# Report and Suggestions from IPEDS Technical Review Panel #33 Improvements to IPEDS Publications and Web Tools

SUMMARY: Based on a review of the current IPEDS publications and web tools and several enhancements to these tools planned for 2011, the Technical Review Panel suggests a number of improvements to the IPEDS publications and online data dissemination tools to increase utility and usability, and ensure that IPEDS data continues to be disseminated in the most efficient and effective manner possible. Comments from interested parties are due to Janice Kelly-Reid, IPEDS Project Director at RTI International, at <a href="mailto:ipedsTRPcomment@rti.org">ipedsTRPcomment@rti.org</a> by February 21, 2011.

On November 2–3, 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 obtain peer review of IPEDS-related project plans and products, and to foster communications with potential users of the data. The purpose of this meeting was to solicit input from the postsecondary education community regarding improvements to IPEDS publications and web tools. The panel consisted of 43 individuals representing the federal government, state governments, institutions, data users, association representatives, 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 potential ways of further improving these publications and tools to more effectively meet the needs of all *IPEDS data users*.

#### Overview

The IPEDS online data tools serve as the primary means by which IPEDS data are released to both providers of postsecondary education and to the public. Since the release of the first IPEDS web tools just over a decade ago, NCES has worked continuously to improve and enhance its online data products, and as a result of these efforts, both the scope and usage of the IPEDS tools have evolved rapidly in recent years.

IPEDS data are currently made available to students and parents through the College Navigator college search website, and to researchers and others through the IPEDS Data Center.

- College Navigator: Designed as a consumer information tool, College Navigator provides data on nearly 7,000 postsecondary institutions in the United States and other jurisdictions (such as Puerto Rico) as a first step for parents and students in the college search process. Released in September 2007 to replace the College Opportunity Online Locator (COOL), College Navigator offers a wide range of information such as programs offered, retention and graduation rates, financial aid availability, campus safety, accreditation, and estimated student expenses. The site allows users to build a list of schools by selecting a variety of indicators and generate side-by-side comparisons of up to four schools. Results can be saved online or downloaded and exported into spreadsheet format.
- IPEDS Data Center: The IPEDS Data Center was released in April 2009, replacing the IPEDS Peer Analysis System (PAS) and the Dataset Cutting Tool (DCT) to create a single entry point for IPEDS online analytical tools. Designed as a centralized web-based data retrieval system from which users can access all IPEDS data, reports, and statistics, the Data Center incorporates a wide range of automated tools and diverse reporting capabilities for analyzing IPEDS data, including advanced statistical, institutional ranking, and trends

analysis reports and the ability to construct customized data sets and download full data files for one or more institutions.

According to NCES site usage reports, College Navigator is currently the second most visited area of the NCES website, with 1,068,335 page views in August 2010—nearly 10 times the number of visits the site received during the same time period in 2007; and the Data Center is the third most visited area of the NCES website, with 804,346 page views in August 2010—approximately 40 times the number of visitors to both PAS and DCT combined during the same time period in 2008.

With the population of users accessing these tools broadening, NCES has identified a number of improvements to the IPEDS web tools to further expand their utility and versatility for all data users. Most recently, this included integrating the previously disparate Executive Peer Tool (ExPT) into the Data Center and releasing an enhanced version of the Create Group Statistics functionality within the Data Center. NCES also released the IPEDS State Data Center in January 2011, to provide access to state-level comparison data across a wide range of IPEDS variables.

In addition, NCES is in the process of planning improvements and next steps for the IPEDS online tools in 2011. These include the following:

- Continuing to improve College Navigator while maintaining the current ease of use and simplicity of navigation.
- Continuing to improve on the IPEDS Data Center functions and features.
- Developing a table generator within the IPEDS Data Center to replace the IPEDS Data
  Analysis System (DAS). (Other NCES postsecondary sample surveys, including the National
  Postsecondary Student Aid Study (NPSAS), the Baccalaureate and Beyond Longitudinal
  Study (B&B), and the Beginning Postsecondary Students Longitudinal Study (BPS) have
  already replaced DAS with the new QuickStats and PowerStats guided table generators.)

