

Report and Suggestions from IPEDS Technical Review Panel #43: Defining an IPEDS Institution (Part 2)

SUMMARY: The Technical Review Panel continued their discussion of issues associated with defining an institution for IPEDS. The panel suggests that IPEDS codify the definition by identifying and documenting common standards and practices for creating subentities. As a possible research solution, the panel suggests a crosswalk between OPEIDs in the Office of Federal Student Aid (FSA) data to address alignment issues and facilitate trend research using IPEDS and FSA data. Comments from interested parties are due to Janice Kelly-Reid, IPEDS Project Director at RTI International, at ipedstrpcomment@rti.org by June 4, 2014.

On March 18 and 19, 2014, 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 (ED).

RTI's specific purpose for TRP 43 was to continue the discussion from TRP 42 with the postsecondary education community regarding the definition of an IPEDS institution. The panel consisted of 42 individuals representing institutions, researchers and other data users, state governments, the federal government, higher education associations, and others.

TRP 43 is the second in a series of TRP meetings to discuss the definition of an IPEDS institution. Members of the TRP met previously on February 11 and 12, 2014 (TRP #42) to discuss issues related to defining an institution for IPEDS. The panel considered several different perspectives on IPEDS UnitID and discussed the challenges with the current system. TRP 42 suggested that further study be conducted to better inform TRP 43 discussions of both campus structures and ownership structures and how they are represented in IPEDS and other ED programs (i.e., the way some institutions combine their data to report to IPEDS). The panel also suggested that TRP 43 discuss ways to codify and document the definition of an IPEDS institution.

Background

IPEDS is both a compliance survey and a statistical survey. All postsecondary institutions that have a Program Participation Agreement (PPA) with the Office of Postsecondary Education (OPE) are required to report data to IPEDS. This agreement allows institutions to participate in federal student financial assistance programs upon compliance with Title IV regulations. As a statistical survey, IPEDS helps NCES fulfill its mandate to report full and complete statistics on the condition of postsecondary education in the United States.

Federal legislation and regulations provide the framework for reporting data to IPEDS and other ED programs. Institutions that report data to IPEDS are reporting entities and are each assigned a UnitID (a unique 6-digit identifier). There may be cases where a UnitID represents an affiliated location or campus that is an IPEDS reporting entity. Campuses or locations that are not IPEDS reporting entities are not assigned a UnitID; data for these locations are reported with the primary institutional reporting entity, which is responsible for reporting combined data for itself and all affiliated locations

for all survey components. For example, a single UnitID could represent a single campus, a main campus of a multicampus institution, a branch campus of a multicampus institution, or a main campus and a branch campus combined. Postsecondary institutions are identified as potential respondents to the IPEDS surveys and are added to the IPEDS universe for three primary reasons:

1. **Eligibility for federal student aid:** Any institution with a PPA with the Office of Federal Student Aid (FSA) must report. These entities are assigned an OPEID (unique identifier in OPE data systems) that follows the pattern 0XXXXX00.
2. **Other requirements:** Entities that cross state lines and serve a large number of students in different states must report at least at the state level.
3. **By request:** Institutions may request to report any additional locations from their PPA; institutions may request to report an online or nontraditional unit separately (“Other” IPEDS entities); and institutions that are not eligible for federal funding may choose to report but receive an indicator that shows that they are not Title IV eligible.

The OPEID is the basis for the IPEDS universe; any institution that is eligible for Title IV federal student aid is required to report to IPEDS. The current process for defining an institution in FSA data systems is linked to accreditation. To become eligible in FSA data systems, an institution must first receive accreditation from an ED-accepted accreditor. Each recognized accreditor submits a list of accredited institutions to OPE. Upon receiving authorization to operate in a given state, an accredited institution becomes eligible to apply for Title IV participation. Once an institution receives approval to participate in Title IV federal student aid programs, the approved PPA data are then visible in the Postsecondary Education Participants System (PEPS). PPA approvals and renewals are normally for multiple years. During the multiyear period, PEPS is updated with approved modifications such as additional locations or programs, and changes in ownership.

FSA uses OPEIDs to identify institutions in its systems and data collections as either main campuses or additional locations. The main campus is the primary PPA-holding entity, and its OPEID begins with a 0 and ends in 00. Additional locations have the same 6-digit root OPEID as the main campus, plus a two-digit location code, from 01 to 99. If an institution has more than 99 additional locations, the first digit of the OPEID is then incremented to 1 (e.g., 1XXXXX11 would be the 111th location). If an institution has more than 199 additional locations, the first digit of the OPEID is incremented to 2, and so on.

