

UNIVERSITY LEADERSHIP COUNCIL



Tracking Post-Graduation Student Success

Custom Research Brief • April 12, 2010

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I. RESEARCH METHODOLOGY

Project Challenge:

A member institution approached the Council with the following questions:

- *How are institutions defining post-graduation student success?*
- *How are institutions tracking post-graduation student success?*

Sources:

- Carey, Kevin and Chad Aldeman, “Ready to Assemble: Grading State Higher Education Accountability Systems.” *Education Sector*, June 2009. Accessed January 2010. < <http://www.educationsector.org/sites/default/files/publications/HigherEdSummary.pdf>>.
- Education Advisory Board. *Hardwiring Student Success*. 2010.
- University websites

Research Parameters:

The Council interviewed institutional research and career services leaders, primarily at small institutions.

A Guide to the Institutions Profiled in this Brief				
Institution	Sector	Campus Setting	Carnegie Classification	Approximate 2008 Enrollment (Total/Undergraduate)
Institution A	Private	Suburb: Midsize	Baccalaureate Colleges--Arts & Sciences	1,900 / 1,900
Institution B	Private	Rural: Fringe	Baccalaureate Colleges--Arts & Sciences	2,500 / 2,500
Institution C	Private	Town: Distant	Baccalaureate Colleges--Diverse Fields	1,200 / 1,200
Institution D	Public	Town: Remote	Research Universities (high research activity)	7,100 / 5,900
Institution E	Public	City: Small	Research Universities (high research activity)	13,400 / 11,400

II. EXECUTIVE OVERVIEW

Key Observations:

- ❖ **Public university systems are able to determine their student's placement rates, salary figures, and enrollment by linking individual records in databases maintained by member institutions to each other and to records maintained by other state agencies.**
- ❖ **Private universities must rely on surveys to measure student success after graduation, and while low response rates are common, they are not inevitable.** In particular, several small institutions have achieved response rates above 70 percent.
- ❖ **Several strategies exist for boosting survey response rates, including combining online and paper surveys, collecting data on students over an extended period of time beginning before graduation and ending six to nine months later, and using personalized follow up methods.** Personalized follow up methods include asking faculty members to contact students with whom they had close relationships and using Facebook.
- ❖ **Student success data collected by a single unit, usually the career center, is nonetheless highly useful to a number of university units, including:**
 - Institutional research offices seeking to measure overall institutional performance
 - Alumni affairs offices seeking to understand trends in graduate populations
 - Admissions offices seeking to present parents of prospective students with positive and robust outcomes data
 - Academic affairs units seeking to establish new programs that are likely to place students into jobs
- ❖ **However, these surveys primarily attempt to measure student success immediately after graduation and do not examine long-term alumni success.**

III. METHODS FOR TRACKING SUCCESS

The Council uncovered two primary methods of tracking post-graduate student success: university-administered student surveys and state- or system-administered database linkage programs. While database linkage is an attractive strategy for large universities looking to efficiently mine several data sources, smaller institutions with limited resources can wield student surveys to great effect.

Methods of tracking post-graduate success

<i>Student Surveys</i>	<i>Cross-Database Record Linkage</i>
Used by: All institutions	Used by: Public university systems, states
Description: University unit surveys students during graduation or at an interval after graduation.	Description: State government matches student records with payroll records and other government agency databases.
Typical Data Obtained: <ul style="list-style-type: none">• Employment/enrollment status• Salary• Satisfaction with undergraduate education	Typical Data Obtained: <ul style="list-style-type: none">• Employment/enrollment status• Salary
Coverage rate: Institutions achieve a variety of response rates, from below 30 percent to a handful of institutions above 70 percent.	Coverage rate: If most students remain in-state, coverage rates can rival the best surveys. For example, the Florida Education & Training Placement Information Program (FETPIP) obtains outcome data for 72 percent of students.

