Report and Suggestions from IPEDS Technical Review Panel #30: Tools and Resources for Reducing IPEDS Burden

SUMMARY: Based on a discussion of factors impacting IPEDS reporting burden, the Technical Review Panel acknowledged that reducing burden is a complex issue that must consider many factors, such as the complexity of the institution and the knowledge and experience of keyholders and other data providers about IPEDS and IPEDS resources. As a result, this TRP discussed tools and resources that might reduce reporting burden for institutions. Comments from interested parties are due to Janice Kelly-Reid, IPEDS Project Director at RTI International, at ipedsTRPcomment@rti.org by April 28, 2010.

On March 2 and 3, 2010, RTI International, the contractor for the IPEDS web-based data collection system, convened a meeting of the Integrated Postsecondary Education Data System (IPEDS) Technical Review Panel (TRP) in Washington, DC. The purpose of this meeting was not to decrease the amount of information collected by IPEDS, but rather to identify and develop strategies to minimize reporting burden by making it easier for institutions to report data. The panel consisted of 37 individuals representing the federal government, state governments, institutions, data users, association representatives, and others. The TRP examined issues that affect reporting burden and discussed strategies and additional steps to offer to institutions to enable them to be more effective and efficient in the preparation of IPEDS data.

Overview

The Federal Government requires each Federal agency to estimate the burden associated with every Federal data collection. Under the Paperwork Reduction Act, agencies submit estimates of time burden and cost to data providers for each data collection. According to Federal regulations and OMB guidance, a burden hour "is a measure of the time it takes respondents to review instructions, search data sources, complete and review their responses, and transmit or disclose information." NCES's estimates of time burden are disaggregated by each of the IPEDS surveys and then by the different forms within each survey; each institution only completes one form for each survey. For example, there are eight different forms for the Institutional Characteristics (IC) survey depending on whether the institution is a 4-year, 2-year, or less-than-2-year institution, whether the institution is an academic or program reporter, or reports price data.

While IPEDS is widely regarded as an important data source, there are concerns about the magnitude of the burden to institutions associated with completing IPEDS surveys and possible underestimation of time burden by NCES. In 2007, a group of higher education associations submitted comments to the Office of Management and Budget as part of its review of the IPEDS burden estimates expressing concern with the current burden estimates. Congress has also shown an interest in understanding the institutional burden associated with reporting data for IPEDS. As a result, the Higher Education Opportunity Act (HEOA) of 2008 includes a requirement that the U.S. Government Accountability Office study the time burden for institutions to complete IPEDS and identify ways in which burden can be reduced.

In response to these concerns, NCES contracted with an independent consultant to conduct an examination of burden that addressed the following questions:

- How do NCES's IPEDS time burden estimates vary by type of institution and how have they changed since 2006?
- To what extent do NCES's time burden estimates reflect institutions' estimates of the time spent to gather, prepare, and report IPEDS data?

- What factors affect institutions' estimates of time burden?
- What steps could NCES take to reduce time burden for institutions that complete IPEDS surveys?

The suggestions that resulted from this examination were as follows:

- 1. NCES should consider increasing their estimates of time burden to more accurately represent the time burden reported by the institutions.
- 2. NCES should continue estimating time burden by institution type, however NCES may want to incorporate new keyholders' lack of experience with IPEDS into estimates of time burden. NCES could increase each survey's time burden estimate to account for the extra time spent by a new keyholder to gather, prepare, and report data. Additional data would need to be gathered to determine the amount which those estimates should be inflated.
- 3. NCES could target information on training and resources to new keyholders. One method would be to imbed links to online trainings and webinars within the IPEDS data reporting system.
- 4. NCES could open each data collection earlier to allow keyholders more time to prepare and report IPEDS data.
- 5. NCES could develop additional worksheets and tools that would enable institutions to be more efficient in the preparation of IPEDS data.

NCES is awaiting the results of the GAO study on burden to address suggestions #1, #2, and #4. In addition, NCES has contracted work to document the origins of data elements on all the IPEDS surveys. This documentation will be used to lead a review of the survey forms and identify potential areas to decrease reporting burden. In the meantime to address suggestions #3 and #5, the March 2010 IPEDS Technical Review Panel convened to discuss strategies to reduce burden associated with time spent preparing, analyzing, and reporting IPEDS data. Specifically, the panel was asked to examine the following possibilities:

- targeting training and resources to new keyholders;
- developing additional worksheets and tools that would enable institutions to prepare IPEDS data more efficiently; and
- providing additional resources to keyholders to help them prepare and report IPEDS data.

