

Report and Suggestions from IPEDS Technical Review Panel #60: Monitoring Emerging Issues in Higher Education

SUMMARY: The Technical Review Panel discussed emerging issues that may impact analyses, trends, and consumer tools based on the IPEDS data. Areas of focus included cost of instruction, cost of attendance, student borrowing and repayment, free college programs, and issues affecting smaller institutions. This summary provides an overview of the information presented to the panel and highlights several broad themes that emerged from the discussion. Comments from interested parties are due to Janice Kelly-Reid, IPEDS Project Director at RTI International, at ipedstrpcomment@rti.org by December 9, 2020.

On October 22 and 23, 2019, 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. IPEDS TRP meetings are conducted by RTI to solicit expert discussion and suggestions on a broad range of issues related to postsecondary education and the IPEDS collection. As the postsecondary education industry evolves, IPEDS TRP meetings are increasingly critical in addressing changes to ensure that IPEDS data remain relevant, informative, and on the forefront of industry advancements and legislative needs. To this end, IPEDS TRP meetings are designed to foster public discourse and enhance IPEDS data collection, products, data quality, and system user-friendliness. The TRP does not report to or advise the U.S. Department of Education.

RTI's specific purpose for TRP #60 was to inform future changes to improve the IPEDS collection and continue to demonstrate the relevancy of IPEDS data to current higher education research and policy needs. Through this TRP, the National Center for Education Statistics (NCES) aims to gain a richer understanding of salient, emerging issues that may impact analyses, trends, and consumer tools based on the IPEDS data. Discussion, which focused on five topic areas—cost of instruction, cost of attendance, student borrowing and repayment, free college programs, and issues affecting smaller institutions—may enhance IPEDS collections and products.

The panel consisted of 42 individuals representing institutions, state governments, the federal government, higher education associations, researchers, and other experts.

Comments raised by the panel are for informational purposes. The TRP was not charged with establishing any conclusions or suggestions for changes to IPEDS. The work from this information-gathering TRP is intended to serve as a resource only and does not constitute suggestions for a specific research agenda for IPEDS. The invitation to present is not an endorsement of the research or the organizations represented by the panelists.

Background

RTI convened this TRP to elicit various perspectives from subject matter experts on emerging issues in postsecondary education. The TRP was organized into five topic panels made up of researchers and practitioners with expert knowledge of the topic under discussion. Invited subject matter experts were asked to prepare brief presentations highlighting key points from their recent research or work relevant to the topic. A primary objective of this TRP was to learn about current and emerging research in the field to gain a better understanding of topics that might affect the IPEDS data collection in the future.

Cost of Instruction

The perceived high cost of college frequently leads to public skepticism about the value of higher education. Research suggests a major driver of higher-education costs is the cost of instruction, which can be broken down into such categories as instructor/faculty salaries, faculty workload, class size, and nonpersonnel costs. Instruction in some fields (e.g., electrical engineering, nursing) is consistently more costly to provide, while instruction in others (e.g., math, sociology) is consistently less expensive. However, across institutions (primarily research institutions and public institutions), despite ever-shifting market demands, the overall trends in cost of credit-hour production are remarkably consistent over time.

Another means of looking at instructional costs is to examine instructional expenses per degree produced. Such expenses are on an upward trend across most institutions, with the largest increases at private doctorate-granting institutions. Instructional expenses at a smaller subset of institutions, such as public master's-granting institutions, have actually decreased slightly over time. Instructional costs and faculty costs (salaries and the number of faculty) are the most important factors affecting instructional expenses per degree produced.

Instructional expenditures per student vary greatly across different fields of study. Some fields show divergent trends over time, with declining enrollment leading to increased expenditures per student and, conversely, increased class sizes leading to reduced expenditures per student. As one means of addressing these diverging trends, some institutions have been implementing and others are starting to introduce differential pricing structures (typically for more expensive programs). Some research suggests that online instruction, while sometimes touted as a solution for the high cost of postsecondary education, may have minimal association with lower costs.

