Tableau Dashboards: Connecting the Dots to Student Success

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The Main Goal

- Useful, functional, automated dashboards that
  - Our customers can use to get usable and up-to-date information
  - Support student success
  - Free up our time to do deeper information dives

In this presentation:

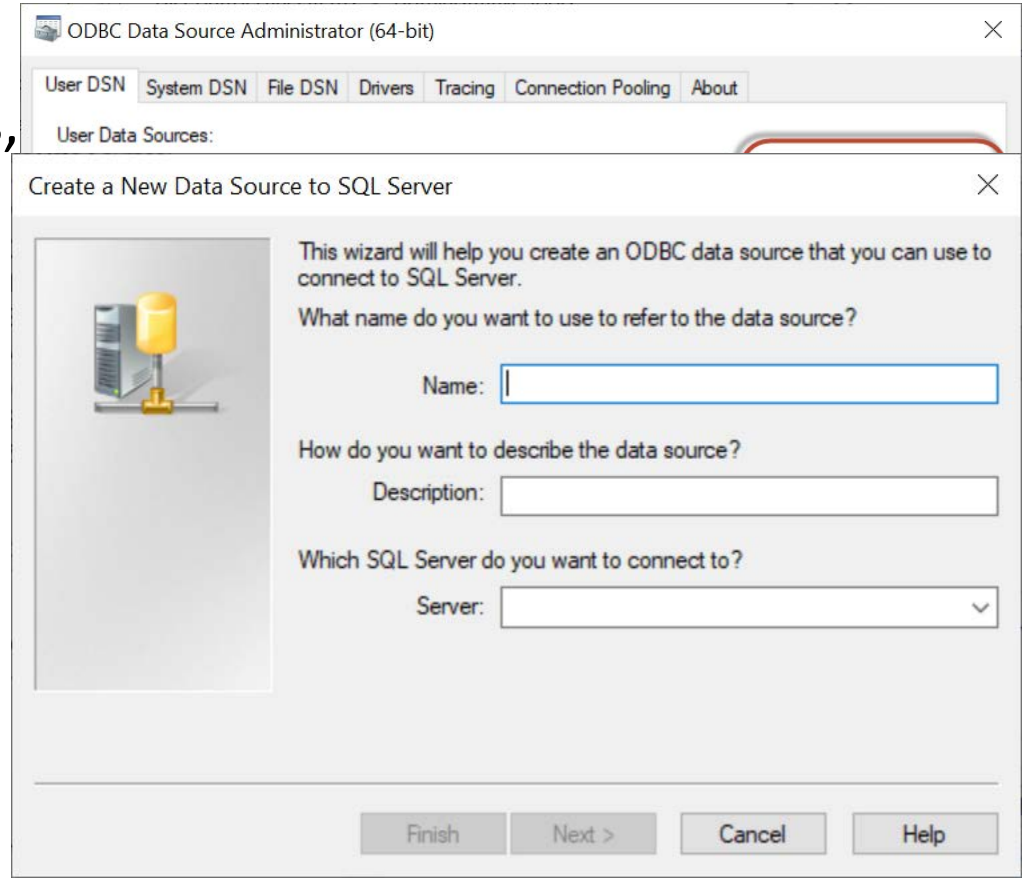
- How to connect to your data warehouse
- The importance of automatically updated tables and complex KPIs that allow for quick access to prepared data
- How Tableau dashboards provide valuable insights with curated visualizations, filters, and KPIs

Connecting to your Data Warehouse

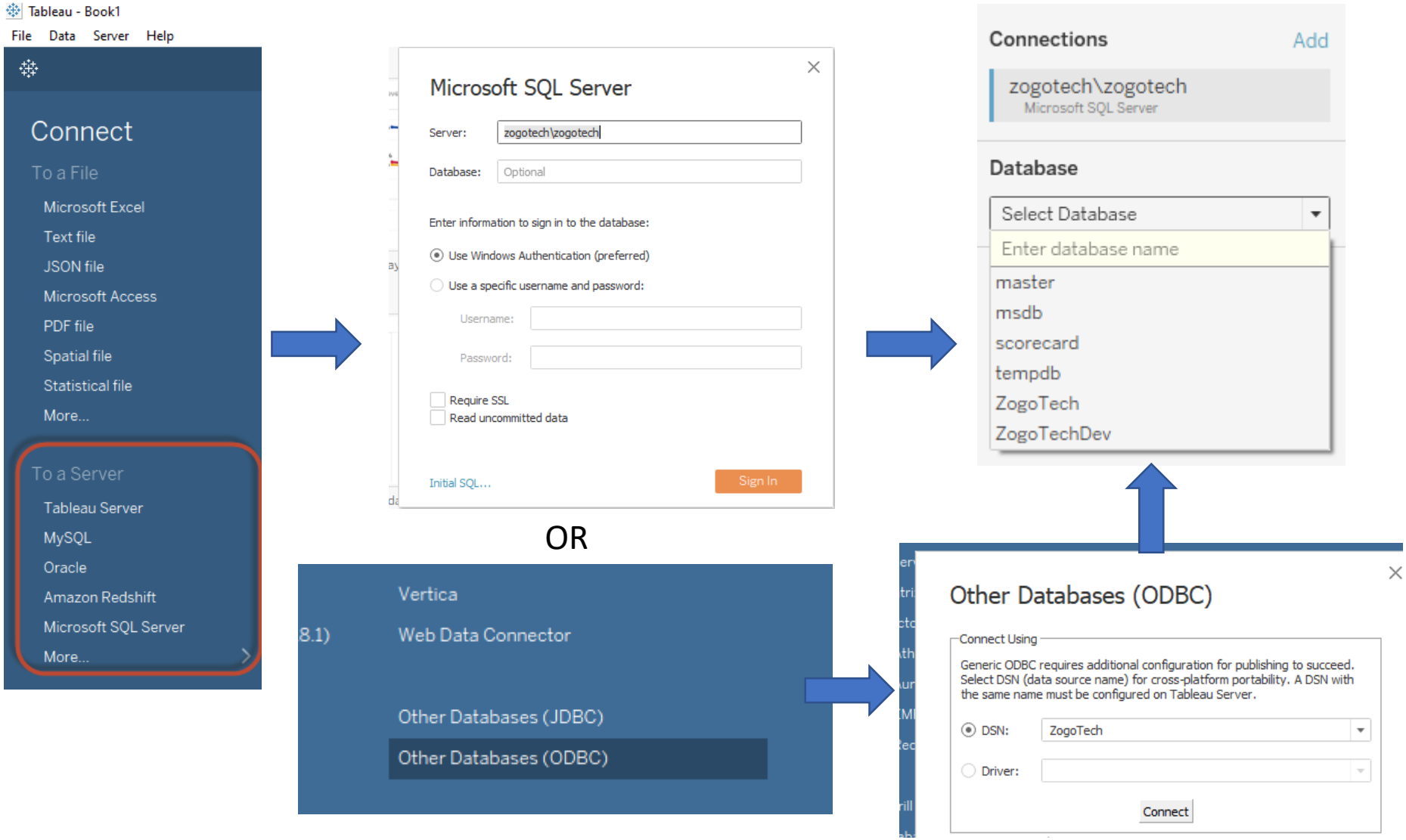
- Step 0 – have a good working relationship with IT
- Have credentials and permissions to access the server(s) data is housed on
- Set up ODBC connection – this sets up an access path to the server data that can be utilized from different tools (e.g. Tableau, Excel, SAS, etc.)