Different Advantages for Large Public Institutions and Small Institutions

Public institutions may at first appear to enjoy an advantage over their private counterparts, at least in states whose governments have implemented such a tracking system:

- Results do not suffer from response bias, as the system pulls all available data automatically. (However, results suffer from selection bias, as the system excludes students who have moved out-of-state and students attending a private university in-state for further education.)
- The system may be able to collect detailed information about academic program enrollment if students remain within the state's public university or community college system.
- The system may generate outcomes for a large number of students; for example the Florida system determines outcomes for nearly three-quarters of the state's students.

However, at the other end of the spectrum, a number of small institutions use student surveys with significant success. Several institutions profiled here have obtained outcomes for 70 percent or more of their students. These institutions retain several advantages over their larger counterparts:

- Small institutional size allows an agile and individualized follow-up process, even with limited staff capacity for follow-up.
- Greater student connection to institution increases likelihood of responding to surveys.
- Survey method enables institution to gather qualitative information on student satisfaction with their undergraduate education.

IV. SURVEY DESIGN AND ANALYSIS

Data Collection

Employment Status and Quality of Job Placement

Institutions typically attempt to qualify student employment status by determining whether students' jobs match either their fields of study or their career interests.

Key Questions to Understanding Student Employment

Relevancy of Job to Desired Career

This question enables an institution to measure whether or not a student was able to find jobs in their desired career field. At **Institution B**, this metric is of high interest to many key university stakeholders as well as to parents of prospective students, who are provided with these metrics. The metric has the advantage of accounting for the student who studies one field in college but ends up seeking a career in a different field.

How would you describe the relationship between your current job and your desired career?

- Highly related*
- Related*
- Unrelated*

Satisfaction with Job

Measuring a student's satisfaction with his or her job has the advantage of being a highly straightforward question. However, a student's response does not provide the institution with insight into how the student's undergraduate education prepared him or her for the position.

How satisfied are you with your current job?

- Highly satisfied*
- Satisfied*
- Unsatisfied*

Relevancy of Field of Study to Job

Measuring the relevancy of a student's undergraduate field of study to his or her current job allows an institution to measure the connection between coursework and eventual job placement. However, drawing this conclusion assumes that the student seeks a career in his or her field of study – a reasonable assumption for a student with a degree highly related to a career field (e.g., business, science), but not for a student with a degree not directly related to particular career fields (e.g., philosophy, art history).

How would you describe the relationship between your field of study and your current job?

- Highly related*
- Related*
- Unrelated*

Industry Field

To make this data useful to multiple campus stakeholders, contacts suggest aligning industry coding systems across university units. This alignment obviates the need for re-coding survey responses if other units, such as the institutional research office, wish to use survey response data.

Check the box next to the field best describing your current job:

- Computer Science*
- Design*
- Engineering*
- etc. -*

IV. SURVEY DESIGN AND ANALYSIS

Salary Level

Institutions typically track student salary levels. While it is common for only a portion of survey respondents to provide a salary figure, institutions may be able to mitigate this by requesting only salary ranges.

Please select your annual salary range:

- below \$20,000*
- \$20,000 - \$29,999*
- \$30,000 - \$39,999*
- \$40,000 - \$49,999*
- \$50,000 - \$59,999*
- \$60,000 or more*

Satisfaction

Some institutions seek information on satisfaction. However, contacts at **Institution A** warn that asking this question of students within a year of graduation may be too soon, because students have not had time to gain perspective on their undergraduate experience and education.

How satisfied are you with your education?

- Highly satisfied*
- Satisfied*
- Unsatisfied*

Graduate School Enrollment

Institutions frequently track which institution students are attending for graduate school and which degrees they are pursuing. However, the Council has not uncovered an institution that tracks where students apply or students' success in their eventual program of graduate study. Some contacts assert that placing this on a survey would lengthen the survey, make it cumbersome, and discourage students from responding.

Transcript Request Tracking as a Retention Strategy – and a Follow-up Strategy?

Previous Education Advisory Board research has revealed that a transcript request tracking system can enable institutions to identify which students may be seeking to transfer to a different institution. By monitoring transcript requests – and specifically the destinations of the transcripts – institutions can target student advisor interventions and lower transfer-out rates. This is especially useful in identifying students transferring for non-academic reasons, such as financial difficulties or homesickness.