A main location is the primary entity on the PPA that is eligible to apply for funding under Title IV programs. A main location, also referred to as a “freestanding” school or an “independently eligible” school, must be recognized as the main by an accreditor. With few exceptions, main locations are sites where classes are being taught and are not solely administrative offices. Additional locations are sites other than the main campus where the school is providing instruction, and gain eligibility through the main location. Both main locations and additional locations must have state legal authorization and accrediting agency approval.

Main and additional locations relate to the institution’s accreditation, not necessarily to the school’s administrative structure, ownership, or how it presents itself to the public. Mergers and changes in FSA occur within and across PPAs:

- an additional location can become a main;
- a main can become an additional location;
- an eligible entity can assume the location(s) of an ineligible entity;

- two institutions may merge (one becomes the main and the other becomes an additional location); and
- institutions may “spin off” an entity.

Some multiple, independently eligible institutions have common ownership or administration and submit combined financial statements or combined audits. In this case, FSA allows for institutions to report consolidated data, but it does not have a formal, standard way of doing this.

Any additional location that shares a PPA with a main campus may be listed as a separate entity in IPEDS if it satisfies the IPEDS definition of a branch campus. For IPEDS purposes, a branch campus is a campus or site of an educational institution that is not temporary, is located in a community beyond a reasonable commuting distance from its parent institution, and offers organized programs of study, not just courses. Most FSA systems do not recognize branch campuses as being distinct from additional locations. For practical purposes, this type of additional location is rarely approved.

Challenges Identified by TRP 42

As outlined above, working within a nonstatistical data structure while maintaining a high-quality statistical data collection presents challenges. The panel agreed there is value in exploring the topics of linkages and alignment between IPEDS data and other ED data systems, but felt that changes to campus structure and ownership that occurred in the IPEDS and PEPS universes over a period of time have not been adequately documented. The panel felt that documentation of changes over time needs further study to better assess how changes could be documented in the future and to consider how federal initiatives may affect linkages in coming years (such as how an institutional rating system might link IPEDS and FSA data).

The panel agreed that a data solution should meet the needs of (1) researchers and policymakers by somehow tracking or documenting campus structure in a way that allows for alignment with ED data systems and (2) other stakeholders by clearly identifying and documenting the current processes. Which institutions the IPEDS data collection includes should be clear to stakeholders.

Discussion Item #1: UnitID, OPEID, and PEPS

Across ED programs, data systems use different identifiers for institutions and campuses. Records cannot be easily linked or merged due to differences in institutional identifiers. Facilitating alignment across ED systems could improve the accessibility of data for use in research and policy analysis, as well as in consumer information.

IPEDS data are used for a number of current and proposed accountability and other policy activities such as College Affordability and Transparency Lists, College Scorecard, and the forthcoming Postsecondary Institutional Rating System. Products such as College Navigator and College Scorecard are based upon data collected in IPEDS and other ED data collections. Examples of such data include accreditation, campus crime and safety, and equity in athletics. The campus reporting structure affects how student data are presented to the public. Institutions that report data to IPEDS will always be represented in search results of consumer information tools. However, in some cases the additional locations and the data from these locations are invisible to consumer information tools. A better crosswalk could improve the quality of these products and simplify the effort in maintaining them.

Other NCES and ED programs use IPEDS data in a variety of ways. The IPEDS universe provides the institutional sampling frame used in most other postsecondary sample surveys conducted by

NCES. The IPEDS institutional universe, stratified by level and sector, is used as the first-stage sample. Accordingly, larger institutions have a higher probability of being included in the sample. Changes to the definition of an IPEDS institution would not have much impact on the survey sample. However, the panel agreed that improvements in linkages between ED data systems, such as data on financial aid applications and programs from FSA, would be helpful.

Outside of ED, IPEDS data are used as part of interagency collaborations. As part of Executive Order 13607: Establishing Principles of Excellence and Public Law 112-249: Improving Transparency of Education Opportunities for Veterans, members of ED, Veterans Affairs (VA), and the Department of Defense (DOD) were tasked with identifying outcomes measures to provide veterans and service members with information on available educational programs. To produce outcomes measures—and link the measures from VA and DOD to measures from ED—the ID codes from all three must be crosswalked. ED uses OPEID and UnitID, VA uses facility code, and DOD has its own code but is in the process of converting to UnitID. Given the variations in the information available from each of the three departments, several measurement issues must be considered when relying on a data crosswalk.