ODBC Connections

- If you have the right access, you can create the ODBC connection yourself
  - Control Panel -> Administrative Tools
  - ODBC Data Sources -> Add
  - Name the connection, specify the path
- If not – talk to IT
- Not always necessary for Tableau



Connecting from Tableau



Relational Pivot Tables

- Pivot tables contain measures and dimensions all in one wide table. You don’t have to write joins.
- Pivot tables have a particular row-level cardinality.
  - Class sections (aggregate measures at the section level)
  - Transcript (measures like grade points and credits)
  - Student Terms (term- and cumulative- measures like completed credits and cumulative completed credits)
- Pivot tables are managed by your IT or data warehouse company who keep these up-to-date.
- Pivot tables might contain measures like completion rate or GPA, but Tableau needs the numerator and denominator of these metrics.

Pivot Table Example (pvt_ClassSections)

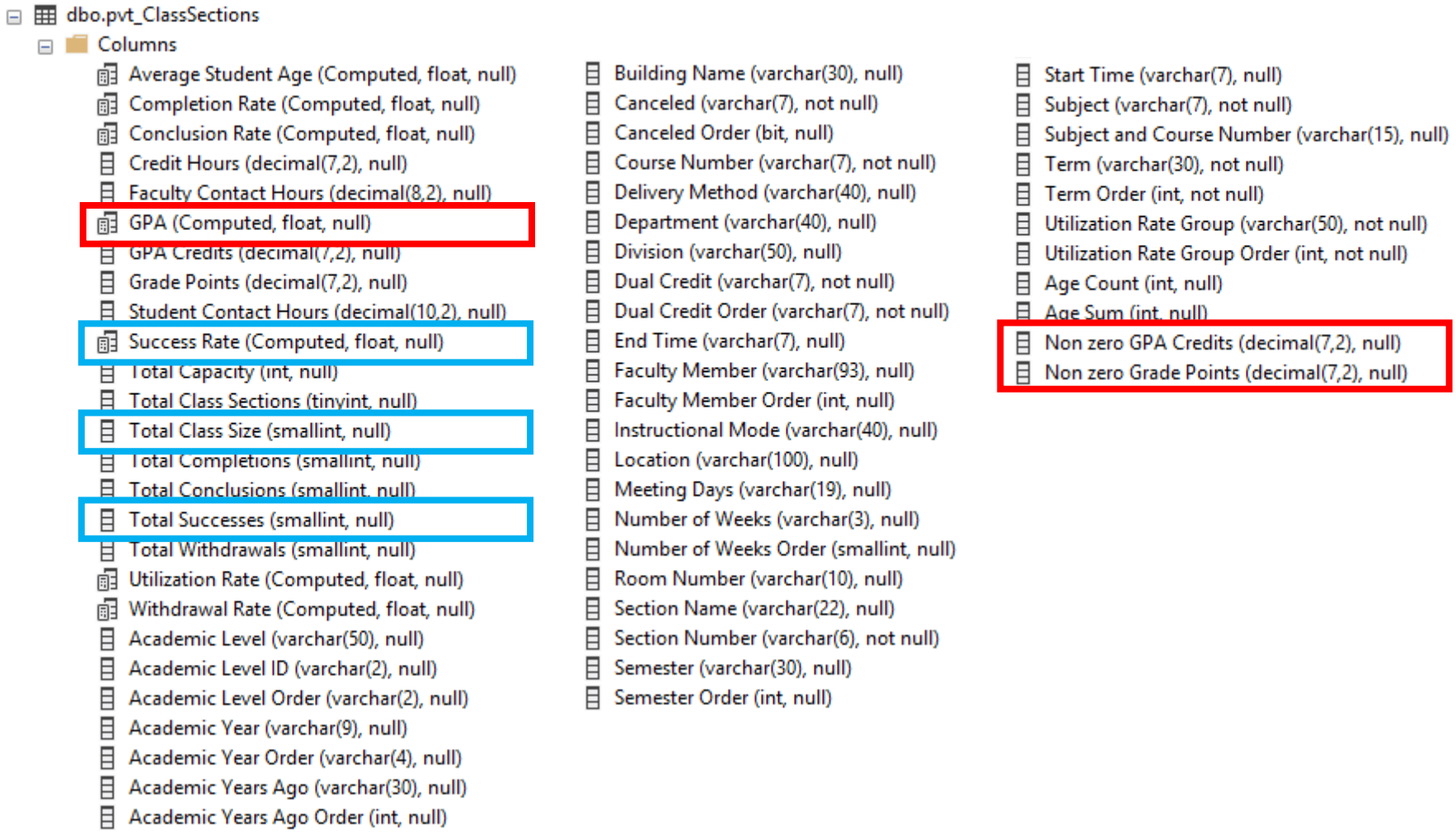
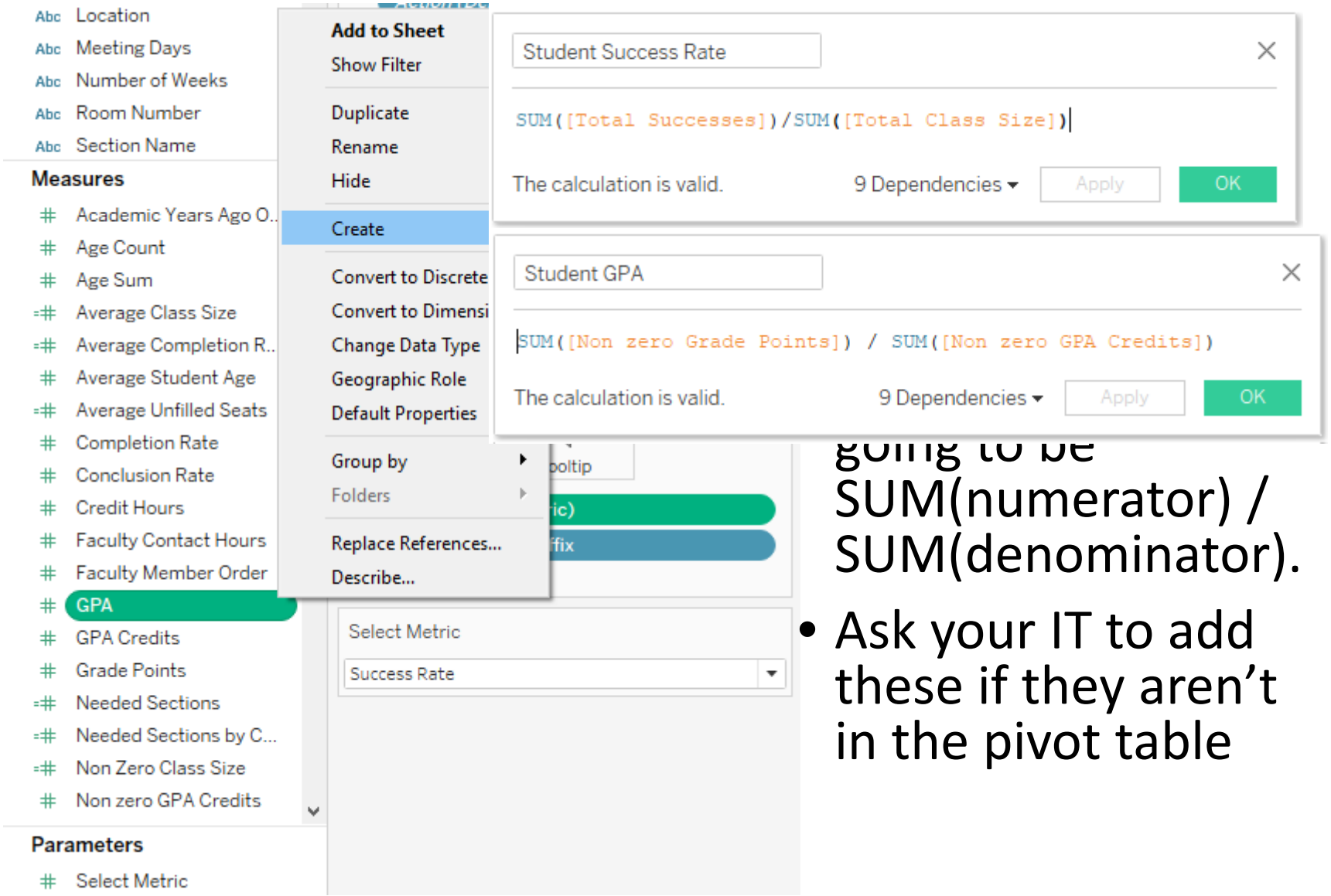


