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I This chapter discusses how alumni research can be used to inform key audiences about the impact of college on alumni, including the preparation of alumni for the workforce, alumni experiences as students, and whether alumni may be inclined to support their alma mater.

Making an Impact with Alumni Surveys

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This chapter focuses on three applications of alumni surveys and how they are used to reach key audiences to have a positive impact on public policy, planning, and advancement of higher education institutions. In particular, the chapter highlights benefits of alumni surveys focused on measuring alumni outcomes, engagement and competencies, and alumni giving. For each category of survey, we describe the policy questions guiding the survey, the assessment objectives, the audience, and the benefits of using such a survey.

Alumni surveys in the United States have served a variety of purposes since they arrived on the campus scene in the 1930s. Alumni surveys from the 1930s through the 1970s generally focused on workforce issues and graduates' professional careers on completing their degrees. In particular, these surveys most often asked graduates about their views on job satisfaction, the relationship of college major to the employment field, and the transition they made to the workforce (Pace, 1979). In this chapter, this application of alumni surveys is referred to as the *alumni outcomes approach*.

Since the 1980s, many alumni surveys have expanded their focus beyond alumni outcomes to investigate competencies that graduates acquired while in college. These surveys seek to understand the effect that institutions have had on developing critical thinking skills and interpersonal and vocational skills among their graduates. Surveys of this type focus on how engaged alumni were with the institution while they were students. Similarly, surveys focusing on competencies acquired while in college attempt to make links to teaching, learning, and outside-the-classroom

activities that shape a graduate's current skills and abilities. This chapter refers to these conceptualizations of alumni research as the *engagement and competencies approach*.

A third conceptualization to alumni research discussed in this chapter focuses on *alumni giving*. Colleges and universities in the United States are increasingly drawing on support from alumni to advance their multiple missions and programs. Major gifts from alumni have become the cornerstone of successful fundraising campaigns, and alumni who help public universities leverage state support for higher education have become increasingly important players in the state lobbying process (Koral, 1998). Given the growing importance of alumni participation in supporting higher education, U.S. colleges and universities are increasingly devoting time and resources to learning about their alumni base and ways that alumni might advance institutional interests.

Alumni Outcomes Approach

The outcomes approach to alumni assessment rests on the assumption that institutional quality and effectiveness can be measured by monitoring what alumni have accomplished in the years following degree completion (for example, Dellow and Romano, 2002; Melchiori, 1988a). Job satisfaction, income, occupational attainment, engagement in civic and political activities, and tolerance for diversity are the primary domains of this approach. This approach also examines collegiate experiences and does so by assessing the general satisfaction with the institution, the quality of the instruction received, the extent to which the college prepared them for employment, and whether they would enroll again (Pike, 1994). In this context, the outcomes approach to assessment seeks to answer the following three policy questions:

- How satisfied are graduates with their employment?
- How satisfied are graduates with the degree-granting institution?
- To what extent are graduates fully participating in civic activities?

The outcomes-based approach to alumni surveys seeks to answer policy questions based on achievement and participation in civic activities. When assessing achievement, such surveys focus on job satisfaction and social or economic accomplishments that specific cohorts of graduates achieve. This approach also seeks to examine the connection between a college degree and self-reported measures of preparation for work (Borden and Rajecki, 2000; Midgen, 1987; Pike, 1994; Quereshi, 1988).

The benchmark in the outcomes approach to alumni assessment is represented by a yearly survey of the National Association of Colleges and Employers (NACE). NACE membership includes over eighteen hundred colleges and universities and more than nineteen hundred employer organizations (Nagle and Bohovich, 2002). The 2002 NACE report reflects

recent graduate data regarding earnings by majors, job, salary, and benefits expectations, as well as difficulties encountered in the job search according to different majors. The NACE survey assesses the impact of college by asking respondents whether college education was a worthwhile investment and the extent to which the college-based career service was helpful in their finding a job.

A second form of outcome-based surveys explores social and civic engagement and key policy questions regarding graduates' participation in relevant civic activities. Bok and Bowen's 1998 book, *The Shape of the River*, is one of the best examples of this emerging literature. The book documents the impact of college on increasing the likelihood that graduates will engage in civic activities such as youth organizations, professional associations, political clubs, and national charities. This formidable study surveyed the 1976 and 1989 graduate cohorts of twenty-eight highly selective institutions of higher education. The information reported in this book is now informing policy issues ranging from access to education to policies seeking to increase diversity in higher education.