Non-Title IV eligible institutions are included in the universe of more than 46,000 facility codes VA uses to identify specific locations or programs that have been certified to enroll VA or DOD benefits. While ED focuses on the experiences of first-time *students*, VA and DOD outcome measures are based on first-time *beneficiaries* who may or may not also be first-time students. ED measures are reported for a school year at one point in time that is tailored to the institution's calendar; specifically, many ED measures are based on a cohort of students that is defined based on fall enrollment at the time of the official reporting date. In contrast, VA and DOD measure students' participation throughout the year. VA and DOD are able to draw on individual student records to aggregate data for student and institutional outcome measures. In contrast, for the universe of all postsecondary students, ED receives only institutional aggregates of data for students attending each institution. While the ED postsecondary sample surveys provide nationally representative estimates of institutions and students, some of the data are only available when the surveys are conducted (e.g., the Baccalaureate and Beyond longitudinal study and the Beginning Postsecondary Students longitudinal study are conducted every 8 years). By comparison, the student-level data needed to calculate outcome measures are available in VA and DOD data systems each year.

Additionally, researchers use IPEDS data to describe and analyze trends in postsecondary education. Although stakeholders have expressed interest in tying together measures from multiple IPEDS survey components and other data sources (e.g., FSA), matching these records and verifying that they are linked correctly is time-consuming and subject to some degree of interpretation. Matches to an OPEID could be one-to-one or one-to-many. In some cases, a main campus reports combined data for itself and some or all affiliated locations under one IPEDS UnitID and the data reported under the one UnitID represent several OPEIDs. In other cases, additional locations are IPEDS reporting entities and their data are reported under separate UnitIDs. If all the locations are not reported separately, determining which OPEIDs the data represent becomes more difficult. This example illustrates how rolling up or collapsing data is appropriate in some but not all situations.

UnitID, OPEID, and PEPS: Adequacy of a Data Solution

The panel acknowledged that organizational differences, particularly those related to campus structure, can make linking data across federal postsecondary data systems challenging. Some data systems provide data at the campus or location level; alternately, consolidated reporting results in combined data for an institution and all affiliated locations. Although an IPEDS reporting map

describes which campuses on an institution's PPA are accounted for in an institution's IPEDS data, the panel agreed that a more comprehensive crosswalk between IPEDS UnitIDs and OPEIDs in FSA data could better address data alignment issues.

A crosswalk can be used to compare elements from one schema to one or more schemas; data that exist in one element in the original schema can be mapped to those of another, based on certain similarities. For example, IPEDS Header tables include 8-digit OPEIDs in addition to UnitIDs. These tables can be matched with PEPS files based on certain similarities, such as name, address, and OPEID, to create one table that matches OPEIDs to UnitIDs. Information found during the matching process can be used to aggregate institutions to the main institution based on 6-digit OPEID (e.g., **00100100**). While institutions with no branch campuses have a one-to-one relationship with OPEID, institutions with branch campuses are matched with the FSA main institution (e.g., **00100100**) and *then* are mapped to the IPEDS institution. For example, if the records for five OPEIDs correspond to one UnitID, the five OPEIDs are aggregated to the one record that exists in the original IPEDS Header file.

An institution with a change in OPEID risks being counted twice. To remedy this, users could compare *yearly* crosswalk files to identify changes in the IPEDS/PEPS universes that occurred between any 2 consecutive years. The panel suggested that for each data year, the crosswalk files should contain a list of institutions that remain the same (including OPEID, UnitID, institution name, address, and other indicators), a list of changes to OPEIDs at the 6-digit level, and a list of institutions that were added in the most recent year. These files would preserve historical OPEID information and clearly document changes that occurred between any 2 consecutive years. The panel agreed that this solution begins to satisfy part of the question "What is an institution in IPEDS?" by establishing language around change in institutions with regards to OPEIDs.

The main purpose of the crosswalk files is to reliably map unique identifiers between UnitID and OPEID on an annual basis. However, this mapping provides information on that single set of two consecutive years only and does not allow for comparison of findings over time (without replicating the process). Although crosswalks would provide a standard framework for linking UnitID and OPEID, the panel noted that this solution does not address questions about how an institution in IPEDS should be assigned and does not address reporting options for institutions with additional locations.