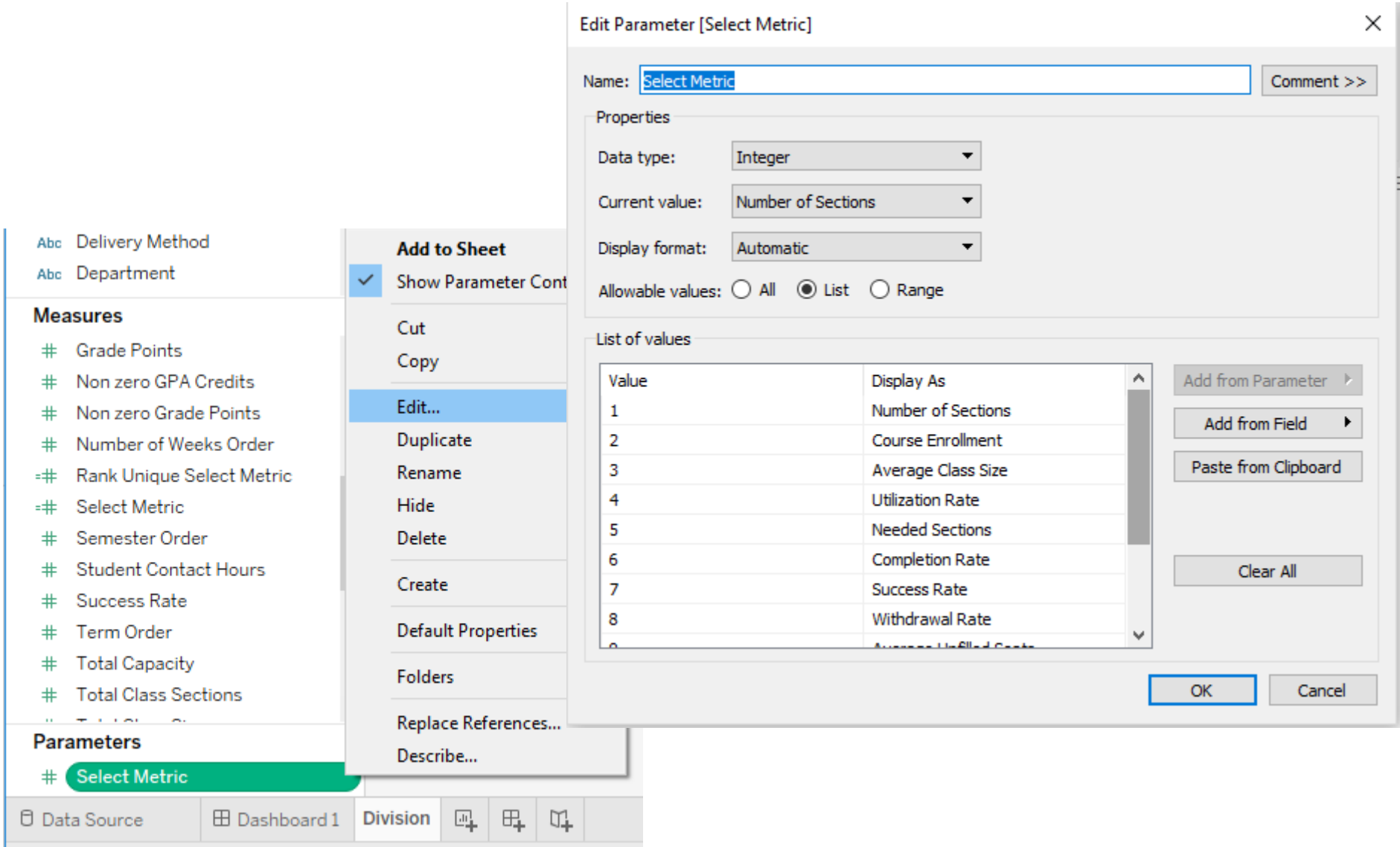
Tableau Calculations



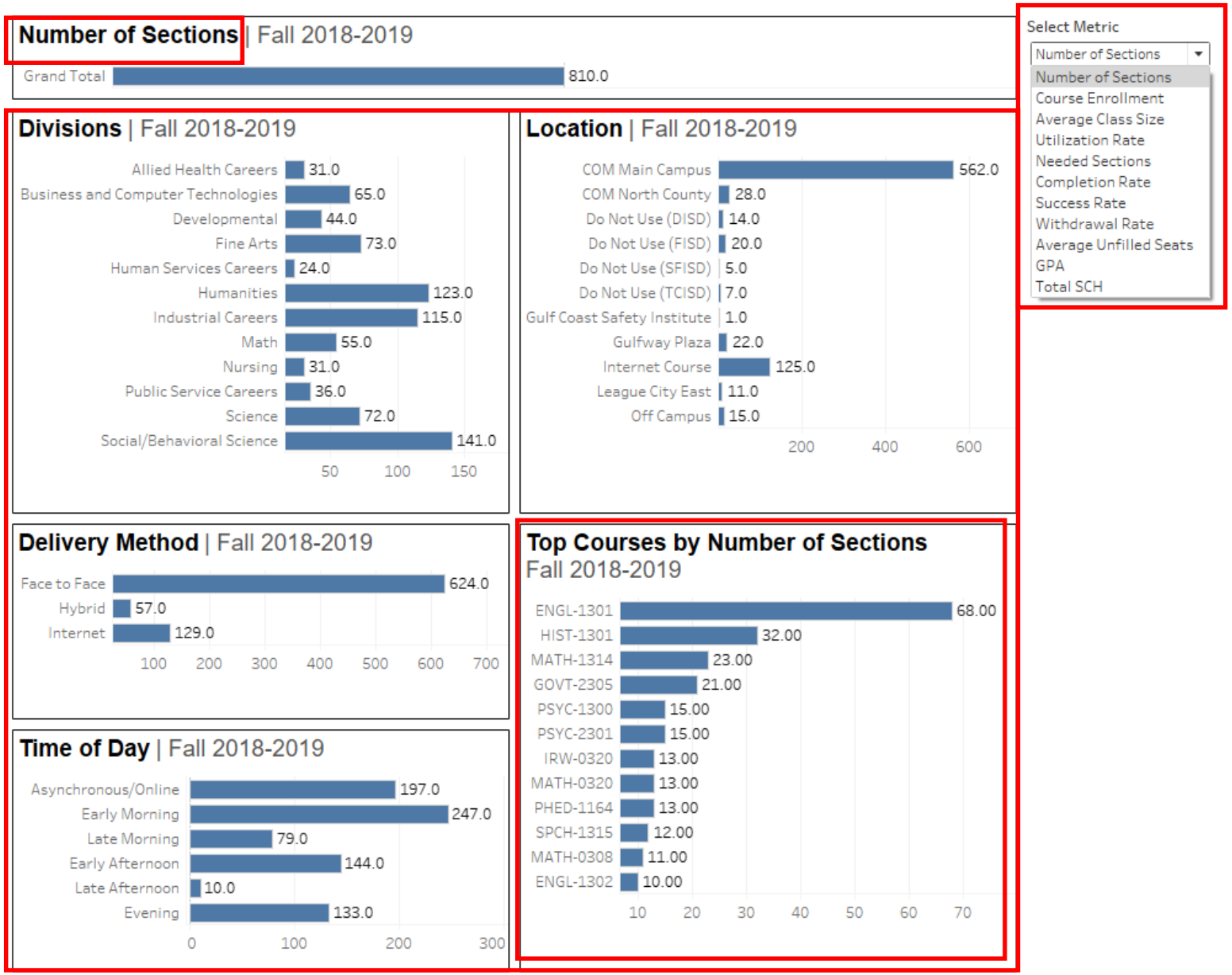
going to be SUM(numerator) / SUM(denominator).