Benefits and Applications of Alumni Outcomes Research. Outcomes-based alumni surveys are popular among many audiences because they are built on easily understood indicators of success (Pace, 1979). Measures usually include alumni opinions regarding employment, employers' opinions of college graduate workers, and both the employer and graduate employees' opinions on the degree-granting institution.

A key audience for outcomes-based alumni surveys is prospective students and parents. A recent study conducted at the University of California at Los Angeles suggests⁴ that obtaining a good job and the academic reputation of an institution were the two top factors influencing the college choice decision of college first-year students (Higher Education Research Institute, 2003). Murray (1994) suggests that campus data on alumni job satisfaction and income attainment are important pieces of information for recruiting new students.

Other important audiences that can benefit from outcomes-based alumni surveys are faculty and departmental leadership for the purpose of making curricular changes. Murray (1994) suggests that information on alumni outcomes and accomplishments can be used for guiding curricular reform as well as spurring important changes in counseling and placement services. For example, Quereshi's 1988 survey of alumni who had majored in psychology addressed issues of curriculum effectiveness by analyzing employment outcomes of graduates by gender. The goal of the survey was to reform curriculum to make it more responsive to the needs of employers. Many other programs, including educational administration and business departments, are using a similar approach to improve the quality of their programs and show their responsiveness to important external audiences (Borden and Rajecki, 2000; Bailey, Langdana, and Rotonda, 1997; Sheehan and Granrud, 1995; Oglétree, 1998).

A potential application of alumni outcomes surveys is to use its data to make claims about the public benefits of higher education. For example, these surveys can measure the extent to which college promotes civic engagement among graduates. According to a 2000 editorial in *Change*, this emerging interest in civic engagement is due in part to Putnam's argument (2000) that Americans' participation in civic and social activities is declining. Specific indicators of civic engagement include volunteerism and leadership in different categories of civic organizations, the propensity of a graduate to vote in presidential elections, and how graduates perceive themselves on the political spectrum. Alumni surveys that address matters of civic engagement can communicate to a broad public audience how institutions contribute to developing its citizens.

Limitations of the Outcomes Approach. The literature suggests that assessing the impact of college on alumni outcomes by simultaneously gathering information on both collegiate experiences and job-related experiences yields several methodological problems (Pascarella, 2001; Pike, 1994). First, recalling events, some of which may have taken place several decades ago, may produce collegiate experiences that may not actually reflect the ones the alumni underwent while attending college (Bok and Bowen, 1998). For example, Pike (1993) found that alumni were more likely to have negative perceptions of their college experiences years after they left the institution than when surveyed during their senior year of college. The study suggests that perceptions of an institution among its alumni can change over time.

Second, research shows that the current career accomplishments of alumni can affect how past collegiate experiences are rated. For instance, Pike's 1990 survey of graduates from the University of Tennessee showed that alumni who are satisfied with their job and working conditions gave positive marks to their experiences while in college, while alumni who were dissatisfied with their job and working conditions gave poor marks to their collegiate experiences (Pike, 1994). The implications of these limitations must be considered when campus leaders communicate the results of alumni surveys to students, parents, faculty, and public audiences.

Engagement and Competencies

Focusing on alumni outcomes as a mechanism to measure institutional excellence and guide institutional reform has been criticized over the past ten years. Many higher education scholars argue that ratings of institutional quality based on income attainment, job satisfaction, and occupational prestige rest on the simplistic view that alumni accomplishments can be attributed to the postsecondary institution he or she attended (Pike, 1994).

Pike, Kuh, and Gonyea (2003) found no evidence that the characteristics of the institution influence learning or intellectual development. Pascarella and Terenzini (1991) reached similar conclusions after having

examined more than thirty years of research on the topic. What mounting research tells us is that student success has more to do with what the college graduate did at the institution than just having matriculated at a particular institution (Pascarella and Terenzini, 1991; Pike, Kuh, and Gonyea, 2003).