Cost of Instruction in the Context of IPEDS

IPEDS data can provide insight into the largest contributor to instructional costs: faculty salaries. Data supporting other factors, such as class size and faculty workload, are not available through IPEDS but are available through other sources (e.g., the Delaware Cost Study). Neither IPEDS nor the Delaware Cost Study, however, provides much, if any, insight into organizational structure (e.g., the organization of academic disciplines into departments), which would be helpful in understanding instructional costs.

Another current limitation of IPEDS is that it does not measure true instructional costs resulting from student transfer behavior, wherein students utilize instructional resources from more than one institution, and the cost of producing a degree is not aligned with the providers of the instruction. Better tracking within IPEDS of transfer students, perhaps by aggregating data up to the state level, would help measure the effects of transfer behavior on instructional costs.

In the current IPEDS reporting of financial data, wide latitude is allowed in the characterization of costs, making comparisons across institutions challenging. Creating more uniform guidelines in IPEDS would help alleviate this issue. The inconsistencies in reporting revenues within IPEDS are even more problematic.

Instructional quality could well be the most important, but least measured, outcome of instruction. To measure quality would require an agreed-upon definition of "quality" and could include such measures as earnings, student satisfaction, etc., which are currently beyond the scope of IPEDS.

With the continued growth of distance education, being able to isolate costs related to such instruction would be beneficial, but IPEDS currently does not collect data to allow for this. Better

measures of distance education activity, as well as associated costs, would facilitate better understanding of costs and benefits of this delivery mode.

Cost of Attendance and Differential Tuition

Cost of attendance (COA), defined in IPEDS as “the amount of tuition and fees, room and board, books and supplies, and other expenses that a full-time, first-time degree/certificate-seeking student can expect to pay to go to college for an academic year,” is an important measure for a number of reasons, including (1) determining student eligibility for federal, state, and institutional need-based student aid and (2) providing consumer disclosure information enabling students and families to anticipate expected annual direct and indirect costs of attending college. Elements of COA include some specific costs specified in statute (i.e., tuition and fees, room and board, books and supplies), as well as some nonspecific costs not defined in statute (personal, transportation, allowances for computers, day care, study abroad, loan fees, miscellaneous), which may be included by financial aid administrators when calculating total COA.

The intent of cost estimates is to reflect a modest but adequate living standard; however, costs can be skewed by institutions seeking to maximize aid eligibility (i.e., overestimated costs) or to attract students through lowered costs (i.e., underestimated costs). The high degree of latitude extended to institutions by the federal government (e.g., living costs developed through “other reasonable estimates that you devise”) leads to a high degree of variance. Additionally, costs may be subject to pressures from multiple forces within an institution (e.g., athletics, leadership).

Expert groups, such as the National Association of Student Financial Aid Administrators (NASFAA) task force on COA, are seeking to develop guidelines to defend such cost estimates against external pressures, and standardization that will allow for comparison among institutions, while retaining flexibility to best serve varying student populations.

A related issue, differential tuition pricing, creates variations in undergraduate tuition by major area of study or year of enrollment, or both. Differential pricing can be used to offset higher instructional costs or for workforce development needs. At present, little research about differential pricing is available, and clarity of information provided by institutions is mixed, leading to limitations in trend analysis and comparisons across institutions. Over time, differential tuition pricing policies have become more common, with effects including a reduction of degrees awarded in costlier fields (e.g., engineering and business), larger negative effects (e.g., enrollments, outcomes) for women and minority students relative to their male and white counterparts, and declines in enrollment of students eligible for Pell Grants.

Cost of Attendance in the Context of IPEDS

When reporting COA, the focus for IPEDS should be on being as accurate as possible. When reporting anomalies appear in IPEDS, such data could be flagged in the collection system (e.g., living costs unchanged year after year, costs out of the expected range, etc.). Although there may be some valid explanations for variance (e.g., some better-resourced schools can help students find more affordable housing), capturing reasons for differences would allow for better understanding.

Additionally, federal or state governments could provide resources (e.g., develop suggested survey questions, methodologies, and frequencies) to help standardize and assist financial aid offices. More detailed guidance would be helpful in improving clarity of and reducing variation in COA estimates. NASFAA guidance is being strengthened to provide that kind of assistance, which could be adopted by IPEDS and may be preferable to creating more federal regulation.