- Ask your IT to add these if they aren't in the pivot table

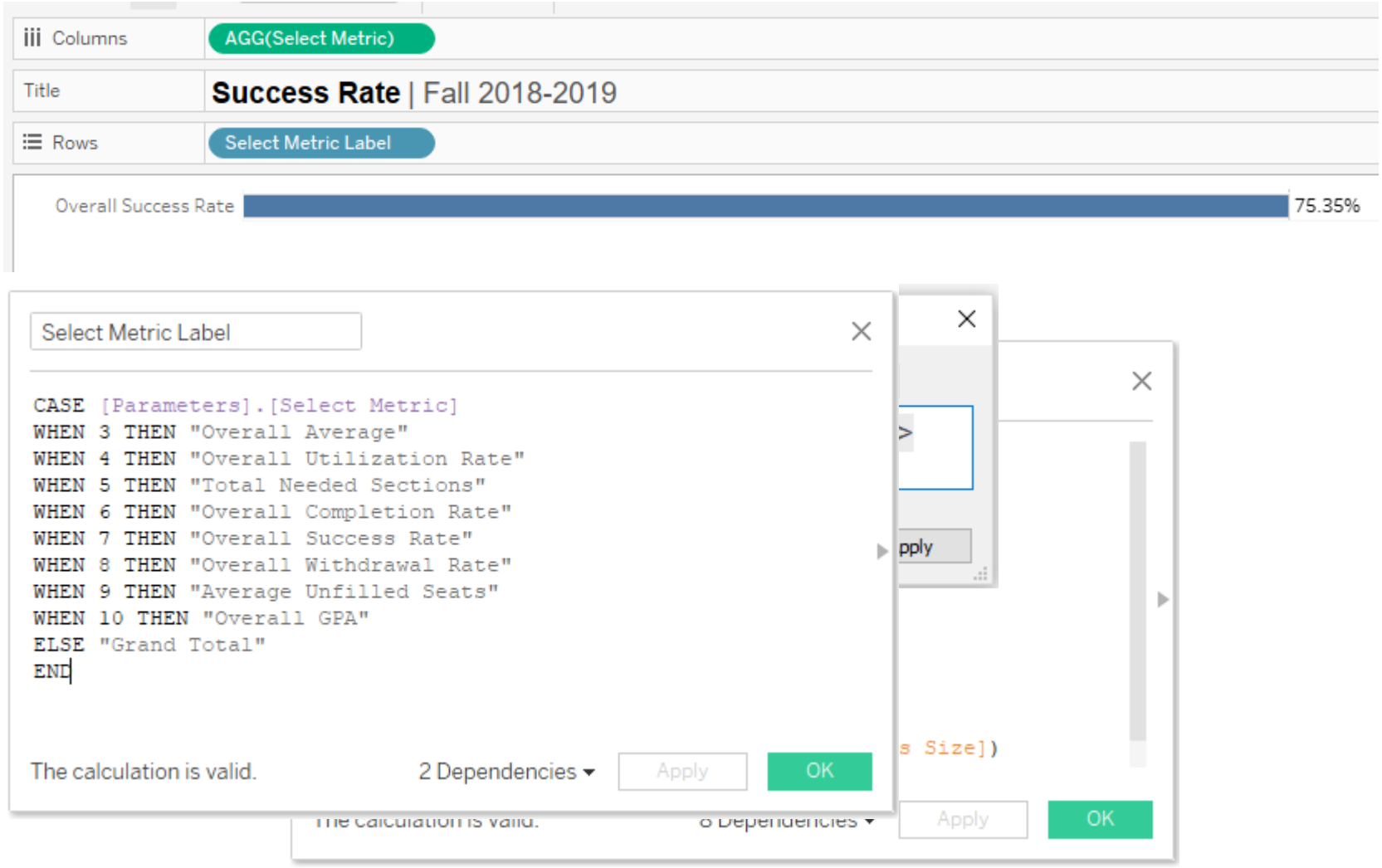
Design once with selectable metrics



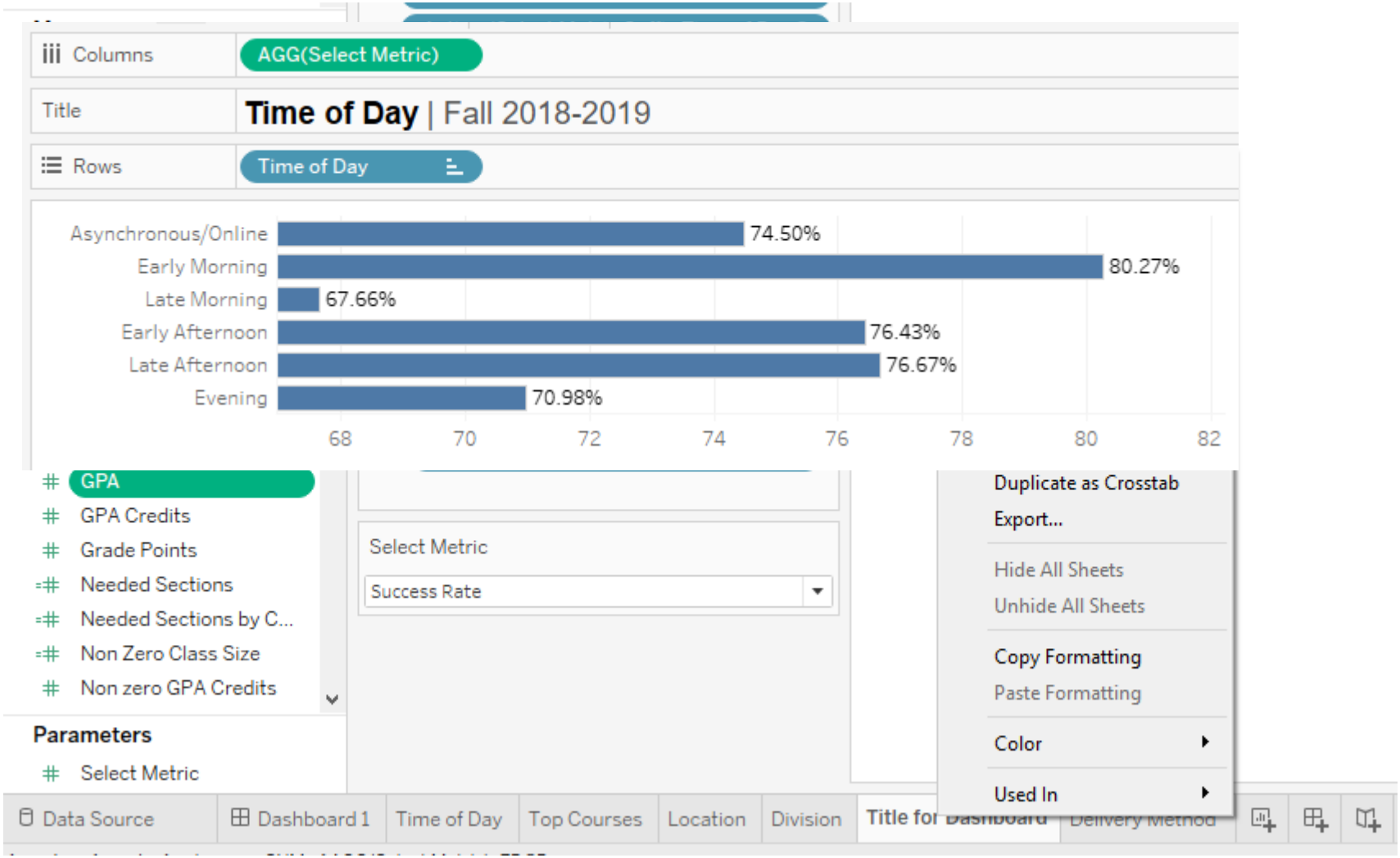
Interactive Dashboard



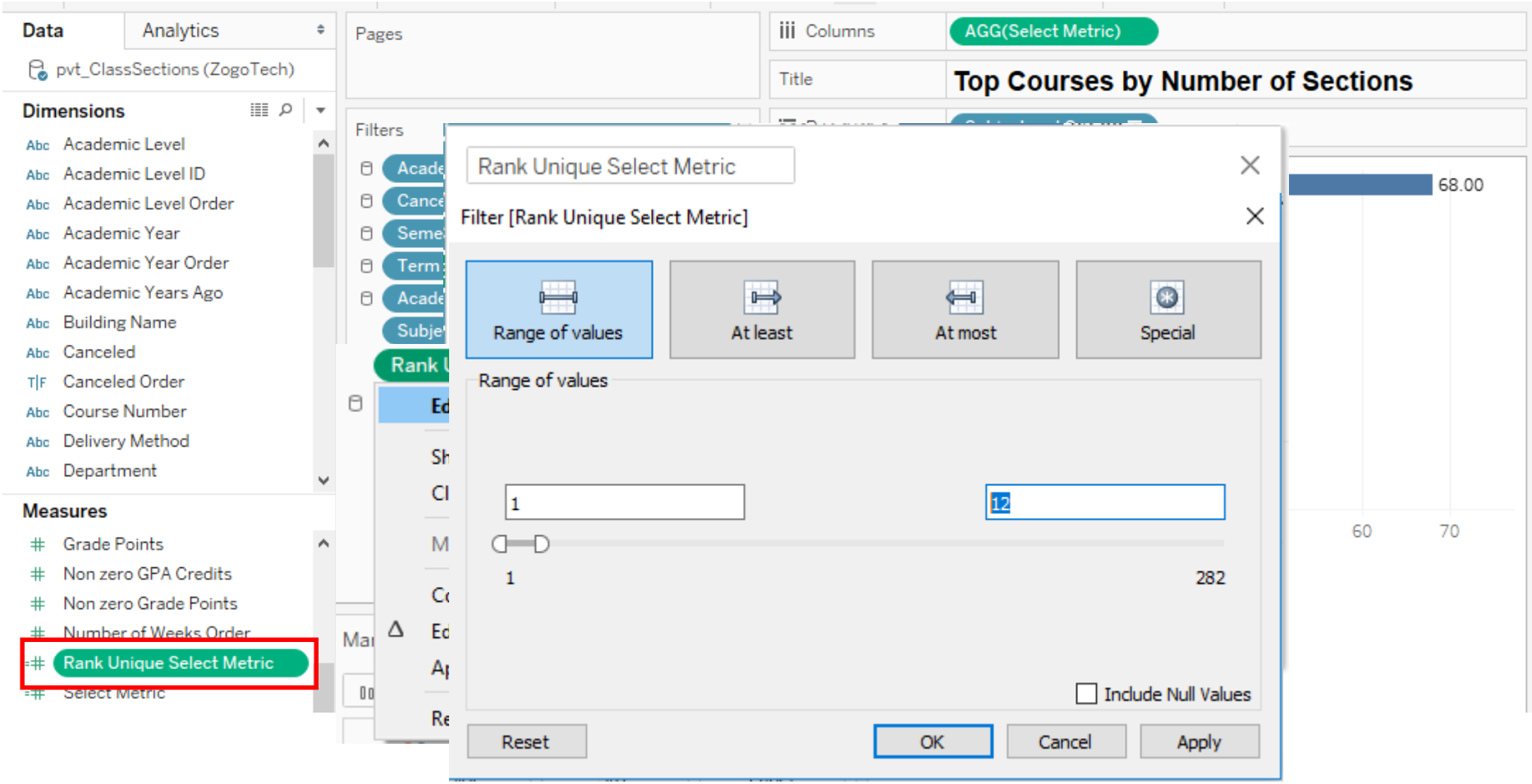