Rather than focusing on the career accomplishments of alumni years after graduation, many scholars in higher education suggest that measuring student engagement and attainment of competencies should be the main focus in assessing institutional quality (Astin, 1993; Ewell, 1996; Pascarella, 2001; Kuh, 2001). The implication of their collective work is to align assessment efforts with what research shows matters in a student's development, learning, and attainment of competencies (Pascarella, 2001; Kuh, 2001; Roberson, Carnes, and Vice, 2002).

The engagement and competencies approach seeks to answer at least four policy questions. One set of questions deals with the character and nature of the experiences of the student in college. The second asks the extent to which competencies are acquired in college and the extent to which alumni apply those in the workforce or graduate school. These questions can be summarized as follows: What are the competencies (outcomes, abilities, and values) that college education should foster most? To what extent were alumni engaged with faculty, staff, and peers while attending college? To what extent do colleges and universities engage students on those learning activities more prone to produce critical competencies? To what extent do graduates apply those competencies on the job or in graduate school?

Benefits and Applications of Surveys of Engagement. Key components of alumni surveys focused on engagement include the extent of student engagement with faculty and peers, student exposure to effective teaching practices, involvement in course work, and quality and intensity of student effort (Kuh, Vesper, Connolly, and Pace, 1997). Our review of the literature suggests that most of today's examples of assessment efforts in engagement sample mostly college students, not alumni (see, for example, Cabrera, Colbeck, and Terenzini, 1999; Kuh, 2001). Of those dealing with students, the National Survey of Student Engagement (NSSE) is the most ambitious. Funded by the Pew Foundation since 1999, NSSE annually gathers information from freshman and senior students from 274 colleges and universities regarding their exposure to effective practices (National Survey of Student Engagement, 2000). Indicators used on the survey range from participation in academically challenging activities (such as the application of theories or concepts to practical problems) to the quality and character of interactions with faculty.

Examples of alumni surveys that measure experiences with faculty, academic advisers, and campus services include the American College Testing's College Outcomes Survey, the State University of New York's Alumni Outcomes Survey (Kinnick, 1988; Volkwein, 2002), and the University of Tennessee Alumni Survey (Pike, 1993). These surveys focus

on understanding how institutional practices contribute to a high-quality collegiate experience.

Surveys of engagement in college may target a wide range of interested parties who seek to understand how institutional practices translate to student learning and success. As higher education institutions are increasingly asked to demonstrate their worth to legislators and the general public, measures of institutional engagement can play an important role in assessing the impact of a collegiate experience. The implication of this research suggests that institutional leaders should use alumni surveys to communicate the quality of classroom and out-of-classroom programs rather than relying on examples of career accomplishments of alumni years after graduation.

Limitations of Engagement Surveys. One reason that alumni surveys focusing on engagement might be scarce is that such surveys have some fundamental methodological problems (Pascarella, 2001). First, it is difficult to capture the whole range of collegiate experiences that contribute to understanding student engagement. These experiences may have little contribution to learning and development. Instead, research on the total impact of college on students should guide efforts on developing measures of engagement (Astin, 1993; Cabrera, Colbeck, and Terenzini, 1999; Kuh, 2001; Pascarella and Terenzini, 1991).

A second problem related to building alumni engagement surveys pertains to the reliability of the indicators. In general, fewer measurement problems are encountered when assessment efforts concentrate on concrete and observable practices than when assessment efforts rest on less factual items (Murray, 1994; Pascarella, 2001). For example, asking students or alumni the extent to which they worked with “other students on projects during class” (National Survey of Student Engagement, 2000, p. 41) leaves less room for error in interpretation than asking for the level of satisfaction with the “quality of instruction in your major department” (State University of New York’s Alumni Survey).

Benefits and Applications of Competencies Surveys. Competencies surveys focus on knowledge and skills gained in college and what alumni do with such knowledge as a result of their collegiate experiences. This type of research is of great benefit to institutional leaders, who face increasing pressures to communicate this information to multiple audiences. In particular, this attention to competencies is spurred by public policy, accreditation, and the needs of the employers of graduates. Burke and Serban (1998), for instance, found that most of the eleven states they surveyed in 1997 had introduced indicators gauging impacts or results, particularly in the area of student development and gains in professional competencies. Accrediting agencies have contributed to this trend by shifting their focus from measures of reputation and institutional quality to indicators of teaching effectiveness. In 1996, for example, the Middle States Association of Colleges and Schools Agency placed teaching and learning as the centerpiece in institutional self-assessment.

