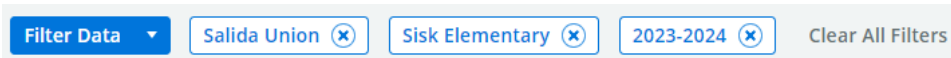


# Using the Attendance and Behavior PowerGrid

The PowerGrid allows you to create ad-hoc reports from available data. It uses a combination of several features to pull and display the data. Understanding filtering and how you want to see the data is important for using this tool effectively.

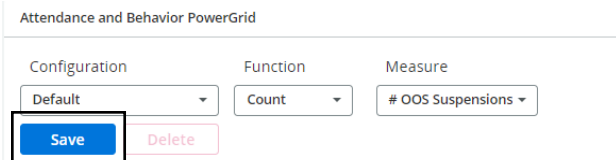
**Dashboard Filter-** Like all dashboards, filters can be applied to limit the data that's available on the grid. For example, if you're only interested in looking at data from one school, the dashboard can be set to filter for just that data, and the resulting grid data will only be for that school. Setting the dashboard filter can also improve the speed with which data populates to the grid.



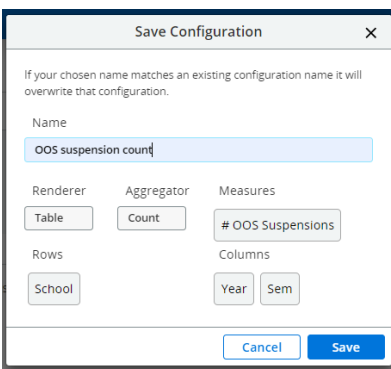
**Configuration-** The grid configuration can be saved, like the way student groups can be saved. This is helpful for quickly pulling up configurations you want to use often, without having to set the functions, measures, and dimensions again. Once the configuration is set, click "Save," review the settings in the dialog box and give it a name, then click "Save" again. The new configuration will be available in the drop-down menu. **NOTE: the configuration does not save the dashboard-level filter. The configuration will reflect the current filter set to the dashboard.**

The default filter is set to return the average attendance percentage in a table, with a year column, and rows reflecting school and race.

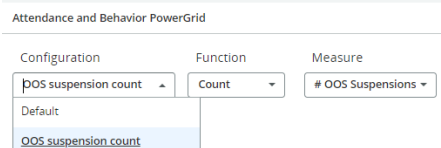
1.



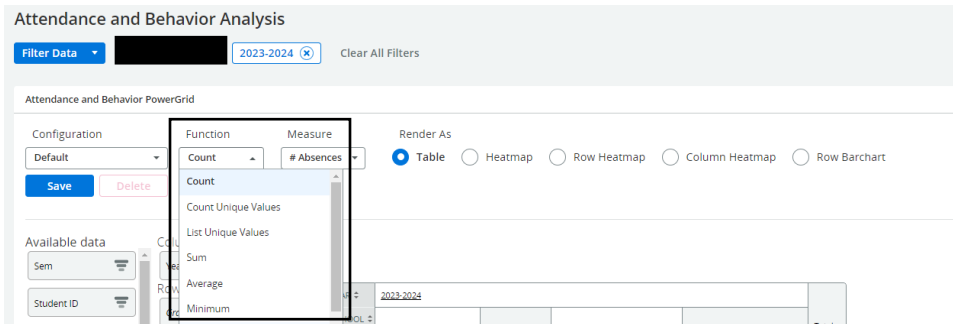
2.



3.



**Function-** The function dropdown lets you control how data in the grid is aggregated. Certain functions might need multiple measures to be calculated. You'll want to be sure you're using a function that makes sense with whatever measure you're working with. For example, if you're working with percentages or scores, you would most likely want Average.



**Count:** Counts the values in the cell. If counting students each occurrence will count as one. One student with four occurrences will count as four.

**Count Unique Values:** Counts the unique occurrence of values. If counting students each student will be counted once even if multiple occurrences are present.

