

## **Technical Review Panel No. 33 Improvements to IPEDS Publications and Web Tools**

### **Final Actions**

On November 2 and 3, 2010, RTI International, the contractor for the Integrated Postsecondary Education Data System (IPEDS) web-based data collection system, convened a meeting of the IPEDS Technical Review Panel (TRP) in Washington, DC. Meetings of the IPEDS TRP are conducted by RTI to solicit expert discussion and suggestions on a broad range of issues related to postsecondary education and the conduct of IPEDS. The TRP is designed to advise and work with RTI to improve IPEDS data collection and products, data quality, and user-friendliness. The TRP does not report to or advise the Department of Education.

RTI's specific purpose for TRP 33 was to solicit input from the postsecondary education community from the postsecondary education community regarding improvements to IPEDS publications and web tools. The panel consisted of 43 individuals representing institutions, researchers and other data users, state governments, the federal government, higher education associations, and others.

The TRP examined the existing IPEDS publications and online data dissemination tools—including College Navigator, the IPEDS Data Center, the First Look reports, and the Compendium tables—and discussed improvements to more effectively meet the needs of all IPEDS data users.

After the conclusion of the TRP, RTI posted a summary of suggestions to the web for public comment. RTI solicited comments by notifying keyholders and coordinators through a "This Week in IPEDS" email announcement. Comments were left open for approximately 30 days and the comment period closed on February 21, 2011. During the comment period, RTI received 2 comments from interested parties. Following the comment period, RTI outlined recommendations for NCES based on the outcome of the TRP meeting and subsequent public comment period. NCES has taken the actions listed below.

### **College Navigator**

The Higher Education Opportunity Act of 2008 (HEOA) includes provisions that require the U.S. Department of Education to report a number of new data elements on the College Navigator website. With the addition of the new data elements, a great deal of information is available to help inform consumers in their college comparisons. Accordingly, the information should be packaged in a way that is relevant to its primary audience. College Navigator should present consumer-friendly information (i.e., something that a student, parent, or other non-researcher can understand) in a simplified format to increase the availability and usability of the data.

Currently, the vast majority of the data available on College Navigator focuses primarily on undergraduate students, with search options customized to the first-time undergraduate experience. An individual's college choice is complicated by many factors. Given the diversity of the prospective student population, the search criteria should be broad and provide consumers with the ability to include additional factors that are important in the college search process, such as distance education offerings.

### College Navigator Improvements

NCES continued to make improvements to College Navigator. College Navigator to keep the site “consumer friendly.” College Navigator now includes the following new functionalities:

- The search function provides users with the ability to search for institutions that offer all programs completely through distance education;
- The Programs/Majors Selector functionality includes search criteria to find schools that offer the selected programs/majors as distance education;
- The Programs/Majors category identifies degrees and programs that are offered as distance education programs by the institution;
- The General Information tab displays the level of distance education offerings by the institution (undergraduate and/or graduate);
- The College Navigator homepage includes a link to the College Affordability and Transparency Center that allows users to browse lists of institutions with the highest and lowest tuition and fees and net price.

## **IPEDS Data Center Planned Improvements**

### **Institution Profile**

Users can access the Institution Profile to quickly retrieve commonly referenced IPEDS data for a selected institution from the most recent data year. The data elements made available through this report should be of interest to data users and presented in a format that is visually appealing and easy to understand.

### New Institution Profile

NCES and its subcontractors have introduced improvements to the Institution Profile to include more data such as student charges, net price, distance education enrollment, enrollments by age and residence added. Additionally, NCES and its subcontractors have added new graphics to visually describe the data. The newly designed Institution Profile is now available via the Look up an Institution function of the IPEDS Data Center.

### **Compare Institutions vs. Build a Custom Dataset**

The Data Center currently has two functions that serve similar purposes: the Compare Individual Institutions task and the Download Custom Data Files task. By selecting either of these tasks, users can select one or more institutions, variables, and data years to create a custom IPEDS data file. While the methods for selecting variables are similar, there are differences in the layouts of the variable trees and the structure of the output files.

Users find it confusing that there are two tasks listed on the main menu that appear to have the same function. To reduce confusion, the main menu should provide a single entry point from which users can navigate between the two tasks.

### Compare Institutions Improvements

NCES and its subcontractors added an additional formatting choice in the Output screen. Users who choose to download their data in comma separated format are given the option to include value labels for categorical variables as part of the output.

Additionally, NCES and its subcontractors implemented a color-coding system within the variable tree to help users distinguish between Continuous, Alpha/String, and Categorical variables.