Regional accreditation efforts are being matched by professional accrediting organizations in their attention to competencies. For example, the Accreditation Board for Engineering and Technology recently enacted eleven criteria requiring colleges of engineering to demonstrate that their graduates have developed competencies as a result of their collegiate experiences. These abilities include elements such as applying knowledge of mathematics, science, and technology; designing and conducting experiments; and analyzing and interpreting data (Accreditation Board for Engineering and Technology, 2002).

Interest in student development of competencies is also heightened by industrial leaders’ calls for college graduates who can work in teams and solve real-world problems (Augustine, 1996; Black, 1994; Bucciarelli, 1988; Roberson, Carnes, and Vice, 2002). Not surprisingly, most of the examples in which the competency approach has been followed are in professional fields such as engineering and business (Cabrera, Colbeck, and Terenzini, 1999; Graham and Cockriel, 1989; Van Dyke and Williams, 1996).

Limitations of Competencies Surveys. Two key challenges to assessing competencies must be addressed. The first issue is identifying those sets of competencies that are actually developed in college rather than those that can be learned elsewhere (Pascarella, 2001). Deciding among competing sets of competencies then involves a deep knowledge of the majors, curricular issues, and the occupations that college graduates are likely to hold.

Second, simultaneously collecting information about outcomes and collegiate experiences from alumni can limit the ability to form firm conclusions about the effects of college. For example, Pike (1993) showed that the relationship between satisfaction with college and learning gains could be the product of a halo effect—an artifact in which an alum’s assessment of a few items colors or “halos” the entire evaluation. For instance, recalling a single positive experience like participation in a student organization may lead the alum to rank positively all domains of his or her collegiate experience. Although inconclusive, Pike’s results indicated that the relationships could be explained by halo rather than by true connections between satisfaction with college and learning and development.

Alumni Giving

Since 1978, state appropriations for higher education have declined steadily, and scholars forecast that this trend will continue far into the future (Mortenson, 2004). Declining state support has led institutions of postsecondary education to search for alternative sources of revenue, ranging from tuition and fees, to private grants, to alumni gifts. In Wisconsin, for example, state support accounted for 52 percent of funding for the university system budget in fiscal year 1973–1974, while alumni gifts, grants, and trust funds supplied 35 percent. Twenty-five years later, gifts, grants, and trust funds cover 50 percent of the total

budget for the university system, while the state covers only 33 percent (University of Wisconsin System Administration, 1999).

In this context, understanding the factors that lead alumni to support their alma mater is critically important for maintaining the quality of institutional programs. Our review of the literature suggests that alumni giving is a function of two factors: willingness to give and capacity to do so. Thus, the key question shaping alumni giving surveys is: What is the inclination and capacity of alumni to support higher education through service, advocacy, and philanthropy?

The literature suggests that inclination to give or volunteer is shaped in part by a graduate's perception of institutional quality and collegiate experiences (Leslie and Ramey, 1988; Brittingham and Pezzullo, 1990; Brodigan and Dehne, 1997; Taylor and Martin, 1995). In framing alumni surveys focused on giving, these experts recommend including the following indicators to measure inclination to give: quality of educational experiences, extent to which the institution prepared them for a career, degree to which faculty members exerted a positive influence, extent to which alumni maintain contact with faculty and former classmates, current impressions of the institution, and history of involvement with the institution.

Positive experiences with the institution are not enough to prompt alumni support. Although motivation to give is shaped by collegiate experiences, capacity is determined by financial resources (Connolly and Blanchette, 1986). Hueston (1992), Pendel (1985), and Connolly and Blanchette (1986) identified some key indicators of financial, political, and social capacity that could be incorporated into the design of alumni survey questions. The most important indicators are age, family income, career and educational history, current job duties and responsibilities, board memberships with both for-profit and nonprofit organizations, honors, achievements, publications, creative works, leisure activities and hobbies, spouse's career and educational history, board memberships, activities, achievements and awards, and ages and schooling of children and grandchildren.