The panel was asked to consider improvements that could address limitations and improve the utility of the crosswalk files. Suggestions for additions included the following:

- **Backward and Forward Compatibility**
The crosswalk files are a lateral (one-way) mapping from IPEDS UnitID to the corresponding OPEID. Institutions with branch campuses have a many-to-one match to the PEPS file. The IPEDS Header file may not contain records for additional locations in the PEPS file; branch campuses (as well as additional locations) that are not IPEDS reporting entities are aggregated to the UnitID of the primary reporting institution. Information about change may reside in the PEPS file (e.g., change in OPEID) or the IPEDS Header file (e.g., change in UnitID). Consequently, separate crosswalks are needed to map from UnitID to OPEID and OPEID to UnitID.
- **Extent of OPEID Entity That Is Summarized in the UnitID**
IPEDS institutions may have a variety of organizational structures, with multiple campuses, branches, and vehicles for providing instruction. The crosswalk files should summarize the

extent to which an OPEID entity or entities are aggregated in a given UnitID and how the OPEID entities represented in the data have changed or change over time.

- **Gatekeeper Accreditation**

In many cases, the campus structure is related to accreditation rather than the administrative organization. Several panelists felt that in addition to considering the federal influences on defining an entity, it is important to identify the ways in which other entities, such as accrediting agencies and state authorizing boards, define an institution and consider how these definitions interact with the definitions of an IPEDS institution.

Accreditation agencies that establish eligibility to participate in Title IV federal student aid programs are considered “gatekeeper” accrediting agencies. While these are generally national and regional accrediting agencies, specialized accrediting agencies can serve as gatekeepers if they provide Title IV funding eligibility for independent institutions that are not otherwise institutionally accredited. Panelists agreed that the crosswalk files could be expanded to include information about an institution’s gatekeeper accreditation.

- **Measures of Ownership**

For FSA purposes, a school can change affiliation and ownership structure in multiple scenarios. For example, a school location can change from a main to an additional location, an additional location to a main, or from an additional location of one school to an additional location of another. An eligible school can assume the location of an ineligible school, or a new location can be the result of two institutions merging. New institutions can be created by operating first as an additional location, then becoming a main when they receive accreditation. Additionally, institutions may choose to report their distance education components as a separate entity. Once such changes are approved by the accreditor and state, FSA updates PEPS to reflect the changes.

Sometimes independently eligible institutions have unique OPEIDs yet have common ownership or administration. OPEIDs can be used to identify branches, additional locations, and other entities that share a PPA and are part of an eligible institution, but they do not necessarily relate to ownership structure.

IPEDS does not currently collect information related to an institution’s administrative structure or ownership. Panelists agreed that while measures of ownership or governance can be useful for identifying institutions that have common ownership or administration, this level of detail is not within the scope of IPEDS data collection.

- **Linkage of Finance Data**

IPEDS has traditionally allowed the reporting of combined data for multiple campuses for one or more survey components. This type of reporting is referred to as “parent/child” reporting. When combined reporting for any component occurs, the parent institution (normally the main campus) submits a combined report, which includes data for its own (main) campus plus data for one or more branch campuses (these branches, because they do not report data separately, are referred to as “children”).

Many jointly audited individual institutions operate under separate PPAs. These institutions are required to complete the Finance survey individually. Reporting separate revenue,

expense, and scholarship data have not traditionally been a problem for these types of institutions, but reporting separate assets, liabilities, and equity (or net assets) can make completion of the Finance survey difficult. Since the 2004 data collection, institutions have been able to submit joint reporting of certain data items, even if they operate under different OPEID numbers. Institutions using this type of reporting are referred to as having a *partial* parent/child relationship.

The panel suggested including an indicator in the crosswalk files that shows whether the record is a parent, a child, or a child with partial data. The UnitID of the parent should be included to identify where the data for the child/children are reported.

While several panelists felt that adding greater detail would improve the utility of the crosswalk files and help meet statistical needs, other panelists pointed out that meeting statistical needs of the data collection does not meet the needs for compliance. Because IPEDS reporting is part of an institution's PPA for Title IV federal student aid programs, several panelists were hesitant to suggest additions to the crosswalk files without first considering impacts such changes could have on Title IV compliance. Additionally, several panelists expressed concern with releasing tables or files that merge IPEDS data with other sources without first considering the implications on current and proposed accountability activities. Further, panelists felt that more information is needed to better assess the federal resources needed to undertake such an endeavor (such as the extent to which such additions to the crosswalk files would require cross-agency collaborations) and agreed that more information is needed to ensure that the data contained in the crosswalk meet NCES statistical standards.

The panel agreed that if the proposed research solution is implemented, the crosswalk data files should be provided to data users. The data file should include both current status and historical metadata at the aggregate and individual institution level for each data collection year, as well as attributes for changes in OPEID over time, changes in ownership, and changes in control. Attributes can be further defined to contain any previous UnitID or OPEIDs associated with the institution and can be packed into one metadata table or contained in a comma-separated list within a cell.

