a result, the visualizations will change. It may take Tableau a few seconds to update visualizations if the dataset is large.

The user documentation for each AEL Tableau report will include detailed information on the visualizations included in each dashboard tab of the report, including the fields used in and the methodology used when creating the dashboard.

# Footer

The footer is the smallest section in a dashboard. The only information included in the footer is the date for the last data refresh and footnotes related to visualizations or other dashboard elements. The data refresh line will include the date, time, and data source used the last time the data source was updated in Tableau.