## Data Analyst, Institutional Research – Interview Exercise

The goal of this exercise is for you to demonstrate your abilities to use external data in support of internal decision-making. From start to finish, you should spend no more than 3 hours on this exercise. Please be ready to share your approach, process, and your ultimate visualization with our team during your interview.

## Background

Our office is responsible for reporting to the [Integrated Postsecondary Education Data System (IPEDS)](https://nces.ed.gov/ipeds/). Through twelve surveys administered throughout the year, institutions provide data on enrollments, outcomes, financial aid, staffing, and finances. The aggregated data makes for a rich data set for us to use in answering questions and to do analysis.

## What You Will Need

In this exercise, you will have the opportunity to familiarize yourself with the IPEDS data using the data center (<https://nces.ed.gov/ipeds/use-the-data>). You will download data from the data center (publicly available) and bring it into a tool of your choice to explore and visualize a finding.

## Steps

**The Provost wants to know how we compare to our peers, in terms of outcomes.** Please use the IPEDS data center dataset to pull outcomes data (e.g., six year grad rates). Then, bring the data into a tool of your choice to explore and visualize an answer to the Provost’s question. Come prepared to show us your visual/interpretation and walk us through your approach.

* Navigate to the IPEDS data center: <https://nces.ed.gov/ipeds/use-the-data>
* Click on Compare Institutions

A menu will show that walks you through the next three steps to build your dataset.

### Select institutions

* 1. There are several ways to select your institution and comparison institutions. You can do this individually, you can upload a file, or you can create a group by choosing from institutional characteristics. For this exercise, we will create an “ez group” using one of the options below
  2. Where it says “How would you like to select institutions to include in your data file/report?” à Choose By Groups à ez group (alternatively, if you’d like to choose a smaller peer dataset, feel free…come prepared to explain). Otherwise, please select one of the following peer groups:

### Select Variables

* From the selection options, browse/search variables to find outcome information.
* The two categories with the most data around outcomes will be Outcomes and Graduation Rates. Choose a variable and timeframe from the list (e.g., Graduation rate within 150 percent of normal time or another measure that might help answer the question – hint: there is more than one variable that would support this work so you have options).
* In most instances you will have to check boxes for the cohort you chose and the time periods.
* Note your selections for explanation.

### Output

* When you have made all of your selections, click continue to download the output.
* Download to csv

### Exploration

* In any tool you are comfortable with, upload your data to explore and visualize.
* Provide a few sentence description about the data and what it might tell us about our student outcomes compared to our peers.
* Visualize your data and come prepared to show and explain your visualization.

## Questions?

Please let me know if you have any questions for clarification ([eguthrie@uw.edu](mailto:eguthrie@uw.edu)). The data center can be finicky but easy to use once you get the hang of it.