

## Trend Generator 2020-21 Collection Cycle Tutorial Script

On behalf of the Institute for Education Sciences's National Center for Education Statistics, NCES, and the Association for Institutional Research, AIR, welcome to this tutorial on how to use the Institutional Postsecondary Education Data System, or IPEDS, Trend Generator.

This tutorial demonstrates how to use the IPEDS Trend Generator to quickly view and analyze frequently used variables over time. After completing this tutorial, you will be able to:

- Navigate the IPEDS Data Tools and Trend Generator homepages;
- Use national-level data trends to answer frequently asked questions about postsecondary education;
- Describe the topics covered in Trend Generator;
- Filter, limit and change how trend data is displayed; and
- Build and download data tables.

From the IPEDS home page, click the IPEDS Use the Data page link to access the Trend Generator. On the Use the Data home page, click Data Trends, which is the third link in the first column, and it takes us to the Trend Generator.

At the left of the screen is the general description of the tool: a fast and simple way to view IPEDS data over time. At the top left of the page is the Trend Generator home button. On the top right is the IPEDS home link and the Data Tools link. You can use these buttons to return to the Trend Generator, IPEDS homepage or to the IPEDS Data Tools. There is also a Trend Generator User Guide link and the phone number for the IPEDS Help Desk.

The main menu is made up of questions organized by subject area and data type. To view all the data found in Trend Generator, you can expand all the menu options by clicking the expand all button. The Trend Generator is designed to answer commonly asked questions about IPEDS data at the national level. However, depending on the question you select, you can view data by institution type, student type, or state.

From this view you can see the variety of questions that can be addressed and data that can be used to create trends over time. Questions range from the number of postsecondary institutions; to the number of admissions applicants and students enrolled in those institutions; to outcome measures such as the number of degrees and certificates awarded, and graduation rates. Trend Generator also

answers questions about the number of employees and instructional staff; student financial aid; and institutional revenues and expenditures.

We will start by looking at a basic question – “How many students enroll in postsecondary institutions annually?” Notice as you move your mouse over the question, the information pane provides more details about the data. The note for this question states all students enrolled in credit-bearing courses at postsecondary institutions over a 12-month period are included.

When we click on the question, the answer is revealed.

Now you have several ways to view this data. The default display is a Trend Line. You can click on Bar, to view bar charts or look at a data table by clicking on Table.

You may also limit the results. This option allows you to select one or more values to limit the answer to a specific data subset.

Trend Generator also lets you build a new table based on your current data selections. Use this feature to create a table that breaks data down into multiple categories by rows and/or columns to view trends for different groups. You can also click on the Change question button to select a different subject or question or Go Back to return to the trend line.

At the top of the trend display, is the Modify Years button. Click on it to open a small window to view all data years available. In this window, you can uncheck any years you wish to remove from the trend. If you want to view a trend of the last five years only, you can click the Deselect All button, then select the desired data years.

You can download this data as well. When we click on the Download button, a drop-down menu allows you to download the data in Excel or comma separated value format. Follow the prompts to open the file.

The spreadsheet opens in Excel with the table of enrollment trends. You may save or edit the file. To return to the Trend Generator, close Excel.

You can also print the information selected. When we click the Printer Icon another pop-up window opens with a printer friendly version of the trend report and bar chart. This report, with its official U.S. Department of Education header, can be very effective when sharing IPEDS data with campus administrators.

After sending the report to the printer, close the print view to return to your report.

Now that we have explored some Trend Generator features, we can return to our original question. Click the Modify Years button to “Select All” years to continue our analysis.

Trend Generator has a limit results feature. Select “Limit Results” and choose one of the options.

For example, if we click Sector of institution, a drop-down menu allows us to exclude administrative units and/or select the sectors we want to include in our analysis.

For our demonstration, we want to limit the question to only public institutions. To do this, select Control of institution, check Public, and click Apply. The answer is now limited to only those students enrolled in public institutions.

Next, we will explore the build a table function. Since we are going to look at a breakdown of data by sector, we will need to deselect 'Public' under Limit Results. Go to Limit Results, select Control of institution, uncheck Public, and click Apply. We will now build a table that provides a breakdown of enrollment by state and sector. Go to Build Table. For the Row variable, select State from the drop-down menu. If you do not want to break down the data any further, then no additional variable selections are required. But since we want to break down the trend by sector too, select Sector of institution from the Column drop-down menu.

The table is displayed. Note if you select a variable in error, you may click on the Column or Row drop-down menus to change your selection. On this screen, we have several options. We can modify our table; view a row or column trend within our table; download the table; or print our output. We can also swap the row and column variables if we think this would create a more useful table.

Often, we may be interested in a subset of the categories within our row and column variables. For example, we may be interested in states from within the New England region only. Click on the Modify categories for the Row variables. Click on "Deselect all" and then select all states within the New England area – Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. With our final selections made click Apply. Our table is now displayed.

Note, if we want to select only a subset of sectors, we can follow the same procedure using the Modify categories tab for the Column variables. We want to view all 2-year and above institutions. So, uncheck Administrative unit only, as well as all less-than-2-year categories and click Apply.

Now we are satisfied with our table. So, let us view a trend for some of the categories within our rows and columns. To view a trend for any category, click on the variable label. We want to view the trend for Massachusetts, so click on Massachusetts.

This trend view has the exact same features as the national trend feature reviewed from our original question. Again, we can view a bar chart, view a data in a table, edit the trend years, download the data, print the trend report, or close the window. Since we have already reviewed these features, we will close the window to return to our table.

Much like we did earlier with the original question, we can also restrict the table to specific subsets of data. For example, we can display data for degree-granting institutions only. Click "Limit Results", select Degree-granting status, check Degree-granting and click Apply.

The table now displays the number of students enrolled in postsecondary institutions annually by

state and sector of institution but limited to degree-granting institutions only. We now have a few options for our trend report. The download and print buttons work the same as they did earlier during our demonstration.

Our last option is to “Change the Question.” This feature provides a drop-down menu that allows us to select a different question. We can also click on the Trend Generator button to return to the “Trend Generator” homepage.

This tool holds lots of promise for policy makers, academic administrators, institutional researchers, and other interested data consumers. Check this tool frequently as more subject areas and questions, as well as additional variables to create tables, may be added to the tool. For questions, contact the IPEDS Help Desk.

This concludes our IPEDS Trend Generator demonstration. Please view the other tutorials in this series for additional information on IPEDS data tools.