In light of these changes, the IPEDS TRP convened in November 2010 to review both the recent and planned improvements to the IPEDS online tools, and to discuss these and other ways of further increasing the usefulness and relevance of the IPEDS publications and web tools to ensure that IPEDS data continue to be disseminated in the most efficient and effective manner possible.

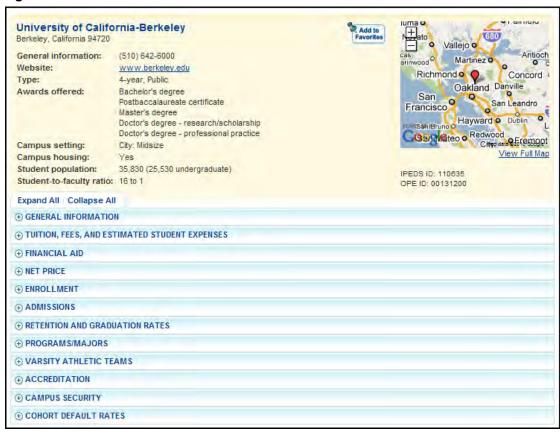
### **Discussion Item 1: College Navigator**

The panel began by discussing the College Navigator college search website. The general consensus of the group was that College Navigator is a very good application and serves well as a first-run tool for students and parents beginning their search for postsecondary education. The group noted that one of College Navigator's strongest features is its simple and clean layout and cautioned against making too many changes to what is already a highly effective application.

However, 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. Currently, data in College Navigator are easy to access and the site is simple to navigate. The increase in required information raised concerns about difficulties in maintaining these characteristics for the intended audience of parents and students.

In response to these concerns, NCES presented the panel with a proposed new layout for presenting institutional data. In the current version of College Navigator, a search for an institution by name directs users to the institution's main page, with a short summary of general information displayed at the top of the screen (see figure 1).

Figure 1



Below the summary are expandable categories of various data components related to the institution. When all categories are expanded and the page is printed, the printed report for an institution like the one shown above may be as many as 17 pages long.

To simplify this layout, NCES proposes improvements to the institutional data page whereby users are directed to a consolidated 3-page summary report that presents the basic characteristics of the institution accompanied by charts, graphs, and tables of selected measures such as the number of applicants, admitted students, and enrolled students; estimated student expenses for in-state students living on campus, before and after grant and scholarship aid; the number of degrees and certificates awarded in a given academic year; and a list of the largest five undergraduate programs at the institution. Each measure would include a link directing users to additional information about that category (e.g., admissions, student financial aid, student enrollments and characteristics). Selecting this link would bring the user to the corresponding expandable tab on the current detailed information screen (shown in figure 1).

The panel was asked to review the proposed prototype and provide feedback. The general consensus of the group was that while there are some mechanical issues and finer details to be worked out, the approach itself is a good one. Panel members agreed that displaying data in charts and graphs is an improved means of presenting the information and that the proposed format is user-friendly, more intuitive to use, and more accessible for parents and students than the current format. Panel members also noted that giving users the ability to print out a clean and simple 2- to 3-page summary report is a vast improvement over the current 17-page printed report. Consequently, the panel indicated support for making the improvements proposed by NCES.

However, the group suggested that NCES give additional consideration to the design of the page. Specific suggestions included ensuring that data elements of greatest interest to consumers are displayed first, and streamlining the page to minimize unused space, perhaps by using thumbnail images that expand when clicked to reduce the need for vertical scrolling.

In addition, the panel proposed that the opening page include two tabs: one for the summary report, and one for accessing the existing detailed information screen so that both formats are easily accessible to users. Panel members also suggested that NCES use care in selecting which measures to include in the summary report, noting that some information may not be applicable to all institutional sectors and that different presentation formats may be necessary for different sectors.

#### Additional ideas included the following:

- Simplifying the student financial aid table and/or displaying these data in chart or graph format for consistency with the rest of the report. Panel members felt that the table as shown in the prototype was difficult to read and suggested reducing the data shown to just the major categories (e.g., grant/scholarship aid, student loan aid) without including details about the type or source of the aid.
- Reviewing the language used throughout the report for clarity. For example, the panel noted that the student financial aid table should state explicitly that the data presented represent estimated *annual* aid.
- Adding percentages to the bars of the Undergraduate Admissions chart.