The Council has not uncovered an institution that uses such a tracking system to analyze where students are applying to graduate school, and such a process maybe cumbersome to use on its own. However, as Section V demonstrates, several contact institutions that determine outcomes for high percentages of their graduates rely on a number of channels to track down non-responsive students. Analyzing transcript requests may provide an additional avenue for locating these students.

Source: Education Advisory Board, *Hardwiring Student Success*, 2009

IV. SURVEY DESIGN AND ANALYSIS

Volunteer Work

At the request of the institutional research office, **Institution D**'s career center survey includes volunteer work as an alternative outcome to gainful employment or graduate school enrollment.

IV. SURVEY DESIGN AND ANALYSIS (CONT.)

Approaches to Data Analysis

Data Collection Tools

Tool	Notes
Banner	Institution D uses Banner software to administer surveys online, collect data, and generate reports.
Google Apps, Microsoft Excel	Institution B uses Google Apps and Excel to capture and easily merge data from a survey that the career center administers both online and on paper. Career center staff enter results from the paper survey in an Excel spreadsheet. The institution administers the online survey via Google Apps, which generates a spreadsheet that can be saved in Excel (.xls) format. Staff have designed the online survey so that the spreadsheet generated by Google Apps aligns with the spreadsheet containing manually entered results, allowing easy merging of the two files. Staff can analyze the combined results within Excel or import the data into Microsoft Access or statistical modeling software.

Data Analysis

Institutions typically break down employment status by major and distribute this information to the appropriate department; they may also provide average or median salaries by major. However, the large number of majors and the small number of students in many of these majors may render these statistics less useful than figures about the entire graduating class.

Some institutions attempt to consider other variables. The career center at **Institution B** uses statistical modeling software (SPSS) to identify key predictors of whether students or not find jobs within their desired career field. For example, this analysis uncovered that the key predictor of this variable was not field of study but rather participation in an internship. This finding has helped persuade more academic departments to offer course credit for internship participation.

V. ACHIEVING ROBUST RESPONSE RATES

While survey response rates are frequently low, rendering results statistically invalid, some institutions consistently achieve response rates above 70 percent. **Institution B** and **Institution C** are especially notable for consistently obtaining response rates above 90 percent.

Notable Survey Response Rates		
Institution	Response Rate	Size of Graduating Class
Institution C	100 %	189
Institution B	90 %	636
Villanova University	85 %	1,927
Institution A	84 %	440
Cornell University	75 %	3,456
Columbia College	72 %	2,470
Institution D	67 %	1,073

This table does not include surveys of alumni administered more than one year after graduation, and counts only bachelor's degrees. The Council was unable to schedule interviews with all of these contact institutions.

Strategies for Generating High Response Rates

Combination of Survey Administration Methods

Institution B combines several survey administration methods for outreach. The two primary methods are a paper survey sent via post and an online survey sent via e-mail. Because students may set up forwarding either with the post office or with an expiring .edu e-mail account, reaching out to students through both methods enables the institution to reach more students.

“The key to our success is the combination of a paper survey and an electronic one. I do not have enough confidence in just one to eliminate the other.”

- Council Interview

Use of Multiple Follow-up Methods

Method	Notes
Leverage Faculty and Alumni Networks	The career center at Institution D tracks down non-responding students by contacting faculty members within the students' major. These faculty members frequently know the students' post-graduation plans and can personally follow up with students. In addition to this practice, staff at Institution A contact alumni leaders (i.e. leaders of alumni years) in order to learn about post-graduation plans. In both instances, knowing where students are currently located may not be a statistically acceptable method of determining placement outcomes, but it can enable the career center to reach students by calling their offices or using their new e-mail address.
Place Follow-Up Calls with Non-University Cell Phones	Contacts at one institution suggest the use of personal cell phone numbers for phone follow-up, as students are likely to begin to ignore calls from phone numbers identified as their alma mater.

