

# Mapping Revisited: A Second Look at the Postsecondary Data Domain

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America's students, policymakers, and institutions need better information about our postsecondary system, especially in this era of rising college costs and stagnating completion rates. Better data can enhance federal and state stewardship of financial aid dollars, inform institutional aid policies, and help students make decisions about how to finance their education. *Mapping the Postsecondary Data Domain: Problems and Possibilities*, a March 2014 IHEP report, acknowledged these data needs and identified a core list of student-centric questions related to student access, progression, completion, cost, and outcomes. It then assessed the availability of data at the national level – in the Integrated Postsecondary Education Data System (IPEDS) and the National Student Loan Data System (NSLDS) – to answer these questions (see Table 1) and made recommendations for filling data gaps.<sup>2</sup> This brief extends the work of *Mapping* by exploring policymakers' and institutional representatives' reactions to the paper. Most of this expert feedback validated the paper's findings, with several experts suggesting additional data measures and considerations. This brief summarizes that input and defines a path forward for improving access to and quality of postsecondary data.

## Confirmation – What *Mapping* Got Right

IHEP tested the findings in *Mapping* at six convenings and through individual conversations with postsecondary data experts.<sup>3</sup> Throughout this post-*Mapping* conversation series, participants noted that the core measures in *Mapping* (see Table 1) are important measures that policymakers, students, and institutions need to answer the most critical questions about student access, progression, completion, cost, and outcomes. Participants frequently emphasized several *Mapping* measures in particular – including college major (or

program-level data), future income/post college earnings, transfer rates, outcomes of completers reported separately from non-completers, and completion rates for part-time and transfer students – indicating their importance in policy and practice work.

Participants agreed that *Mapping's* evaluation of IPEDS and NSLDS data availability was generally correct. They spoke often about IPEDS limitations, critiquing graduation rates' focus on first-time, full-time students, which omits many students attending American colleges and universities. Participants also noted that IPEDS does not disaggregate data on all demographic measures, which limits stakeholders' ability to answer key questions.

In an effort to identify alternative solutions for the lack of federal data, some participants cited the origins of IPEDS, noting that it was not designed to be the national data source to answer all of the questions posed in *Mapping*. These individuals identified external data sources – such as the National Student Clearinghouse, Complete College America, Achieving the Dream, and the Student Achievement Measure – that could fill some of the gaps left by IPEDS. However, many participants noted that these supplemental sources do not collect data on all of the *Mapping* measures.

## Refinements – What *Mapping* is Missing

While participants generally agreed with the list of core measures in *Mapping*, some also noted omissions. These participants advocated for the inclusion of a number of student-centered measures in order to produce more complete data. The following were noted most frequently:

**First generation status.** This disaggregate could complement income and academic preparation in identifying underserved students. However, consensus did not emerge on how first generation status should be defined, and some participants called for federal guidance on this definition.<sup>4</sup>

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<sup>2</sup> Because of the paper's federal focus and explicit emphasis on students, it did not address postsecondary data elements like faculty or expenditures or state or institutional data systems.

<sup>3</sup> IHEP attended convenings of the Association of Institutional Research (AIR), the National Higher Education Benchmarking Institute (NHEBI), the Student Financial Aid Research Network (SFARN), State Higher Education Executive Officers Association (SHEEO), the National Association of State Student Grant and Aid Programs (NASSGAP), and the Association for the Study of Higher Education (ASHE). Staff collected additional data through individual conversations with postsecondary data experts and from dialogue on the Postsecondary Data listserv. We estimate that over 250 professionals participated in this critical conversation series.

<sup>4</sup> The Common Education Data Standards (CEDs) includes parental education levels as elements in its Version 5 Draft. Additionally, Federal TRIO Programs (TRIO) target first-generation students. Both CEDs and TRIO could serve as sources for a common definition of "first-generation."

TABLE 1

What do we need to know about our higher education system and how available are the data?