Grand Total and Metric Label



Pivot Table Reports



Top 12 Report

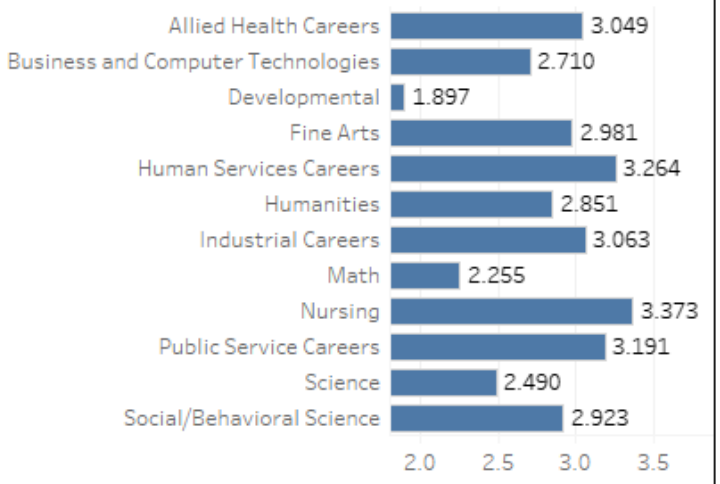


GPA | Fall 2018-2019

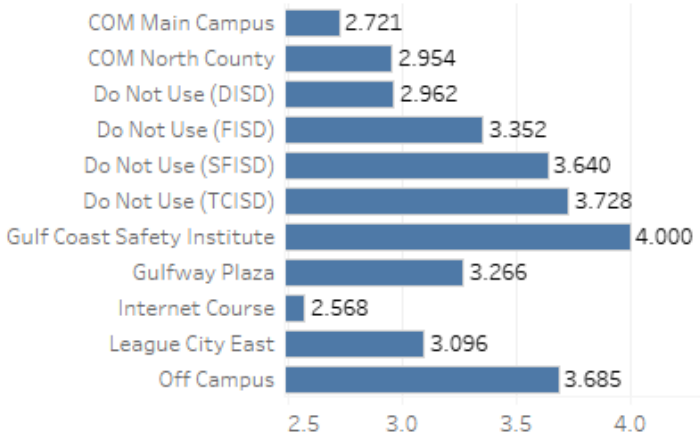
Select Metric

GPA

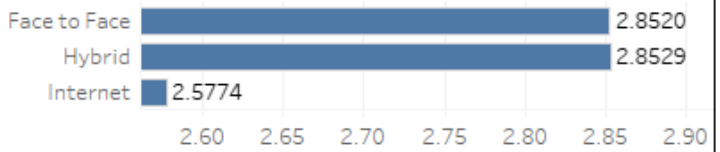