**List Unique Values:** We show the unique values present in the cell. If counting students, it will show the student IDs.

**Sum:** Totals the measurement. If counting absence days, it will total the number of absences. Watch out for summing measures that should not be summed. For example, students are a measurement for which summing may be incorrect.

**Average:** Gets the average value. When looking at absences it would show the average number of absences.

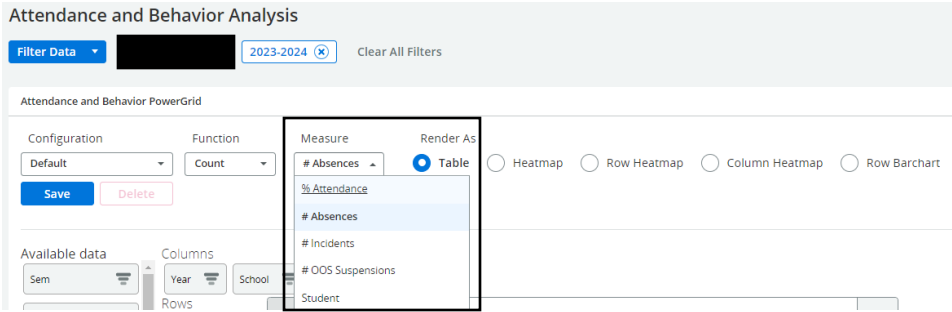
**Minimum:** Returns the lowest value.

**Maximum:** Returns the highest value.

**Note:** This diagram is from PowerSchool and details what functions work with which measures (described below). While PowerSchool says that Counting and Listing Unique Values do not function at this time, the STATS team has found that in some cases those functions will return data. However, when drilling down into those grids, generally it will cause an error and return the user to the home page.

Function	Measure					Comments
	%Attendance	#Absences	#Incidents	#OOS Suspensions	Student	
Count	NA	NA	NA	NA	Yes	Always doing the Student Count
Count Unique Values	NA	NA	NA	NA	NA	Not Required
List Unique Values	NA	NA	NA	NA	NA	Not Required
Sum	NA	Yes	Yes	Yes	NA	Sum of Student should give us Student Count
Average	Yes	Yes	Yes	Yes	NA	Total Calculation need to be fixed, Update Average %Attendance calculation (if feasible)
Minimum	Yes	Yes	Yes	Yes	NA	
Maximum	Yes	Yes	Yes	Yes	NA	

**Measures-** The attendance and behavior measures that the grid will populate based on the filters, functions, available data, etc.



**%Attendance**- Total number of days attended divided by the total possible days of attendance.

**#Incidents**- The number of discipline incidences in the system.

**#Absences**- The number of absences in the system.

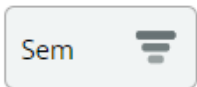
**#OOS Suspensions**- The number of out of school suspensions in the system.

**Student**- At this time this measure only works with the “Count” function and will return the count of students who have values related to the filter settings that are in place (see additional details at the end of this document).

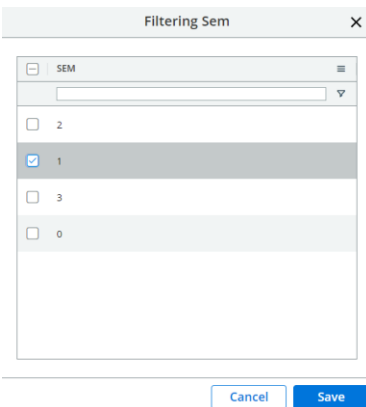
**Dimensions**- The available filters that can be applied to either columns or rows. Each dimension can be filtered by clicking on the lines. A filtered dimension is noted with italics and an asterisk.

Dimensions are applied to the grid by dragging and dropping them as either columns or rows. If you want to remove dimensions, drag them out of the grid and back to the “Available Data” section.