A panelist suggested building a nomenclature to systematically describe how an IPEDS institution is related to PEPS. OPEID main campuses (entities with a 6-digit OPEID) must be listed as separate entities in IPEDS; additional locations (entities with an 8-digit OPEID) can be listed separately in IPEDS; additional locations (entities with an 8-digit OPEID) can be listed together with the main campus in IPEDS; and institutions can be listed in IPEDS but not PEPS (entities with no OPEID). However, a panelist pointed out that institutions can report in parent-child relationships, further complicating tracking changes in institutions.

Panelists noted that data products related to the crosswalk could potentially include (1) a series of crosswalk metadata files with attributes for changes in ownership, changes in ID over time, and changes in control, (2) a look-up tool to provide a documented history of change for a single institution over time, and (3) a data merging tool to facilitate the merging of IPEDS and FSA data on commonly referenced subject areas and key variables. While the panel recognizes the value of such a data merging tool, this approach would likely require collaboration across ED programs. Further study is needed to resolve technical issues and assess the feasibility of a data merging tool as a long-term solution.

Discussion Item #2: Codifying the Definition of an IPEDS Institution

Although the panel did not suggest changes to the definition of an institution for IPEDS, they clarified that for the purposes of this discussion, an “IPEDS institution” refers to the definition of an IPEDS reporting entity (UnitID).

As noted in previous discussion, any institution that has a PPA with the Department of Education (i.e., has an OPEID ending in 00) and is primarily postsecondary must be listed as a separate reporting entity in IPEDS and is assigned a unique IPEDS UnitID. Subentities are created on a case-by-bases basis and include the following scenarios:

- Additional locations that conform to the IPEDS definition of a branch campus
 - A campus or site that is not temporary, is located in a community beyond a reasonable commuting distance from its parent institution, and offers organized programs of study, not just courses.
- Requests
 - Online components: Currently, PEPS does not usually provide a separate location ID for online campuses that are part of another institution. However, IPEDS has worked with a number of institutions to separate their online component for IPEDS reporting purposes.
 - Nontraditional components: Many institutions have a main campus that differs in mission from the other locations on their PPA. Additionally, many institutions have nontraditional programs within their main campuses that have a distinct mission. Examples include groups of satellite campuses that serve non-traditional students, such as working adults.
- Large national systems report either by state or by location
 - IPEDS has been working to implement state-level reporting for institutions that cross state lines. For many multi-institution systems that cross state lines, implementing state-level reporting is easy. However, complications arise when institutions are part of the same system, and are located in the same state, but have different OPEIDs. It is also difficult when multiple states are embedded in one 6-digit UnitID.

While the panel agreed that the process for adding an entity to IPEDS is well documented and clearly defined in regulations, the panel noted that campus structures in IPEDS are often complex. After reviewing the process for creating subentities in IPEDS, the panel agreed that more information is needed about how factors such as size thresholds for multiple IDs (i.e., when do they have to report separately by state?) and physical location and state boundaries can be codified. The panel suggested that IPEDS should adopt and document rules and processes for adding subentities and document where consistency already exists.

As previously noted, IPEDS reporting maps describe how the data from the various campuses listed on an institution’s PPA are accounted for in its IPEDS reporting. The panel agreed that while maps are a good first step, the lack of alignment in reporting periods is a technical issue to consider— institutions are asked to verify reporting maps in IPEDS each August, but updates and changes to the PPA can take place throughout the year. The panel agreed that further clarification is needed to

improve the overall quality of the reported data, and additional information is needed to resolve technical issues related to timing.

Impact of Changes Identified by the TRP

Although the panel did not suggest changes to the definition of an institution for IPEDS, they discussed ways to codify the definition of an IPEDS institution and standardize the framework for linking UnitID and OPEID. Panelists noted that data from IPEDS and other ED data collections are highly visible and are used in a variety of ways. Yearly crosswalks between UnitID and FSA data will address data matching issues and better facilitating the linking between IPEDS and FSA datasets.

Next Steps and Reporting Implications

Once the TRP summary comment period has closed, RTI will review and summarize the comments for NCES. The summary will be used, in conjunction with the summary from TRP 42, to determine whether definitional changes can help better align the reporting entities within IPEDS, and whether a crosswalk would help data users to better understand linkages between IPEDS and FSA.

Comments

RTI is committed to improving the quality and usefulness of IPEDS data. 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 June 4, 2014.