Discussion Item 1: Targeting Training and Resources to New Keyholders Background

One of the main factors affecting reporting burden is the level of experience of the keyholder and other data providers has with IPEDS. Across all institutions reporting IPEDS data, about 16 percent had a new keyholder in 2007 and 11 percent had a new keyholder in 2008. The likelihood of having a new keyholder in 2007 was similar across all institution types. Because new keyholders may not be familiar with the definitions of data elements and how to prepare institution level data for IPEDS reports, new keyholders spend more time gathering, preparing, and reporting data for each of the IPEDS surveys.

Through both collaborative partnerships and its own efforts, the Association for Institutional Research (AIR) sponsors a variety of training opportunities to help keyholders prepare and report IPEDS data. The resources are delivered in two methods:

- 1. *Online tutorials*. Free video tutorials with step-by-step guidance for completing each IPEDS survey are available on the AIR website.
- 2. *Workshops*. AIR and other higher education organizations/units/groups can co-host in-person training sessions on IPEDS reporting.

AIR is in the process of developing a training module specifically targeting new keyholders. The training module contains an overview of IPEDS, the data needed to complete each survey, definitions of the data collected, and areas of frequent confusion. The training focuses on the following questions:

- What is IPEDS?
- Who is responsible for IPEDS reporting?
- What are keyholder responsibilities?
- What data does IPEDS collect?
- What resources are available to the keyholder?

The TRP was asked to consider the appropriate format and delivery of the training module for new keyholders and discuss strategies for providing new keyholders with available information about IPEDS training and resources.

Discussion

The panel noted that the role of the keyholder varies at each institution. Within the IPEDS universe, the staff members appointed to be keyholders may come from many different departments. In general, keyholders work in the institutional research department; however, not all institutions have institutional research departments. Some institutions assign keyholder responsibilities elsewhere, typically a staff member from the registrar's office or provost's office at larger institutions while at very small institutions even the owner, accountant, or/finance officer have the keyholder responsibility. Further, the level of IPEDS expertise and familiarity with institutional research varies, as does the amount and quality of institutional resources available to keyholders and the amount of time a keyholder can devote to IPEDS. The panel noted that the level of involvement from other departments that assist the keyholder, typically by providing data, is difficult to measure.

The panel agreed that given the varying levels of new keyholders' and other data providers' knowledge and expertise about IPEDS, those with less knowledge and experience would benefit from additional information about the purpose and value of IPEDS data to answer questions such as the following:

- Why do I need to do this?
- Where do the data show up outside my institution?
- What is the link between IPEDS and the "public face" of my institution?

The panel was concerned that providing detailed training for all IPEDS survey components in one module would overwhelm new keyholders with too much information and detail, and would not properly emphasize key IPEDS concepts. The panel agreed that the training should focus on key concepts, rather than provide detailed step-by-step instructions for each survey component. Examples of key concepts include defining the following terms for the survey components indicated:

- "first-time, full-time student";
- "cohort"; and
- "full-time instructional staff".

The panel noted that for more comprehensive *survey-specific* training, keyholders can access the AIR modules already available online. The panel noted that although the keyholder is ultimately responsible for submitting IPEDS reports, collaboration with other departments is often necessary to gather, prepare, and finalize data. When changes are made related to data elements collected in IPEDS additional collaboration between institutional departments is often necessary. The panel noted that keyholders and institutional research offices have different levels of involvement with other data providers, so the panel agreed that the new keyholder training should emphasize the keyholder's responsibility to communicate with additional data providers. Where appropriate, the training should be expanded to include combinations of keyholders and particular specialty groups such as financial aid or finance personnel.

The panel discussed the appropriate delivery method of the new keyholder module and noted that although in-person training is the most expensive format, it can also prove to be the most effective. In-person training is more interactive and offers opportunities for networking. The panel noted the value of AIR regional groups co-hosting in-person training sessions during their annual conferences. However, attending a training in person is not feasible for all new keyholders, so the panel further suggested that AIR develop and make available an online tutorial for new keyholders.

The panel noted that ensuring new keyholders are aware of the training and resources available to them could reduce the burden they face. The panel discussed strategies for communicating training opportunities and agreed that when appropriate, state-level, system-level, and sector-level coordinators should provide training or inform keyholders about AIR training resources and about specific requirements of their state. The panel agreed that coordinators should communicate information about keyholder turnover to NCES. The panel noted that each state has varying levels of coordinator responsibilities and involvement, and many states do not have coordinating responsibilities for all sectors. Thus, not all institutions have a relationship with a coordinator.