The panel also requested that NCES consider developing an interface that would further facilitate side-by-side institutional comparisons using the selected summary charts.

The panel also examined the College Navigator search criteria and capabilities and discussed some possible ways of expanding these to give users more options when searching for institutions. Panel members agreed that a search category is needed that allows users to search based on the level of diversity at an institution—specifically distribution by race/ethnicity and distribution by gender. The group agreed that incorporating diversity indicators into the search criteria would provide a meaningful measure for consumers, but the panel could not reach a consensus on how best to implement this without overcomplicating the search options.

Panel members also discussed the idea of expanding the search criteria to be more representative of different types of students. Traditionally, the data available on College Navigator focuses primarily on undergraduate students, with search options customized to the first-time undergraduate experience. The group expressed concern that since the College Navigator audience ranges from high school students enrolling in traditional postsecondary institutions for the first time to adult learners enrolling in distance education programs, it might be necessary to reevaluate the search options with more nontraditional concerns in mind. A number of panelists noted that the population of adult, returning, nontraditional students is increasing, as is the number of students enrolling in distance education, both trends that are likely to continue. Consequently, the panel agreed that to effectively provide consumer information to all students, NCES should consider adding additional search categories relevant to these and other types of nontraditional students.

Finally, the panel discussed the possibility of allowing users to generate "personalized rankings" or of weighting search results based on criteria users indicate are most important to them. The panel expressed concern with ranking institutions in any way because this may introduce false precision into the results or have the unintended consequence of institutions' manipulating data to gain a more favorable ranking. Instead, the panel discussed the possibility of using an algorithm to enable users to place different emphasis on different criteria, or of enabling users to reorganize or refine their search

results based on specified criteria. As another option, the panel discussed displaying the percentage by which an institution meets the user's search criteria (e.g., "This institution meets 70 percent of your search criteria"). In this case, the results would be presented in a static alphabetized list not able to be sorted by percentage. Ultimately the panel agreed that the College Navigator output function should be revised to allow for sorting or refining of search results; however, no consensus was reached on how this could best be implemented.

## **Discussion Item 2: IPEDS Data Center Planned Improvements**

#### Look Up an Institution

The panel began its discussion of the IPEDS Data Center features and functions by reviewing the *Look Up an Institution* function. According to data compiled from NCES Site Usage Reports, this is the most frequently accessed function in the Data Center, garnering 30.2 percent of all Data Center page visits during the month of August 2010.

The *Look Up an Institution* function allows users to quickly retrieve data for a single institution using any of three different methods:

- **Institution Profile:** Users can access an automated report containing selected IPEDS data for a chosen institution for the most recent data year. The report can be viewed on screen or downloaded in PDF format.
- **Reported Data:** Formerly referred to as "Forms Facsimile," this option allows users to access current and prior years' IPEDS data as reported by the selected institution on the actual survey forms.
- **Printed IPEDS Data Feedback Reports (DFRs):** Users can view and download current and previous years' printed IPEDS DFRs as provided to the selected institution.

The current usage rate indicates that users are largely satisfied with this section of the Data Center. However, as part of NCES's commitment to continuing to provide users with the most relevant data in the most intuitive structure possible, NCES presented the panel with two prototypes for a proposed new layout for the Institutional Profile page.

Currently, when the Institutional Profile is accessed on screen in HTML format, available subject areas such as admissions, awards/degrees conferred, and student enrollment can be expanded to view the data within a particular component (see figure 2).

Figure 2



Two prototypes of the redesigned Institutional Profile were distributed to the panel for review—one representative of an academic reporter and one of a program reporter. The proposed concept is a single data repository that includes charts, graphs, tables, and lists of information relevant to the selected institution.

The panel reviewed and showed support for the concept, agreeing that the proposed format is more readable and user-friendly than the current Institutional Profile. However, panel members noted that while the Data Center has an intended audience of institutional data users and researchers rather than student or parent users, because of its ease of use, this particular feature is often also used by policymakers and the media to quickly look up data for a selected institution. In light of this, the panel suggested that NCES do some additional research to better define the primary audience for this tool and tailor the information in the report as closely as possible to that audience to ensure that the most appropriate and useful data are displayed.