To better measure and understand differential pricing, IPEDS should consider having institutions report base tuition, mandatory fees, and specific information as to whether differential tuition exists (by program or college or major or year) and the dollar amounts for affected programs.

Student Borrowing and Repayment

Student indebtedness continues to be a growing concern for consumers and policymakers at the national, state, and local levels. Although federal student loans can help increase students' access to educational opportunities, inequities in debt burden across income levels and race/ethnicity disproportionately affect certain groups of students. Black or African American students, Pell Grant recipients, and students at for-profit institutions are more likely to borrow, less likely to complete, and more likely to struggle with repayment.

Data consistently show variation in both the statewide average debt levels and the share of graduates with debt across states. High-debt states seem to be concentrated in the Northeast; low-debt states tend to be concentrated mainly in the West. However, borrowing rates and cumulative debt figures can be misleading if the data used to derive the measures do not include private (nonfederal) loan debt, especially when looking at debt levels for students in high-debt states. Private loans often have higher interest rates and are not subject to the same terms, borrowing limits, or repayment options offered with federal loans. Federal loans offer important consumer protections, including terms and conditions set by law and income-driven repayment plan options that provide an important safety net for student borrowers.

The average amount of debt for recent graduates varies by institutional sector (public, private nonprofit, private for-profit), with students at private for-profit institutions more likely to borrow and take on considerably more debt than students at public and private nonprofit institutions. However, graduates of private nonprofit institutions are more likely to take out private loans than all other sectors.

Students are less likely to default if they have completed their college program; however, students from vulnerable populations who completed their program are still more likely to default than students from less-vulnerable populations who dropped out. At present, the research community has theories on what leads to student loan default but has not produced causal evidence on various factors associated with student loan default. Research suggests that those with the greatest barriers to being successful in college (Pell Grant recipients; single parents; Black or African American; first-generation; and low-income students) are most likely to default on their student loans.

Graduate students also hold a disproportionate amount of the federal loan debt. In recent years, policy changes that affect graduate student borrowing include reductions in government-guaranteed private loans, increases in interest rates for graduate PLUS loans, and the elimination of subsidized loans for graduate education. Research shows that the total debt burden on graduate students has increased in recent years, with a larger percentage of graduate students borrowing and an increase in the total amount of borrowing, with higher debt amounts incurred at private institutions. More students relied on unsubsidized federal loans and private loans, which often have longer repayment periods and higher interest rates. Demographic differences emerged during this period, partially due to the changing demographics of graduate students, but the accumulation of debt for graduate school could potentially exacerbate gaps in wealth and earnings among older, female, and non-white students who could have diminished access to financial capital.

Policy levers—such as cohort default-rate thresholds and gainful employment regulations (since repealed)—have sought to protect students and taxpayers from untenable debt burdens and high rates

of loan default but create a tension in the policy environment between access and accountability. With the increasing focus on risk in higher-education finance, institutions and policymakers have an incentive for students to make informed borrowing decisions before incurring large amounts of debt to enroll in a program. Some institutions are making progress in improving the financial literacy of their students in regard to their financial aid packages and the loan repayment process.

Student Borrowing and Repayment in the Context of IPEDS

The College Scorecard provides cumulative loan debt data by completion status and field of study, derived from National Student Loan Data System (NSLDS) data. Note that College Scorecard data are at the institution level. Private loan data are not included in NSLDS, and institutions do not report cumulative private loan data in IPEDS, so private loan debt continues to fall outside the scope of federally collected cumulative debt data, including data published on the College Scorecard.

Although data from the U.S. Department of Education’s National Postsecondary Student Aid Study (NPSAS), a nationally representative sample survey of undergraduate and graduate students, show how students and their families use student loans (both federal and private) to finance postsecondary education, data are not provided at the institution level.