### Download Custom Data Files Improvements

NCES and its subcontractors integrated the variable tree and qualifying variable tree design into the Download Custom Data Files component to give users increased flexibility when choosing their qualifying variables. For example, when downloading Completions data, the CIP Code qualifying variable now includes options to select all CIP codes (e.g. 'Grand Total') and 'Select all 2-digit'. Then, within each 2-digit CIP Code, additional options to 'Select all 4-digit' and 'Select all 6-digit' are now available. This change enhanced reporting capabilities and improved the system's efficiency by facilitating more targeted analyses.

### **Enhanced Statistical Report**

The Create Group Statistics task is designed to help users generate a report containing summary statistics for one or more IPEDS variables for a group of institutions. Results can be viewed on screen in HTML format or downloaded in CSV or Excel format for further analysis.

One strategy to improve usability of this function is to simplify the format for easier navigation to help more novice users create useful statistical reports without the need for outside statistical software. Currently, users must answer several questions to generate the report and select variables twice—once for analysis variables and once for classification variables.

### Statistics Report Improvements

NCES and its subcontractors redesigned the *Statistics Table Options* userface and integrated the classification variable selection process (formerly a standalone screen) into the Statistics Table Options screen. The new userface offers data users a more intuitive work flow by presenting a single selection process that includes all available output options. Additionally, NCES and its subcontractors redesigned the output screen for improved presentation and clarity.

### **IPEDS Tables Generator**

The TRP discussed the usefulness and relevance of developing a table generator within the IPEDS Data Center to replace the IPEDS Data Analysis System (DAS). While DAS is still the primary option for producing tables and correlation matrices from IPEDS data, NCES recently replaced DAS with the QuickStats and PowerStats guided table generators for accessing data from its nine postsecondary education sample surveys.

NCES should maintain consistency across its postsecondary data dissemination tools, similar to the way that DAS originally integrated all postsecondary surveys under one consistent interface and command structure. Providing users with a quick and easy means of generating simple tables related to one statistic—particularly if the tool incorporates derived variables and a multiyear capacity—would be of considerable use to both beginning users and more advanced users who perform ad hoc data analysis.

### IPEDS Trend Generator

NCES and its subcontractors developed the IPEDS Trend Generator, an online tool that can be used to create tables of selected IPEDS data over time. The Trend Generator utilizes a step-by-step approach that guides users through the process of building tables with national level trends or creating groups to show more detailed trends. The data available through the IPEDS Trend Generator is organized into subject areas (such as Student Enrollment, Graduation Rates, Financial Aid, and so on). An expandable directory of these available subject areas is displayed on the Trend Generator homepage. Each subject area contains a list of relevant questions (e.g. ‘How many students enroll in postsecondary institutions annually?’ or ‘What is the graduation rate within 150% of normal time at 4-year postsecondary institutions?’) for more targeted analysis. Tables and charts can be printed or viewed online and data can be downloaded as Excel files for further analysis.

Since its implementation, NCES and its contractors have added a number of enhancements to the existing functionality, including the addition of more questions and subjects, allowing users to create trends from more IPEDS data than before. Additionally, NCES and its subcontractors added the capability for users to “limit” (or filter) their results to a specific subset of institutions based on one or more user selected values.

### **Additional Data Center Discussion Items**

A library of tables would be particularly useful to smaller schools and to novice users who could benefit from knowledge shared by more experienced users. Many data users have expertise in specific sectors, and allowing less experienced users to draw upon this knowledge through gaining access to their products would be a valuable resource for the higher education community. Although advanced users may have greater resources at their disposal, they would benefit from the ability to share and discuss their derived variables, code, and categorical groupings with a peer community in order to solicit feedback from other expert data users.

### Tables Library

NCES and its subcontractors revamped the postsecondary division’s Tables Library, an online tool where users can view and download tables of IPEDS data aggregated to the state and national level for a wide-range of topics in postsecondary education. This includes the IPEDS First Look Tables, Compendium Tables, and State Tables, as well as tables from the postsecondary sample surveys. The Tables Library can be accessed from the IPEDS Data Center.

Additionally, RTI recommended that NCES examine the language used throughout the Data Center, particularly the main menu and function names and descriptions, and make an effort to simplify and clarify the language wherever possible. Distinguish between a “report” and a “file” and use simplified, standard language within each function.

### Improvements to the Data Center

NCES and its subcontractors have updated the descriptions of the available functionalities listed on the main menu to help data users better understand which component would be more useful for their intended output.

Additionally, NCES and its subcontractors continued to make enhancements to the Data Center to increase its overall usability and visual appeal.