Additionally, in its prototype, NCES included methodology notes at the end of the printed report. Variable definitions and methodology notes have not been included in previous versions of the Institutional Profile. The panel agreed that the notes provide an important annotation to the data and should be included at the end of the printed report. The panel further suggested that this information be integrated into the online version of the report as embedded links to corresponding IPEDS glossary terms and other relevant information. As a final proposal, the panel suggested that, in order to reduce confusion, the new Institutional Profile not be made available until after reporting of the new race/ethnicity categories becomes mandatory for all IPEDS surveys.

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

The Data Center currently has two functions that serve similar purposes: the *Compare Individual Institutions* function and the *Download Custom Data Files* function. Both allow users to select one or more institutions, variables, and data years to create a custom IPEDS data file. Within each function, the layouts of the variable trees differ, but the general method of variable selection is similar. In addition, both functions allow for a downloadable comma-separated values (CSV) output to be created that can be imported into outside statistical software packages (e.g., Stata, SPSS, and SAS) for further analysis, although the specific output files differ. The *Download Custom Data Files* function produces a multirecord output of subsets of data. For example, if three years of Completions data are selected using this function, the resulting file will contain three subsets of data—one for each year. When using the *Compare Individual Institutions* option, a separate query is produced for each variable. These queries are then combined in the output to produce a single-record file regardless of the number of years selected.

The separation of the two functions in the Data Center is based on the format of the old Peer Analysis System. In PAS, SQL server restrictions forced a limit on the number of institutions that could be included in a comparison group and the number of variables that could be selected using the *compare institutions* functionality (the *build a custom dataset functionality* had no such limitations). However, these limitations are no longer present in the Data Center.

While NCES is interested in preserving the separate functionality of these two tools, users have expressed confusion as to why there are two functions listed on the main menu that appear to have the same purpose. To clear up this confusion, NCES proposed revising the Data Center main menu to consolidate these two menu options into one entry point with two internal tabs or submenu options for choosing between the two functions.

Following a review of both functions, the panel supported this concept. The group further suggested that the tabs include a detailed description of each tool to clarify the differences between the two and aid users in determining which is more useful for their intended output. As a final proposal, the panel suggested that NCES further review the function names and consider revising them to better represent and describe the true functionality of each.

#### **Enhanced Statistical Report**

The *Create Group Statistics* function in the Data Center allows users to 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.

In the original output, users could designate the following statistics for inclusion in the report:

- N;
- Sum;
- Minimum:
- Maximum;
- Mean (included by default);
- 25th Percentile;
- Median;
- 75th Percentile: and
- Standard Deviation.

NCES recently enhanced the report to include an additional step that enables users to select up to three additional classification variables to obtain separate analyses for subgroups within the comparison group. If this option is selected, the number of observations (N Obs) is added to the list of available statistics for inclusion in the report.

Following a demonstration of the recent enhancements, the panel endorsed the concept, noting that the addition of classification variables is a great new feature ideal for creating pivot tables and Online Analytical Processing (OLAP) tables and cubes. However, the group expressed concerns related to navigation within the tool, specifically the number of questions users must answer in order to generate the report and the need to select variables twice—once for analysis variables and once for classification variables. Panel members felt that the enhanced tool was designed more for users who are already familiar with the system, noting that if the enhancements are intended to help more novice users create useful statistical reports without the need for outside statistical software, NCES should consider ways of simplifying the format for easier navigation.

The panel also questioned the terminology used. The module makes reference to "analysis variables" and "classification variables," but panel members noted that most statistical software applications categorize these items as "measures" and "dimensions." The panel suggested that NCES give further consideration to the definitions of the terms being used to ensure that the language and terminology are appropriate to the technology.

In addition, the panel noted that the addition of "N Obs" to the list of available statistics once classification variables are selected is confusing and easy to miss as currently presented. The panel suggested that this option be removed from the list and instead automatically included in the report by default any time a classification variable is selected. Finally, the panel noted that the Excel download option currently included on the output screen appears to produce an exact replica of the on-screen output. Given the availability of the more useful CSV output option, the panel suggested eliminating the Excel option in order to reduce confusion.