Capturing data on private loans—either by incorporating private loan data into the IPEDS data collection or having lenders report private loan data to NSLDS—would give researchers more reliable and robust institution-level data on all sources of borrowing, including for students who do not file the Free Application for Federal Student Aid (FAFSA) but who are still borrowers and in the private loan market. The vast majority of private loans are certified by institutions, so institutions tend to have these data should private loan data be incorporated into the IPEDS data collection. Another option would be for lenders to report private loan data to NSLDS. However, both options would require major regulatory or statutory changes and extensive changes to the data collection systems.

Free College

The last decade has seen increasing activity in support of free college tuition at state and local levels. Many policymakers suggest free college programs (e.g., “promise programs”) as solutions to addressing college affordability challenges. However, the programs vary considerably in terms of funding, scope, and eligibility and must be considered in the context of other state efforts. There is no systematic analysis of which models work best for which students, no consensus on how to define success for promise programs, and no clear framework for identifying and comparing promise programs. Additionally, the messaging of “free college” may not be accurate, as some programs cover tuition only, some cover tuition and fees, and others are more inclusive, covering not only tuition and fees, but also costs of books, supplies, room and board, transportation, and other expenses related to college attendance.

The type of award determines whether [or to what extent] programs address affordability. Most state-level programs are “last-dollar,” meaning they cover remaining tuition after all other aid and scholarships are applied. Some programs are “first-dollar” such that the funds can be included with other financial aid and scholarships. “Middle-dollar/last-dollar plus” programs guarantee minimum awards to all participants regardless of other aid and scholarships. Eligibility for programs also varies, with requirements such as state residency, age, neediness, application while in high school, FAFSA submission, minimum grade point average, minimum credit hours, continuous enrollment, mentoring, etc.; and programs may be restricted to certificates or associate degrees, while some cover bachelor’s degrees. Some stakeholders have concerns about equitable access to such programs: K-12 high schools may not have the resources to message these programs effectively or counsel students

through the application process, awareness of programs and associated requirements may be unevenly distributed, and more eligibility restrictions may result in limited access.

The design of various program components has implications for advancing or obstructing affordability, access, and success. Fiscal constraints and political landscape make trade-offs inevitable in program design. To determine the impact of the programs, states must analyze and consider which elements (affordability, access, success) matter the most in their given environments.

Free College in the Context of IPEDS

There is interest in IPEDS collecting information on a more comprehensive set of subgroups in all datasets to help examine and inform the policy discussion on free college. Additionally, information on remediation or developmental education could be added to IPEDS, given that it is an important factor to consider when students participate in free college programs because these courses have an impact on the time it takes to earn a degree. There is also interest in IPEDS collecting more details related to transfer students to improve the understanding of transfer rates both into and out of an institution, and whether it was reverse or lateral transfer. A more comprehensive set of student subgroups would help policymakers and research track and examine the effects of these policies (e.g., connect transfer outcomes to the goals of free college policies).

To better understand the impact of the free college tuition programs, IPEDS should consider having institutions report additional information on dual enrollment, remediation/developmental education, credit attainment, and the full picture of student debt beyond just federal student loans.

Issues Affecting Small Institutions and Institutional Research Offices with Fewer Resources

Broadly, institutional research (IR) is a range of activities involving the collection, analysis, and distribution of information about the institution to various internal and external stakeholders. The roles and functions of an IR office vary across institutions and often depend upon capacity (e.g., staffing and staff skills), organizational structure, and financial resources. Capacity barriers include staffing limitations, in both the number and technical skills of the staff; limited information technology or poor data infrastructure; competing data priorities; and insufficient resources or access to training and professional development opportunities for IR staff.

Small institutions often rely on tuition revenue for funding student enrollment: the financial model of small institutions necessitates lower staffing levels. Regional differences also come into play: traditional college-age populations are decreasing in the Northeast and Midwest, and declining enrollment results in less tuition revenue. Volatility in enrollment and finances introduces additional demands by accreditation agencies for greater accountability reporting. At the same time, many states have begun to implement performance-based funding (PBF) models in response to growing concerns over accountability and quality. Performance-based funding introduces competition among institutions for funding (and enrollment) and also increases the workload for IR professionals, who are responsible for meeting the mandatory reporting requirements.