Divisions | Fall 2018-2019



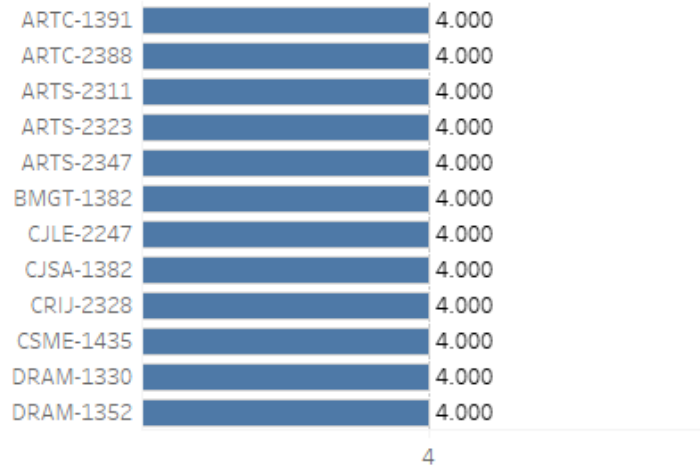
Location | Fall 2018-2019



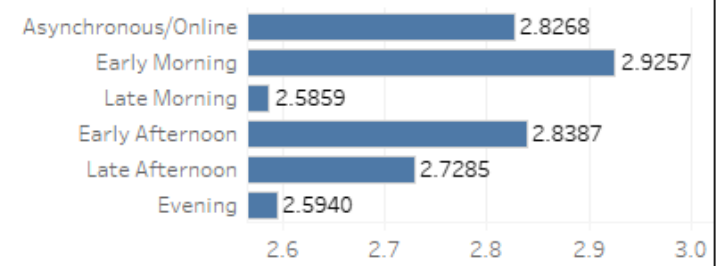
Delivery Method | Fall 2018-2019



Top Courses by GPA
Fall 2018-2019



Time of Day | Fall 2018-2019