#### IPEDS Table Generator

As noted in the overview, another planned improvement to the Data Center is development of an online table generator. NCES is concerned with maintaining consistency across its postsecondary data dissemination tools, similar to the way that DAS originally integrated all NCES postsecondary surveys under one consistent interface and command structure. 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.

- QuickStats is a web-based guided table generator designed to provide fast and easy access to hundreds of frequently used variables from NCES postsecondary sample surveys like NPSAS and BPS. The system utilizes a step-by-step approach and visually intuitive drag-and-drop interface to guide users through the process of creating a simple data table related to a specified area of interest. Tables can be viewed online in HTML format, downloaded to Excel for further analysis, or saved on the NCES server for later review.
- **PowerStats** boasts all of the same features and capabilities as QuickStats, but in a much more powerful framework, which incorporates a regression-based functionality, a complex covariance analysis tool, and access to full datasets composed of thousands of sample survey variables.

The panel was given demonstrations of QuickStats, PowerStats, and a working prototype of the proposed new IPEDS Table Generator, which follows a format similar to that of to the two sample survey table generators described above. The subsequent discussion centered on the value of a

QuickStats versus a PowerStats version of the table generator, and how simple or complex the IPEDS Table Generator should be.

The panel noted that the difference between IPEDS and other NCES datasets is that with IPEDS there are other means of accessing the data. Panel members questioned how complex the IPEDS Table Generator needs to be when users can already access raw data through the Data Center and perform these types of analyses themselves. The panel noted that most potential PowerStats users are already proficient with regression-based analysis and already have access to sophisticated statistical software. Based on this, the panel was unsure of the usefulness of a PowerStats tool at this time and suggested that NCES perform additional research to further define the audience for this type of tool.

However, panel members agreed that a QuickStats version of a table generator would be useful, particularly for small institutional research (IR) offices and national associations with smaller staff sizes and budgets. The panel agreed that 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. Therefore, the panel supported the concept of a simplified table generator similar in format to QuickStats, with a smaller subset of variables and table options than would be available in a PowerStats version in order to maintain ease of use and cater primarily to the of small institutional research (IR) offices and novice users. Panel members also suggested that users might find additional utility in the ability to import existing tables and/or parameters from other sources such as the First Look reports and Compendium tables into the table generator; using these tables as a starting point, they could make modifications or add variables without having to replicate the tables on their own.

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

As part of the discussion of the IPEDS Table Generator, the panel was given a demonstration of the NCES DataLab website, which houses QuickStats, PowerStats, and an additional "Library" option from which users can access existing tables and figures developed by NCES. In addition to providing NCES-generated tables, PowerStats allows users to build an online library of their work and to store tables and figures to upload in subsequent sessions. Users can save their tables in two ways: by downloading the tables onto their computer hard drive in a zipped CSV format and uploading the CSV during a subsequent session; or by saving tables to the NCES server. When saving to the NCES server, users are provided with a URL to retrieve their data during future sessions.

The DataLab Library allows for users to share user-generated tables with other PowerStats users. These tables contain a disclaimer indicating that they are user-generated items and are *not* tables or figures released by NCES. Each table published by NCES is required to undergo a process of statistical review, whereas user-generated tables are not held to any particular set of standards or review.

The panel discussed the idea of creating a similar community of data users for IPEDS, with a library for sharing tables, derived variables, and other relevant data items. NCES noted that if the panel were to adopt the proposed table-sharing library, all potential users would have to opt in to the system by requesting a login ID and password, similar to the process of becoming a DAS Power User, so the table library would not be a completely open forum.

The panel agreed that establishing a library of user-defined tables and derived variables would be worthwhile and useful for the IPEDS data user community. 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. Panel members noted that while this type of forum would be particularly useful to smaller schools and to

novice users who could benefit from knowledge shared by more experienced users, those at larger IR offices may benefit as well. Although they may have greater resources at their disposal, advanced users 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.