Institutions face increasing demands from internal and external stakeholders for accountability and institutional improvement purposes. The information requests and mandatory external reporting requirements have increased in quantity and complexity. Because reporting requirements are generally the same across all institutions, regardless of size, the impact of these demands may be relatively greater on small institutions. Large, well-resourced institutions that support an IR department with a sufficient number of skilled staff to complete compliance reports, meet data needs, and respond to ad hoc queries can devote a small percentage of their overall IR resources to these

functions, leaving more time to devote to analytical research and sophisticated analysis. Larger institutions often also have dedicated IT staff involved in preparing data submission and supporting IR data needs, or have robust data warehousing and automated workload processes, which help to increase efficiency and enable IR staff to run their own data analysis and data reporting.

Compared with IR offices at larger institutions, operating budgets and staffing levels at small institutions have not kept pace with the increased workload demands, and very few use graduate or undergraduate student employees. Data science skills—including programming and coding experience, database functions, and data visualization—are becoming more important skill sets for IR professionals, but small institutions compete with larger and more resourced organizations for these professionals and may not have the financial resources to be competitive in attracting and retaining such staff. As a result, they increasingly rely on professional organizations to train in-house staff. Despite the availability of free, open-source software to automate workflows and processes, many small IR offices lack resources for complex statistical programming (or lack time and funding for IR professionals to learn these skills).

Issues Affecting Small Institutions and Institutional Research Offices with Fewer Resources in the Context of IPEDS

Changes that increase the complexity of IPEDS reporting in turn increase the workload of IR professionals at small and under-resourced institutions. Also, most state reports are modeled after federal reporting mandates. Changes made to IPEDS, including minor tweaks or clarifications to definitions, create differences across accrediting, state, and federal reporting. Not only do changes to IPEDS contribute to the workload of IR professionals who report these data, changes may also require input and coordination from multiple divisions or departments at the institution. This can impact IPEDS reporting in terms of responsiveness to changes and data quality due to lack of integration between the institution's business units and divisions that own differing data-reporting systems. Also, gaps may exist in data governance and infrastructure (e.g., small institutions may not have a data dictionary or validation tables), requiring IR professionals at small institutions to manually compile data, use data from legacy software systems, and spend more time investigating definitions and errors. These tasks require multiple steps, such as extracting query results, cleaning data, and creating reports.

IR professionals in small and under-resourced institutions could benefit from additional capacity-building training to adapt to changing requirements, improve documentation, enhance reporting capabilities, and automate and standardize processes. Funded by NCES, the Association for Institutional Research produces a host of training opportunities for individuals to increase their skills and knowledge on a variety of IPEDS topics through IPEDS video tutorials, face-to-face national workshops, and online keyholder courses. Additional training could help IR professionals and others improve their abilities to gather, clean, and verify data, which in turn would control the IPEDS reporting burden (by increasing IR capacity). Making these training opportunities available online, at no charge to participants, would help reach IR professionals who lack the resources (time and/or travel funding) to attend in-person trainings or conferences.

Further, automating data extraction and data preparation for IPEDS reporting functions can help to maximize technical efficiencies and streamline data submission. Small institutions with an increased IR capacity can overcome distinct challenges such as limited staff and technology support through automation. Access to tools, such as an aggregation tool, could help schools convert their data into a file that can be uploaded to the IPEDS Data Collection System. Making an IPEDS Data Collection System test environment available for institutions to test their upload files would also help streamline

the IPEDS reporting process. Likewise, small institutions and other stakeholders with fewer resources at their disposal may require more assistance accessing and making use of IPEDS data.

An ongoing review of the appropriateness and applicability of IPEDS data elements could help ensure that particular sectors or types of institutions are not disproportionately affected by the data collected. For example, publishing data items such as the percentage of Pell Grant recipients at a given institution might look different for institutions with a high percentage of dual-enrollment students included in the overall enrollment totals.

Next Steps

Once the TRP summary comment period has closed, RTI will review the comments and outline recommendations for NCES based on the outcome of the TRP meeting and subsequent public comment period. NCES will review the recommendations to determine next steps.

Comments

RTI is committed to improving the quality and usefulness of IPEDS data as well as strategies that might be helpful in minimizing additional reporting burden. 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 **December 9, 2020**.