

2 Data-Driven Career Engagement: Brief Two of Four

Overview of the Briefs

This is one in a series of briefs to provide institutions with practical information on building a data-driven approach to career engagement and outcomes. These briefs may be used separately or together. The briefs are (current brief is in bold):

- [Foundations](#) builds common understanding and shared definitions.
- **[Building a Data Driven Approach](#) identifies considerations for building the data infrastructure.**
- [Using Career Data](#) covers implementation strategies for different student populations.
- [Dashboards, Reporting, and Benchmarking](#) discusses approaches to reporting, benchmarking, and continuous improvement.

This document builds the data infrastructure that makes tracking both categories possible: identifying the right metrics, mapping the systems that hold relevant data, establishing governance to protect student privacy, and aligning the cross-functional team that will sustain the work over time.



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BUILDING A DATA-DRIVEN APPROACH TO CAREER ENGAGEMENT AND OUTCOMES

DATA-DRIVEN CAREER ENGAGEMENT

Moving toward a system that meaningfully collects and uses career engagement and post-graduation outcomes data requires several deliberate steps. Beyond establishing clear data definitions, institutions must assess their current data capacity, decide which metrics to prioritize, and determine how data will be collected, connected, and maintained over time. This brief offers a practical framework for that first step: evaluating existing data infrastructure, including the systems, governance, and culture already in place, as a foundation for the metric selection that follows and the dashboard design covered in a later brief.

Assessing Data Capacity

A data capacity assessment helps institutions determine whether they have the people, processes, technology, governance, and culture necessary to effectively collect, connect, analyze, report, and use career data. The goal is not simply to identify gaps, but to prioritize the improvements that will have the greatest impact. Using the table on the next page as a rubric, identify your institution's current capacity to leverage additional career engagement and outcome data.



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TABLE 1: DATA CAPACITY MATURITY MATRIX

AREA	EMERGING	»» DEVELOPING	»» ESTABLISHED
Leadership	Limited executive support	Some campus coordination	Career outcomes are an institutional priority
Technology	Disconnected systems	Partial integration	Common student ID across systems
Governance	No clear ownership	Shared ownership	Formal governance and data dictionary
Analytics	Basic reporting	Dashboards in use	Data routinely informs decisions
Equity	Limited disaggregation	Periodic equity reviews	Equity analysis embedded in reporting

The current landscape: common gaps in career data

Most public institutions already collect career-related data in some form; the challenge is rarely a total absence of data, but rather fragmentation across systems and offices. Common gaps include:

- Siloed systems — career services CRMs, academic advising systems, and alumni databases that do not share a common student identifier
- Manual, event-based tracking — data from sign-in sheets and paper surveys that do not get recorded in a central location
- Inconsistent outcome definitions — different colleges within the same university defining “placement” or “underemployment” differently
- Survey fatigue and low response rates — first-destination surveys that capture only a fraction of graduates, biasing outcome data toward students who are easiest to reach
- Absence of a feedback loop — engagement data and outcome data exist but are never analyzed together, so no one can say which interventions actually work.

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Identifying Key Metrics

A useful metrics framework separates leading indicators (engagement) from lagging indicators (outcomes) and tracks both at the individual student level so they can later be joined together for analysis. Keep engagement and outcome data in two separate sets of columns on any dashboard you build to avoid conflating the two.

Outcome data typically doesn't arrive until well after graduation, while engagement data can be captured from day one. Many public institutions now embed light-touch career touchpoints into first-year orientation and seminar courses, tracking basic metrics (attended / did not attend) that, over years of matriculation, build a longitudinal engagement record for each student. These include:

- First-year seminar career module completion
- Major/career exploration assessment completion (e.g., interest inventories)
- First advising appointment by end of first year
- Sophomore-year resume or LinkedIn profile review

Tracking these early touchpoints allows institutions to identify, by the start of the junior year, which students have had no career engagement and need proactive outreach — well before it becomes a crisis in the final semester.



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Engagement metrics – What students are doing right now

Beyond these early touchpoints, institutions should track a broader set of engagement metrics throughout a student's time on campus:

TABLE 2. ENGAGEMENT METRICS

METRIC	DATA SOURCE	FREQUENCY
Advising appointments completed	Career services CRM	Per term
Career fair / event attendance	Event check-in system	Per event
Career platform logins / activity	Platform analytics (e.g., Handshake-type system)	Monthly
Mock interviews / resume reviews completed	Career services CRM	Per term
Internship or co-op participation	Academic records / employer reporting	Per term
Employer info session attendance	Event check-in system	Per event

Outcome metrics – What happened after students left

Once students leave, institutions should track a parallel set of outcome metrics. Where possible, every metric should be attached to a unique student ID so that engagement and outcomes for the same student can later be linked. This single design decision, made early, will save institutions years of retrofitting work.