Panel members expressed concern related to lack of oversight and editorial control over what is posted, noting that the validity of the library depends entirely on the credibility of the user community. It was further noted that without editorial control, a table of disputable quality could have unintended policy implications. In response to this, the panel discussed the idea of allowing other users within the community to post ratings of shared items. This option would allow the community to evaluate a posted table in terms of quality or usefulness. The panel noted that ratings would allow for items to be vetted by the user community that would otherwise not undergo any type of quality review. However, the panel expressed concern about the inherent disorganization of existing rating systems within peer tools, noting that tables could be inappropriately applied ratings by users who do not understand the context of the data.

The panel also recognized that similar attempts at creating shared table libraries have failed to generate widespread interest for a variety of reasons. However, the consensus of the group was that despite the obstacles in place, the concept of creating an IPEDS data user community and library of user-defined tables and derived variables is good and should be explored further by NCES.

Finally, the panel suggested 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. Specifically, the panel suggested that NCES better distinguish between a "report" and a "file" and use simplified, standard language within each function. Panel members also felt that there was room for improvement in the naming of the main menu options and the language used to identify and describe each function.

### **Discussion Item 3: First Look Reports**

NCES publishes a series of First Look reports to introduce new data through the presentation of tables containing descriptive information. These First Look reports are published annually, highlighting key findings from each IPEDS data collection cycle. In addition to the First Look tables, NCES creates many more tables using IPEDS data. These Compendium tables contain more detailed information related to the various topics covered by the IPEDS surveys.

NCES is concerned with maintaining a balance between providing relevant and useful First Look reports and timely release of IPEDS data, facilitated by the small number of tables included in the reports. To address this concern, panel members were divided into three small discussion groups, each tasked with reviewing a specific report from the most recent series of First Look and Compendium tables: Fall, Winter, and Spring. Each group was asked to examine the report, considering the following questions:

- (1) Do the tables in the most recent First Look reports present the most important and relevant data collected in the survey under discussion?
- (2) *If not, should the tables be revised or replaced?* 
  - a. If revised, how should the table be changed?
  - b. If replaced, what table should be included?
- (3) Are the Selected Findings highlighting the most important data in the tables?
- (4) Are there additional tables that should be included in the Compendium?

At the conclusion of small group discussion, the TRP reconvened to discuss each group's findings.

#### Group 1 Findings: Fall First Look and Compendium Tables

The Fall First Look report reviewed by the group presents findings from the IPEDS Fall 2009 data collection, which included three survey components: Institutional Characteristics for 2009-10; Completions, covering the period July 1, 2008, through June 30, 2009; and 12-month Enrollment, covering 2008-09. Below are the group's findings:

- **All tables.** The group opened discussion first by noting that some, but not all, tables include a totals row for all institutions. When appropriate and relevant, the group suggested that NCES include a total for all institutions.
- Table 2: Number and percentage distribution of Title IV institutions, by control of institution, degree-granting status, and highest level of offering: United States, academic year 2009-10
  - o **Discussion item 1:** The group questioned how NCES defines the highest level of offering between the three doctor's degree offerings:
    - doctor's degree—research/scholarship
    - doctor's degree—professional practice
    - doctor's degree—other

The group noted that the order of listing doctor's degrees implies a hierarchy within the doctor's degree offerings. Therefore, doctor's degree—other could be interpreted as the highest level of offering within the doctoral categories. The group expressed concern because many public research institutions opt not to use this category when reporting to IPEDS. Consequently, the group requested that NCES examine collapsing the three doctoral degrees into one general doctor's degree category for Table 2 in future reports. To maintain consistency and preserve trend data, the group noted that NCES could include the three doctor's degree offerings as subcategories to the collapsed doctoral degree category.

O Discussion item 2: The group examined the redundancy that exists in table 2. Consider this example: because the table subdivides highest level of offering by degree-granting and nondegree-granting status, the number of associate's degree offerings shown in the associate's degree total column (1,371) is the same as the number of associate's degree offerings shown in the degree-granting subtotal (1,371). The group suggested that NCES consider reorganizing table 2 to show the highest level of offering for *all* institutions and then divide degree-granting and non-degree granting subcategories by award level, when appropriate. For example:

#### All institutions

Less than 1 year
At least 1 but less than 2 years
Degree-granting
Non-degree-granting
Associate's degree
At least 2 but less than 4 years
Degree-granting
Non-degree-granting
Bachelor's degree