What questions need answers?	Which measures will answer these questions?
<p><b>ACCESS: WHICH STUDENTS ATTEND WHICH COLLEGES?</b></p> <p><b>Consumers</b> need to know the demographic profile of the student body.</p> <p><b>Policymakers</b> need to know which institutions provide sufficient access to a diverse array of students.</p> <p><b>Institutions</b> need to know which students they are serving to increase access as well as target support to key populations.</p>	<p><b>PERCENTAGE OF FIRST-TIME STUDENTS AND PERCENTAGE OF UNDERGRADUATES BY:</b></p> <ul style="list-style-type: none"> <li>Enrollment Status (first-time, transfer)</li> <li>Attendance Pattern (full-time, part-time)</li> <li>Degree-Seeking Status</li> <li>Income or Financial Aid Category</li> <li>Race/Ethnicity</li> <li>Gender</li> <li>Age</li> <li>Major or Program of Study</li> <li>Military Status or Military Benefits Receipt</li> <li>Level of Academic Preparation</li> </ul>
<p><b>COMPLETION: HOW MANY—AND WHICH—STUDENTS SUCCEED IN COLLEGE?</b></p> <p><b>Consumers</b> need to know their chances of timely completion, as well as meeting key benchmarks of success along the way.</p> <p><b>Policymakers</b> need to know how successful institutions are with student populations of public interest and how many credentials institutions contribute to the economy.</p> <p><b>Institutions</b> need to know which students are progressing through their courses of study (and how well) to target instruction and support.</p>	<p><b>PROGRESSION MEASURES: DISAGGREGATED AT LEAST BY THE FIRST FIVE, BUT IDEALLY BY ALL ACCESS MEASURES ABOVE</b></p> <ul style="list-style-type: none"> <li>Gateway Course Completion Rate (disaggregated by remedial status)</li> <li>Retention Rate</li> <li>Satisfactory Academic Progress</li> <li>Credits to Credential</li> <li>Time to Credential</li> </ul> <p><b>COMPLETION MEASURES: DISAGGREGATED AT LEAST BY THE FIRST FIVE, BUT IDEALLY BY ALL ACCESS MEASURES ABOVE</b></p> <ul style="list-style-type: none"> <li>Completion Rate</li> <li>Transfer Rate</li> <li>Continued Enrollment Rate</li> <li>Degrees and Certificates Awarded</li> </ul>
<p><b>COST: HOW MUCH DO STUDENTS INVEST IN COLLEGE?</b></p> <p><b>Consumers</b> need to know how much they will pay and borrow to attend an institution.</p> <p><b>Policymakers</b> need to know the cost and debt burden that students must carry to access and succeed in college, which reflects on how institutions invest public dollars.</p> <p><b>Institutions</b> need to monitor the impact of cost and debt on access and completion for students.</p>	<p><b>COST AND DEBT MEASURES</b></p> <ul style="list-style-type: none"> <li>Tuition and Fees</li> <li>Cost of Attendance</li> <li>Net Price by Income</li> <li>Cumulative Debt (disaggregated by loan type, income or financial aid category, and completion status, and ideally race/ethnicity; also accompanied by the percentage who borrow)</li> </ul>
<p><b>OUTCOMES: HOW DO STUDENTS FARE AFTER COLLEGE?</b></p> <p><b>Consumers</b> need to understand the economic return on their credential to inform borrowing and enrollment decisions.</p> <p><b>Policymakers</b> need to know which institutions prepare students to repay their loans and succeed in the workforce to protect consumers and the public investment.</p> <p><b>Institutions</b> need to calibrate course and program offerings as well as support programs based on student outcomes.</p>	<p><b>WORKFORCE SUCCESS MEASURES: DISAGGREGATED AT LEAST BY COMPLETION STATUS AND INCOME OR FINANCIAL AID CATEGORY (WHILE IN COLLEGE) AND IDEALLY RACE/ETHNICITY</b></p> <ul style="list-style-type: none"> <li>Employment Rate</li> <li>Post-College Earnings</li> <li>Default Rate</li> <li>Repayment Rate</li> <li>Debt-to-Earnings Ratio</li> <li>Graduate School Enrollment Rate</li> <li>Learning Outcomes</li> </ul>

 Available in national data set	 Available with minor to moderate modifications recommended	 Available with major modifications recommended	 Not available in national data set
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**Living situation/commuter status.** A student's living situation can impact student prices, progression, and completion.

**Progression through the pipeline.** Participants expressed concern that *Mapping* does not identify enough measures of student progression and that gateway course completion alone is not a sufficient indicator. They suggested measures like credit accumulation and credit completion ratios.

**Annual and cumulative debt.** Participants noted that – especially for consumer purposes – annual and cumulative debt data signal different things, and that both are necessary to understand students' borrowing behaviors.

Participants also recommended that data reflect the changing higher education landscape by disaggregating by delivery mode and faculty composition. With the emergence and expansion of online courses, prior learning assessments, and adjunct faculty, the experts noted that progression and completion data may differ greatly based on these factors.

### Next Steps – Where We Go From Here

It is clear that we need a stronger data infrastructure to answer the questions that are critical to postsecondary students' access and success, as well to drive federal, state, and institutional financial aid policymaking. *Mapping* represents a first step in propelling this dialogue. The report identified *what* data we need, but we also prompted participants to reflect on *how* to get these data. In response, many participants discussed the decreased reporting burden and improved data consistency that a federal student unit record data system could offer. Additionally, some participants suggested federal/state data partnerships or expanded use of other governmental data systems. Participants highlighted the importance of proper data governance, the capacity for institutional researchers to collect and report these data, and the need to plan future data collections to accommodate 21st century students. To address these ideas and challenges, IHEP is conducting a second round of research – including a convening of experts – on the nation's postsecondary data infrastructure. Based on lessons learned from these six meet-

ings, this expert convening will examine the feasibility of several data system options against criteria such as timing, funding, privacy, security, comprehensiveness, consistency, flexibility, currency, reporting burden, and politics.

IHEP also will tackle the challenge of defining the core *Mapping* data measures. Participants in the constituent conversations called for consistent definitions, especially for hard-to-define measures like low-income, transfer, time to degree, credits to credential, gateway course, and academic preparation. They also noted challenges in choosing between rates and counts and determining which of the many possible measures are best suited to represent post-college employment and earnings outcomes. IHEP will leverage the work of voluntary data initiatives and previous research, as well as the expertise of postsecondary data leaders, to define these measures in greater detail.

### Conclusion

*Mapping the Postsecondary Data Domain: Problems and Possibilities* was written on the premise that current data systems need improvement, a premise with which hundreds of higher education experts agreed. *Mapping* launched the conversation with a list of core data measures, and this brief affirms the validity of those measures, while introducing additional considerations. This feedback sets the stage for two next steps: (1) evaluating and reforming the national data infrastructure to facilitate collection of the core measures and (2) defining the core measures with greater specificity. These upcoming research efforts will draw upon the community's expertise to converge around a well-defined set of measures, while prioritizing reforms to our nation's data systems. Improving postsecondary data is a challenging yet critically important task necessary to enable policymakers, students, and institutional leaders to answer key questions about student access, success, and affordability and to design effective financial aid systems. *Mapping the Postsecondary Data Domain* represented a first step in enumerating core postsecondary questions and data measures. Now, IHEP will continue to collaborate with practitioners, policymakers, and other experts to pursue higher quality postsecondary data through more specifically defined data measures and a more robust data infrastructure.



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