Discussion Item 2: Developing Additional Worksheets and Tools That Would Enable Institutions to Prepare IPEDS Data More Efficiently

Background

Another factor affecting time burden is the level of automation used in IPEDS data reporting. Automation refers to using computer software to analyze and prepare data for IPEDS surveys, and upload data into the IPEDS system. Institutions can submit IPEDS data by uploading a delimited text file with all the data elements required for a particular survey. As a result of uploading, keyholders need not manually enter the data on each screen of the IPEDS data collection system, potentially saving time. For those institutions that do not currently upload, NCES explored various aggregation tools that would assist institutions with converting Microsoft Access and/or Microsoft Excel tables into upload files. By offering new tools to institutions, NCES would take additional steps toward reducing burden and would help users prepare data more efficiently.

Discussion

The panel noted that institution personnel, both keyholders and data suppliers, have a wide variety of expertise and resources. Moreover, the level of automation at institutions varies, and it is not possible to know which keyholders use computer software to aid in preparing and reporting IPEDS data or the sophistication with which this software is used. Likewise, it is difficult to identify institutions that are not highly automated and manually track students for IPEDS reporting. Because institutions and

states currently use a wide variety of data structures and tools to produce IPEDS reports, the panel agreed that providing one tool may not be sufficient to meet the needs of all institutions.

The panel members discussed the characteristics of institutions that would benefit from an aggregation tool. The panel agreed that institutions with the level of sophistication required to use statistical analysis software to prepare IPEDS reports would likely already be proficient in preparing upload files, and these institutions would not likely benefit from an aggregation tool. The panel also noted that a number of institutions are required to submit unit records to their state system offices and the state system is responsible for aggregating data and uploading the reports to IPEDS. There is little utility for an aggregation tool if the state system prepares unduplicated tables for the institutions and uploads the files into the IPEDS data collection system.

The panel agreed that institutions with access to statistical analysis software would benefit most from a tool that unduplicates student records to produce a file that is aggregated and can be uploaded to the IPEDS data collection system. However, the level of expertise and software resources available varies tremendously, and the panel expressed concern that an aggregation tool may shift the time burden, rather than reduce the burden, for some institutions. Panel members noted the majority of IPEDS surveys, most of the time burden is associated with gathering and preparing data and there is no significant difference in the amount of time required to manually key data versus upload files.

Additional tools might reduce burden if the tools can be made flexible enough to integrate institutional reports and various data structures. The panel agreed that the utility of a tool or tools depends on the context of the institution and the extent to which the institution can benefit from the tool. Consequently, the TRP suggests soliciting additional input and feedback from the larger IPEDS community regarding the feasibility and utility of a new IPEDS aggregation tool.

Discussion Item 3: Additional Resources for Keyholders

Background

NCES is developing ways to provide more support to keyholders, especially those in their first year of reporting to IPEDS. After registration, new keyholders are sent a welcome email that provides links to AIR's training resources. Beginning with the 2010-11 collection, NCES will mail new keyholders a packet that includes information on how to access a new handbook for keyholders. NCES will make the handbook available in electronic form through the data collection system, where it can be downloaded and printed.

The panel was asked to discuss additional resources to add to the new keyholder packet or to make available online to help new keyholders manage the collection cycle.

Discussion

The panel suggested that NCES develop an optional work plan to help new keyholders manage the collection cycle from data gathering to data dissemination. The panel discussed appropriate formats and delivery methods for a work plan and agreed that a web-based dashboard application would provide the most utility. The dashboard would provide a centralized access point for locating resources and include a modifiable work plan and calendar that allows keyholders to track their progress in the collection cycle. The panel noted that the calendar and work plan should be adjustable in order to reflect specific state deadlines when applicable.

In addition to helping keyholders streamline information systems and manage deadlines, a dashboard shows the level of effort and time required to report to IPEDS. Institutions with numerous data providers can coordinate with each department and identify any inefficiency.

The panel agreed that keyholders should be provided with a generic, optional template that the keyholder can modify, but was undecided whether it should be developed by NCES or AIR.

What Are the Implications of These Suggestions?

There are no new requirements for institutions as a result of this panel. If the above suggestions are implemented, AIR will incorporate TRP suggestions for new keyholder training into its New Keyholder training module, NCES will seek additional input and feedback on potential tools for uploading IPEDS data, and NCES will develop ways to provide new keyholders more support in their first year. NCES will also work with state and sector-level coordinators to involve them more directly in outreach to new keyholders, and NCES will solicit feedback from seasoned keyholders that provide tips to new keyholders on how to efficiently manage the data reporting process.

Comments

RTI is committed to helping new keyholders manage the collection cycle and developing additional worksheets and tools that would enable institutions to prepare IPEDS data more efficiently. 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 April 28, 2010.