Post-baccalaureate certificate

Degree-granting

Non-degree-granting

Master's degree

Post-master's certificate

Degree-granting

Non-degree-granting

Non-degree-granting

Doctor's degree—research/scholarship

Doctor's degree—professional practice

Doctor's degree—research/scholarship and professional practice

Doctor's degree—other

- Table 4: Average and median tuition and required fees, percentage change in average and median tuition and required fees, and number of institutions reporting academic year tuition and required fees, measured in constant 2009-10 dollars, for full-time students at Title IV institutions, by student level, sector, and residency: United States, academic years 2000-01, 2003-04, 2006-07 and 2009-10
  - O **Discussion item 1.** The group noted that the second page of table 4 is the count of institutions, which provides the denominator of institutions used to calculate the average. The panel questioned the usefulness of providing these data in the table and suggested that unless it was added as a request of internal reviewers of the table, the second page should be eliminated. If NCES is required to include an institution count, the page orientation should be changed to landscape to allow space in the chart to list the number of institutions alongside the average tuition and required fees, and percent change 2000-01 to 2009-10 on one page.
  - **Discussion item 2:** The group agreed that it would be useful and relevant to include an annualized percentage change in average tuition and fees in addition to the 10-year percentage change already included. They suggested that NCES explore including this measure in future reports.
  - O **Discussion item 3:** The panel suggested that NCES explore the usefulness of adding an in-district measure of average tuition and required fees for public institutions.
- Table 5: Average components of academic year price of attendance and percentage change in average components of price of attendance, measured in constant 2009-10 dollars, for full-time, first-time degree/certificate-seeking undergraduates at Title IV institutions, by level and control of institution, residency, and student housing: United State, academic years 2007-08 and 2009-10
  - O **Discussion item 1:** Revising "percent change" in the subheading to "2-year percent change" provides an important clarification that may otherwise be overlooked. The group suggested that NCES make this distinction in the subheading for all three columns.
  - O Discussion item 2: The group expressed concern that 4-year, 2-year, and less-than-2-year levels may not be the most appropriate way to show averages by level. Instead, the panel suggests using institutional category or collapsed institutional category to separate the levels.
- Table 6: Average academic year price of attendance and percentage change in average price of attendance, measured in constant 2009-10 dollars, for full-time, first-time degree/certificate seeking undergraduates at Title IV institutions, by level and control of institution, student housing and residency: United State, academic years 2007-08 and 2009-10

- Discussion item 1: The group discussed including measures other than the central tendency because the central tendency does not give a sense of the distribution. It was the sense of the group that the distribution may be of more interest than the mean and that, instead, NCES should investigate using a quantile approach for this table. Table 6 could also be expanded to show the percentage of price that is tuition and fees or a ratio of instate to out-of-state.
- O Discussion item 2: The group expressed concern that 4-year, 2-year, and less-than-2-year levels may not be the most appropriate way to show averages by level. Instead, the panel suggested using institutional category or collapsed institutional category to separate the levels.
- Table 7: Number and percentage distribution of degrees conferred at Title IV institutions, by control of institution, level of institution, gender, race/ethnicity, and degree level: United States, academic year 2008-09. The group noted that showing all award levels would be a relevant and useful addition to table 7. The panel suggested that NCES add all award levels to this table or include an additional Completions table that shows the number and percentage of awards conferred at Title IV institutions, by control of institution, level of institution, gender, race/ethnicity, and award level.
- Table 9: The 10 largest programs of study for men and women at 4-year Title IV institutions, by level of degree and program of study: United States, academic year 2008-09
  - O Discussion item 1: The group acknowledged that variation exists in how institutions define programs by Classification of Instructional Programs (CIP) level. For example, not all institutions may code a general doctor's degree in psychology as Psychology, General (CIP 42.0101), and the panel noted that determining largest programs by the 6-digit CIP may not be the most useful determination of largest program for the purposes of table 9. Consequently, the panel suggested determining largest program by aggregating at the 4-digit CIP rather than 6-digit CIP to show broader programs of study.
  - o **Discussion item 2:** The panel suggested further refining table 9 by including subassociate award levels.