TABLE 3. OUTCOME METRICS

METRIC	DATA SOURCE	FREQUENCY
Career outcome rate	First-destination survey ¹ + National Student Clearinghouse data	Annual, by cohort
Field-relevant employment rate	First-destination survey	Annual
Median starting salary	First-destination survey	Annual
Graduate/professional school admission	Survey + National Student Clearinghouse	Annual
Time-to-employment	Survey (date of offer vs. graduation date)	Annual

¹National Association of Colleges & Employers. *First-destination outcomes for college graduates*. <https://www.nacweb.org/job-market/graduate-outcomes/first-destination/>

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Metric identification templates

Use these worksheets to standardize how each engagement or outcome metric is defined and calculated, directly addressing the inconsistent-definitions gap described above. Include both existing and aspirational metrics. Please indicate in the Status column if the metric exists or needs to be added.

TABLE 4. ENGAGEMENT METRICS DEFINITIONS

Metric Name	Definition	Calculation / Formula	Data Owner	Status

TABLE 5. OUTCOME METRICS DEFINITIONS

Metric Name	Definition	Calculation / Formula	Data Owner	Status

Data Sources and Systems

Most public institutions draw career data from a combination of the following systems:

- [Career services CRM / platform](#) (appointment scheduling, employer postings, event check-in)
- [Student information system \(SIS\) and learning management system \(LMS\)](#), for enrollment and academic data
- [Alumni and advancement databases](#), for longer-term outcome and giving data
- [First-destination or post-graduation outcome surveys](#), administered by career services or institutional research, drawing on NACE's first-destination survey resources
- [National Student Clearinghouse StudentTracker²](#), for verifying enrollment in further education nationally

State longitudinal data systems or state workforce agency wage-records matching, where data-sharing agreements exist (several states, including Texas and Virginia, operate statewide systems that match unemployment insurance wage records to graduates, giving public institutions outcome data beyond what self-reported surveys alone can provide).^{3,4}

A practical first step for most offices is a data inventory listing every system that touches career-relevant data, who owns it, and what student identifier it uses. The Data Source and Governance Matrix Template on the next page supports this exercise.

Data Governance

Any approach to tracking individual student engagement and outcomes must be built on a foundation of privacy compliance and clear ownership.

- FERPA compliance — career and academic records are protected education records; data sharing across departments should follow the institution's FERPA policy and any applicable data-sharing agreements⁵
- Consent for outcome tracking — many institutions ask graduating students to consent to LinkedIn/employment verification or Clearinghouse matching; consent language should be reviewed by general counsel.
- Outcomes data ownership — a single office (often institutional research or career services) should be designated as the system of record for outcomes data, even when multiple offices contribute.

²National Student Clearinghouse. *StudentTracker*. studentclearinghouse.org/solutions/ed-insights/studenttracker

³Texas Higher Education Coordinating Board. *Student Outcomes Data*. databridge.highered.texas.gov

⁴American Institutes for Research. *The Earning Power of Recent Graduates From Virginia's Community Colleges*.

⁵U.S. Department of Education. *What is FERPA?* studentprivacy.ed.gov/faq/what-ferpa

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- Engagement data ownership — should be assigned the same way, typically to career services or whichever office administers the primary engagement-tracking platform, even when other departments also log engagement activity.
- Access controls — dashboards should show aggregate data broadly, but access to individual-level records should be limited to staff with a legitimate advising or reporting need

The Data Source and Governance Matrix Template at the bottom of this page includes a responsibility field for assigning data ownership across departments. When completing the template, list every system that touches career-relevant data and assign clear ownership.

Importance of collaboration

Career engagement data rarely lives entirely in one place. Turning raw engagement and outcome records into decisions that improve programming requires sustained collaboration across the departments that each hold a piece of the data. Effective institutions build a standing cross-functional data team that includes:

- [Career services](#) (engagement data, employer relationships)
- [Institutional research](#) / analytics (survey design, statistical matching, dashboards)
- [Academic departments](#) (program-specific outcome context, faculty buy-in)
- [Alumni relations / advancement](#) (long-term outcome tracking, donor and ambassador networks)
- [Information technology](#) (system integration, data security)

Many public university systems formalize this through a standing “career data committee” or “student success analytics” working group, often meeting monthly and reporting up to the provost's office.

TABLE 6. DATA SOURCE AND GOVERNANCE TEMPLATE

System/Data Source	Data Owner	Student ID used	Access Level	Review Frequency