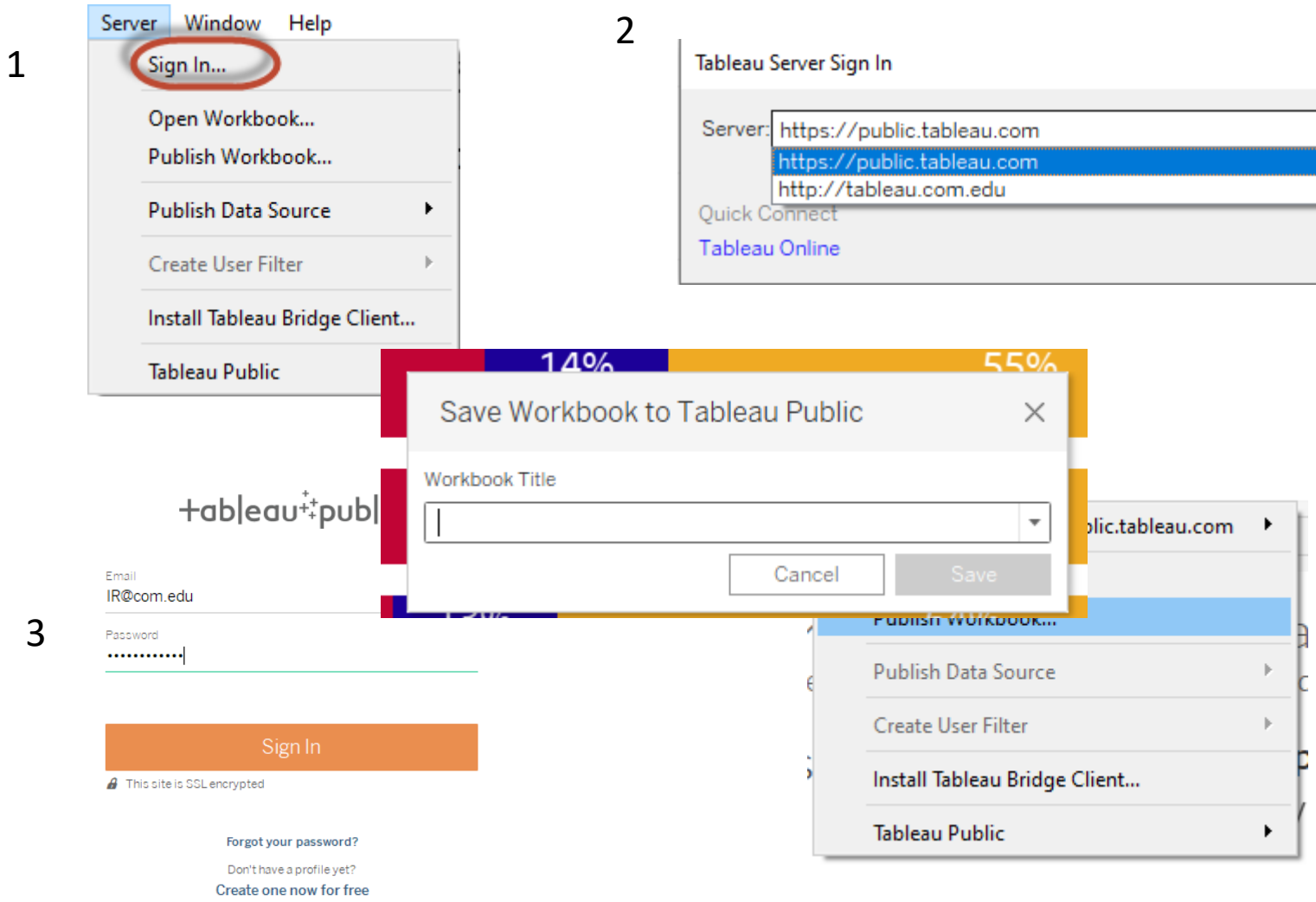


Sharing Dashboards

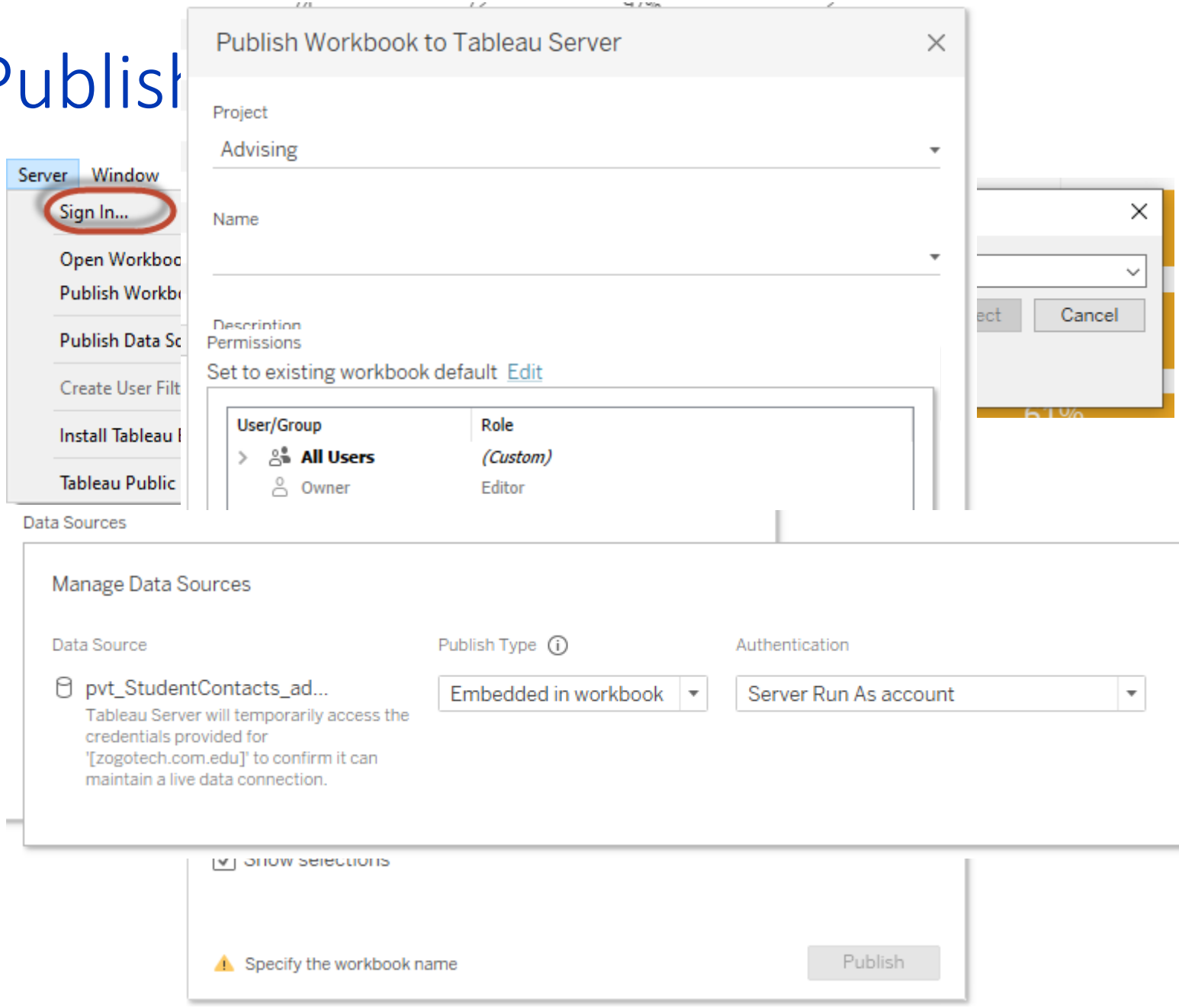
- Tableau Public
  - No student level data
  - Best for high level, long term data
  - Able to embed Dashboards into your own website