#### Group 2 Findings: Winter First Look and Compendium Tables

The Winter First Look report reviewed by the group presents findings from the Human Resources component of the IPEDS Winter 2008-09 collection. The HR component consists of the following three sections: Employees by Assigned Position for fall 2008, Fall Staff for fall 2008, and Salaries for academic year 2008-09.

During discussion, the group agreed that the tables included in the First Look reports are the most appropriate tables and did not suggest any further revisions to the Winter First Look reports or Compendium tables. The panel discussed revisions to the tables but withdrew the proposals after it was determined that the suggested revisions would delay data release. The panel did suggest that NCES include an indication in the table notes that salary data for non-medical employees are not included in the tables.

The group noted that entities that use HR data in their own publications cannot officially release their publications until NCES publishes First Look reports. Therefore, the group suggested that NCES send a notification 1 week before the First Look reports are published to provide outside groups advance notification of the release date. This would allow these groups to schedule their report publication date to coincide with the release of First Look reports.

### Group 3 Findings: Spring First Look and Compendium Tables

The Spring First Look report reviewed by the group presents findings from the IPEDS Spring 2009 data collection. This collection had five components: Student Financial Aid for full-time, first-time degree/certificate-seeking undergraduate students for 2008-09; Fall Enrollment for 2008; Graduation Rates within 150 percent of normal program completion time for full-time, first-time, degree/certificate-seeking undergraduates beginning college in 2002 at 4-year institutions or in 2005 at less-than-4-year institutions; Graduation Rates within 200 percent of normal program completion time for full-time, first-time degree/certificate-seeking undergraduate students beginning college in 2000 at 4-year institutions or in 2004 at less-than-4-year institutions; and Finance for fiscal year 2008.

The group focused on the Compendium tables and suggested that instead of releasing Compendium tables in three series at three distinct points during the year, NCES should release one Compendium for all components once per collection year. The group noted that a typical user unfamiliar with IPEDS would probably search the Compendium table list by subject, rather than component. In the current layout, users must be familiar with each particular survey component and its corresponding collection in order to access the correct report. The group suggested that NCES organize Compendium tables by content rather than by fall, winter, and spring.

The panel pointed out that Compendium tables and First Look reports are static files and suggested that NCES make the Compendium web-based and interactive. The panel mentioned the utility in an online search feature that would allow users to search for tables by subject matter or survey component. A model for categorizing tables by subject in a searchable Compendium spreadsheet was presented to the panel. Tables in the spreadsheet were sorted by the type of data displayed. Users would first select the component or broad subject category and then be presented with a subcategory list specific to the subject selected to further narrow down the list. For example, if Enrollment were selected as the subject category, only subcategories pertaining to enrollment would be generated in the subcategory selection.

The panel also discussed the need to use broad language within the categories and suggested grouping the Institutional Characteristics, Finance, and Human Resources surveys into an "about the institution" category and grouping the Completions, 12-month Enrollment, Fall Enrollment, Graduation Rates, and Student Financial Aid surveys into an "about students" category. The panel agreed that the example presented is a good first step, but NCES should also explore adding a keyword search. The panel did not offer a definitive solution about the online search feature specifics, but they agreed that NCES should take steps to simplify searches for Compendium tables. Specifically, instead of organizing Compendium tables by survey structure, NCES should group the tables using broader categories.

A panelist suggested that trusted tables from the proposed table generator could be included as a supplement to the Compendium tables and organized and hosted in a Compendium Data Center. NCES noted that changing the format of the tables may violate the statistical standards that are required of NCES publications.

## What Are the Implications of These Suggestions?

There are no new reporting requirements for institutions as a result of this panel. If the suggestions discussed above are implemented, the IPEDS publications and web tools will be modified in 2011 to incorporate the suggestions of the TRP for improving College Navigator, the Data Center features and functions, and the First Look reports and Compendium tables.

## **Comments**

RTI is committed to improving the quality and usefulness of the IPEDS publications and online data dissemination tools. We encourage interested parties to send any comments or concerns about this topic to Janice Kelly-Reid, IPEDS Project Director, at ipedsTRPcomment@rti.org by February 21, 2011.