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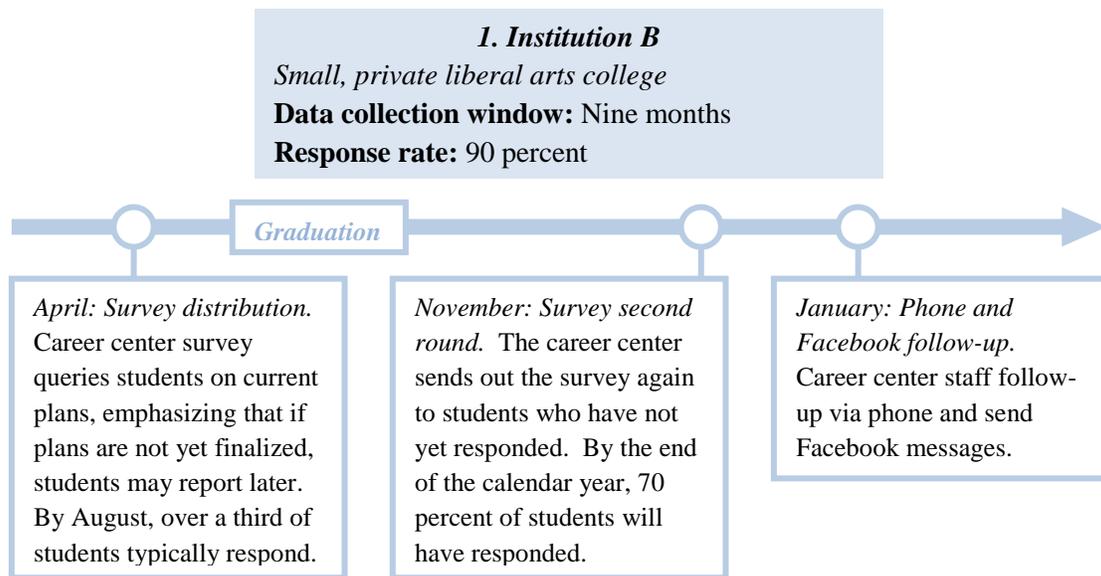
V. ACHIEVING ROBUST RESPONSE RATES (CONT.)

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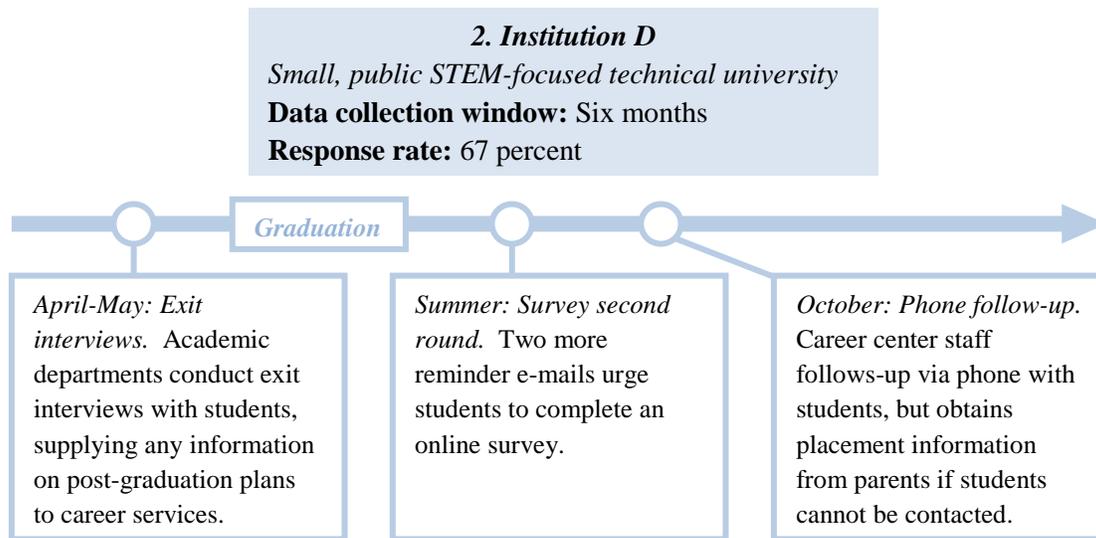
Send Messages	While students' addresses, e-mail addresses, and phone numbers may change after graduation, Facebook accounts remain intact. The Career Centers at Institution A and Institution B uses Facebook in its last round of follow-up to locate students who have not yet responded to a survey. Institution A also uses LinkedIn, a website whose more professional orientation may make it a more acceptable venue for follow-up.
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Rolling Data Collection Process