- Tableau Server
  - Reporting credentials for automated updates
  - Daily updates possible
  - Better for more granular information

Publish to Public

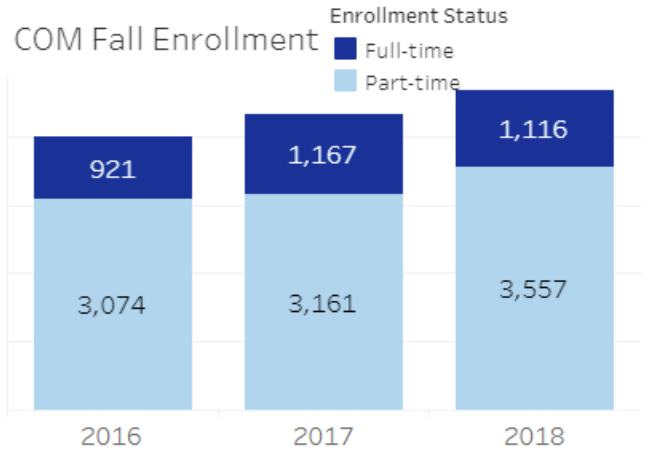


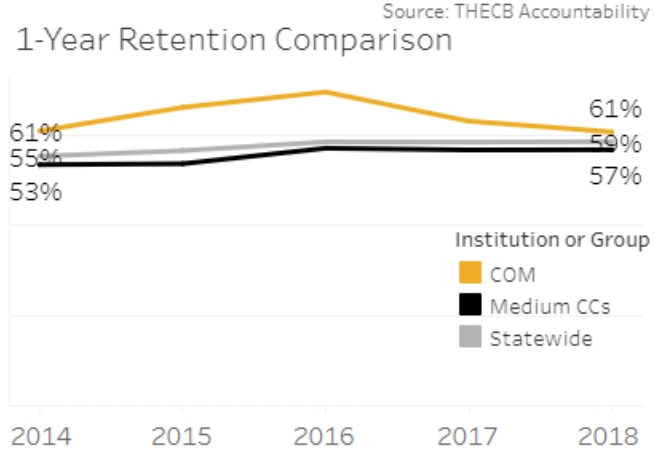
Publish

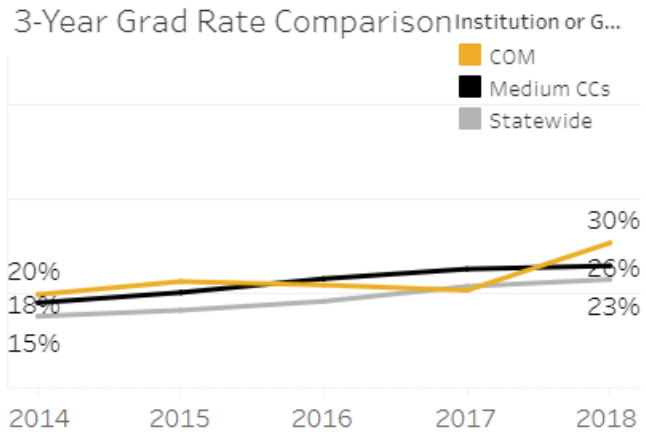

Server
Window
Sign In...
Open Workboo
Publish Workb
Publish Data So
Create User Filt
Install Tableau
Tableau Public
Publish Workbook to Tableau Server
Project
Advising
Name
Description
Permissions
Set to existing workbook default
Edit
User/Group
Role
All Users
(Custom)
Owner
Editor
Cancel
Data Sources
Manage Data Sources
Data Source
Publish Type
Authentication
pvt_StudentContacts_ad...
Tableau Server will temporarily access the credentials provided for '[zogotech.com.edu]' to confirm it can maintain a live data connection.
Embedded in workbook
Server Run As account
Show selections
Specify the workbook name
Publish

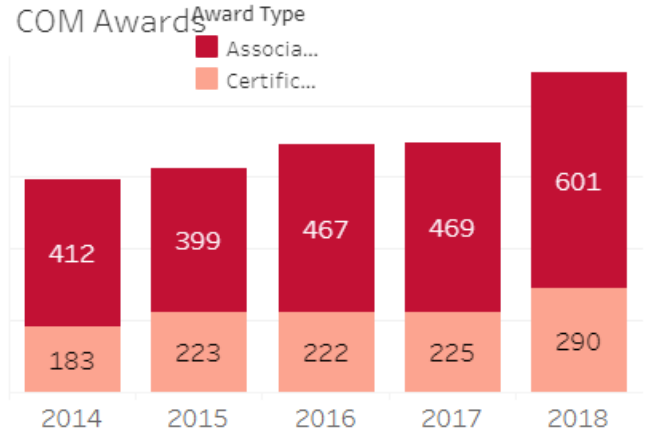
Data Reports

Key Indicators









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Contact

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Providing Insights

- Data visualization eases interpretation
- Workload changes
- Stop being the middleman
- Informed campus -> Student Success

Questions and Discussion