1. Click the lines to the right to open the filtering options.



2. Select the filters (in this case, we only want to see data from the 1<sup>st</sup> semester of a year). Click save.



3. The dimension is now italicized with an asterisk.



4. The filter is applied as a column, and the resulting data only shows semester 1 numbers for each school.

Columns: Year, Sem \*

Rows: School

YEAR	2022-2023	Totals
SEM	1	
SCHOOL	[Redacted]	604
	[Redacted]	731
	[Redacted]	819
	[Redacted]	1,383
	[Redacted]	549
	[Redacted]	306

**Render As-** the format of the grid, including the way the data is displayed:

Attendance and Behavior Analysis

Filter Data: Sylvan Union, 2023-2024, Clear All Filters

Attendance and Behavior PowerGrid

Configuration: Default, Function: Count, Measure: # Absences, Render As:  Table,  Heatmap,  Row Heatmap,  Column Heatmap,  Row Barchart

Buttons: Save, Delete

**Table-** A standard data table. In this case, the table looks at average attendance, and the color coding corresponds with the color coding in the Attendance dashboards.

YEAR	2023-2024					Totals
SCHOOL						
GRADE LEVEL						
06		98.37%	99.19%	98.95%	96.67%	98.78%
07		97.62%	98.85%	99.35%	89.02%	98.52%
08		97.80%	99.26%	99.13%	92.67%	98.67%
Totals		97.92%	99.10%	99.16%	92.22%	98.65%

**Heatmap-** Cells with higher values will have a darker shade. For example, if looking at attendance percentage, cells with the lowest values will be much lighter than cells with higher values.

GRADE LEVEL	YEAR	2023-2024				Totals
	SCHOOL	[Redacted]				
06		98.57%	99.19%	98.95%	96.67%	98.78%
07		97.62%	98.85%	99.35%	89.02%	98.52%
08		97.80%	99.26%	99.13%	92.67%	98.67%
Totals		97.92%	99.10%	99.16%	92.22%	98.65%

Row Heatmap- Like heatmap, but the values are compared within rows. (In this case, focusing on grade level.)

GRADE LEVEL	YEAR	2023-2024				Totals
	SCHOOL	[Redacted]				
06		98.57%	99.19%	98.95%	96.67%	98.78%
07		97.62%	98.85%	99.35%	89.02%	98.52%
08		97.80%	99.26%	99.13%	92.67%	98.67%
Totals		97.92%	99.10%	99.16%	92.22%	98.65%

Column Heatmap- Like heatmap, but the values are compared within columns. (In this case, focusing on the school.)

GRADE LEVEL	YEAR	2023-2024				Totals
	SCHOOL	[Redacted]				
06		98.57%	99.19%	98.95%	96.67%	98.78%
07		97.62%	98.85%	99.35%	89.02%	98.52%
08		97.80%	99.26%	99.13%	92.67%	98.67%
Totals		97.92%	99.10%	99.16%	92.22%	98.65%

Row Bar chart- Creates a bar within the cell reflective of the value.

GRADE LEVEL	YEAR	2023-2024				Totals
	SCHOOL	[Redacted]				
06		1,180	846	875	8	2,909
07		1,302	985	1,190	15	3,492
08		1,261	1,133	1,294	28	3,716
Totals		3,743	2,964	3,359	51	10,117

## Additional Notes

**Value** - Several of the functions are looking at “values.” In most cases, “value” means having a number. For example, incidents, suspensions, and absences all have numbers for each student. Some students will have a value of zero in a cell (“0”). This is especially true with discipline-related data. Zero is considered a value, so even if a student has never had an absence or a suspension, they still have a value in the cells that contain that data. This can skew the data that’s returned, particularly with the “Count” function. Let’s look at an example-

If we want to see the total number of out of school suspensions at a school, we may be inclined to set the function as “count” and the measure as “# OOS Suspensions.” It seems like we’re saying, “count the number of out of school suspensions.” However, because the “count” function is designed to work with the “Student” measure, it’s not going to count the number of suspensions. It’s going to count the number of students who have a value associated with out of school suspensions. the result will be something like below for an elementary school:

Function      Measure

Count      # OOS Suspensions

Columns

Year

Rows

School \*

	YEAR	Totals
SCHOOL	2023-2024	
	813	813
Totals	813	813

813 out of school suspensions for an elementary school at any point in a school year would be cause for serious alarm. But this isn’t accurate. This is the total number of students who have any kind of value related to suspensions, which is ALL the students. 99% of the students have a “0” in the cell where this data is stored. The grid considers this a value, so it counts that student. Here’s an example of what these cells look like for a handful of 1<sup>st</sup> graders at this school:

Total of 813 row(s) with a row limit of 60000

<input type="checkbox"/>	CURRENT GRADE	YEAR	# OOS SUSPENSIONS
<input type="checkbox"/>	01	<u>2023-2024</u>	0
<input type="checkbox"/>	01	<u>2023-2024</u>	0
<input type="checkbox"/>	01	<u>2023-2024</u>	0
<input type="checkbox"/>	01	<u>2023-2024</u>	0
<input type="checkbox"/>	01	<u>2023-2024</u>	0
<input type="checkbox"/>	01	<u>2023-2024</u>	0

None of these students have been suspended, but because of the “0” value, they’re being counted.

**While there are ways to work around the “0” value issue and use “Count” with measures other than “Student,” the STATS team recommends using the “Sum” function with other measure to get accurate totals. Please see the Attendance and Behavior Power Grid- Function and Measures document for examples.**

**PowerGrid Filters and Drill-Down Tables-** Drilling-down in the PowerGrid may not return the expected students in the drill-down table. For example, in the case below we’re looking at the sum of behavior incidences for a single school, broken down by race. We can see that there have been 29 total incidents recorded for Hispanic students up to this point in the 23-24 school year.

Function:  Measure:

Columns

Year

Rows

School \*

Race

		YEAR	
			2023-2024
SCHOOL	RACE		Totals
[REDACTED]	Hispanic		29
	White		2
	Asian		1
	Multiple		2
	Pacific Islander		0
	Black or African American		0
	Native American		0
	Unknown		0
Totals			34

When we click on 29, we would expect to see 29 (or fewer) entries. However, the resulting drill-down table is returning 485 rows- way beyond what we would expect. We can see that the incident measure doesn't act as a filter on the drill-down table. We do have the Race, School, and Year filters, so we're seeing all the Hispanic students who have been enrolled at the school in the 23-24 school year.

Attendance and Behavior PowerGrid

Filter Data: Salida Union, 2023-2024, Mildred Perkins, 2023-2024, Hispanic

Actions

Total of 495 row(s) with a row limit of 60000

PHOTO	CURRENT GRADE	STATUS	YEAR	RACE	# INCIDENTS
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0
	01	Active	2023-2024	Hispanic	0

How do we see the students who account for those 29 discipline incidents? We'd filter the table itself, specifically the #INCIDENTS column. Filtering that for anything greater than "0" will return any student who has at least one discipline entry:

PHOTO	CURRENT GRADE	STATUS	YEAR	RACE	# INCIDENTS	LOCATION
	01	Active	2023-2024	Hispanic	1	
	01	Active	2023-2024	Hispanic	1	
	02	Active	2023-2024	Hispanic	1	
	02	Active	2023-2024	Hispanic	1	Unknown
	02	Active	2023-2024	Hispanic	1	Unknown
	02	Active	2023-2024	Hispanic	1	Unknown
	02	Inactive	2023-2024	Hispanic	1	Unknown
	02	Inactive	2023-2024	Hispanic	1	Unknown
	03	Active	2023-2024	Hispanic	1	Unknown
	03	Active	2023-2024	Hispanic	2	Unknown
	03	Active	2023-2024	Hispanic	1	Unknown

This is not the full range of the students, but the total of the numbers in the column when filtering this way is 29, matching what we saw on the grid.