Some contact institutions that enjoy success in obtaining data on large portions of their graduates treat surveys not as one-time instruments with a short data collection window but as extended processes with a window of six months or more:



V. ACHIEVING ROBUST RESPONSE RATES (CONT.)



However, **Institution C**, which also sees a high response rate, initiates its survey six months out from graduation and completes follow-up by December, a significantly shorter span than the institutions profiled on this page. This success may be due to a significantly smaller graduating class than other contact institutions.

VI. UNIVERSITY UNITS INVOLVED IN SURVEY ADMINISTRATION AND ANALYSIS

Career centers typically administer the successful student surveys used by contact institutions but make the results available to other units, although the **Institution E** institutional research office is the University's primary survey unit. Involving other units may be more efficient at smaller institutions, where unit leaders can easily collaborate in the design of a survey that meets the needs of all parties. This section details the involvement of various units in survey design, administration, and analysis.

Units Involved in Survey	
Unit	Notes
Career Center	<p>At most contact institutions, the career center is responsible for survey administration and also takes the lead role in survey design and results analysis.</p> <p>Contacts at Institution D indicate that involvement in internships and job searches allows the career center to develop a closer relationship with students than units such as the institutional research office or even student affairs. As a result, a survey administered by career services is likely to receive more attention from students who might ignore the numerous other survey requests they receive from other units.</p>
Institutional Research	<p>At Institution B, the institutional research office serves in a consultant role to the career center. While the career center administers the survey, institutional research staff members aid in survey design and in framing the question wording. At Institution B it is the career center director who performs statistical analysis of results, but at other institutions this may be a task that institutional research is better suited to perform.</p>
Alumni Affairs	<p>While several institutions share survey results with alumni affairs, some contacts express reluctance to share individual information. For example, the Institution E clearly brands its survey as being conducted by the office of institutional research at the request of the president, and the accompanying letter explains that the survey is for research purposes and is not used for fundraising purposes. As a result, the institutional research office provides aggregate data but not individual records to the alumni affairs office.</p>
Admissions	<p>At Institution B, the career center director presents information on the institution's career placement process, emphasizing the data on student placement. Admissions staff claim that this is one of the most crucial pieces of information to communicate to parents of prospective students, as parents are highly concerned about where their children will place after graduation. "It is a way to answer the question: 'is it worth it?'" claim contacts.</p>
Academic Affairs	<p>At Institution D, which seeks to create academic programs in areas for which the career center can forecast a high placement rate, survey results inform the process of creating new academic programs. For example, the department of theater recently proposed the creation of a degree in technical theater. From past outcomes data, the career center was able to predict that students with this degree would be likely to find a position. This projection was a factor in the eventual creation of the program.</p>

PROFESSIONAL SERVICES NOTE

The Advisory Board has worked to ensure the accuracy of the information it provides to its members. This project relies on data obtained from many sources, however, and The Advisory Board cannot guarantee the accuracy of the information or its analysis in all cases. Further, The Advisory Board is not engaged in rendering clinical, legal, accounting, or other professional services. Its projects should not be construed as professional advice on any particular set of facts or circumstances. Members are advised to consult with their staff and senior management, or other appropriate professionals, prior to implementing any changes based on this project. Neither The Advisory Board Company nor its programs are responsible for any claims or losses that may arise from any errors or omissions in their projects, whether caused by the Advisory Board Company or its sources.

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