Benefits and Applications of Alumni Giving Surveys. The key audiences that may benefit from alumni giving surveys are largely internal. In particular, campus foundation officers, alumni association heads, deans, and presidents all have a stake in identifying key alumni partners who can play an important role in advancing the goals of the institution. Given the nature of the data collected in these surveys, it is important that data from alumni giving surveys be kept confidential (Melchiori, 1988b) and that safeguards are put in place to ensure the privacy of respondents.

Alumni giving surveys help institutional leaders find the top prospects of alumni donors and volunteers who are likely to have the greatest impact on institutional advancement. Alumni surveys on giving can help development officers stay focused on what Sturtevant (2002) calls the "90/10 rule." Sturtevant's informal guideline suggests that 90 percent of the philanthropic support for colleges and universities is derived from just 10 percent of the

donors. Accordingly, the primary objective of alumni giving surveys (or institutional advancement) is to identify alumni who are the most financially or politically able to help an institution achieve its goals.

One example of an alumni survey that focused on giving, advocacy, and service is the University of Wisconsin Law School survey conducted in 1997. The survey focused on key indicators of inclination to give, such as "current feelings about the Law School," "extent that the Law School prepared you for a career," and "willingness to assist with regional fundraising events or class reunions." Questions of capacity asked respondents to list their job title and indicate the range of their annual household income during the past year.

Limitations of Alumni Giving Surveys. Alumni giving surveys have some limitations worth noting. Primarily, much of the literature on designing alumni giving surveys discusses the delicate nature of asking alumni to report their net worth and salary (Melchiori, 1988b; Trimarco, 1994). Soliciting this information may discourage alumni from filling out the survey or lead them to provide incorrect information that either inflates or deflates their true capacity range. As an alternative, experts suggest that questions of capacity might be listed as optional or asked in a way that captures salary ranges, not exact amounts (Trimarco, 1994). To address these sensitive issues, the literature also suggests using alumni focus groups to pilot-test the questionnaire and clarify ambiguous questions. Focus groups can also provide a forum for a free-flowing expression of ideas, bringing attention to those areas that administrators may not have considered in framing the final questionnaire (Desoff, 1993).

Overall, alumni surveys should be considered a small piece of developing a comprehensive strategy for identifying higher education philanthropists and volunteers. The most successful strategy for identifying future gift prospects is by working with well-established volunteers who can make connections between the campus and future givers. Timing in all of these activities is also relevant. If an alumni survey is to be part of a feasibility study for a major capital campaign, ample time must be set aside for the administration and analysis of the survey to test the saliency of campaign themes (Fisher, 1988).

Making an Impact with Alumni Surveys

As this chapter suggests, there are many internal and external demands for assessment, accountability, and market-driven research in higher education (Dellow and Romano, 2002). This is especially true for public and community colleges where legislators and taxpayers have a strong voice in ensuring that postsecondary education yields economic and social benefits to their states and communities. Outside the university, legislators, trustees, and the general public have increased their demands on higher education to be more accountable, efficient, and aligned with public needs (National

Association of State Universities and Land Grant Colleges, 1999). Institutional leaders must consider how alumni research can be used to inform these key audiences about important issues of institutional quality and the overall impact that colleges and universities make on society.

This chapter has examined three approaches to alumni surveys: alumni outcomes, engagement and competencies, and alumni giving. Our review of literature suggests that alumni outcomes surveys are the most established, and this approach seeks to measure institutional quality by monitoring alumni accomplishments in the labor force and society. We also learned that engagement in college, acquisition and application of competencies, and alumni giving are areas gaining interest in the alumni assessment literature. This approach measures institutional success based on effective engagement and instructional practices and acquisition of relevant competencies. Alumni surveys that target giving data have a market-based purpose to identify alumni who possess the capacity and inclination to support their alma mater.

Our analysis demonstrates that alumni surveys are most effective when they are based on research and appropriate conceptual frameworks. In addition, methodological concerns of each approach must be addressed carefully, especially when communicating results to a wide range of audiences.

This review suggests that alumni surveys may have the greatest impact if they are part of a comprehensive approach to collecting data from precollege students to alumni. Within this philosophy, surveying alumni might be part of a comprehensive enrollment management approach. Research shows that the roots of college degree completion take place as early as the seventh grade, when parents and their children start making plans for college. This research also shows that on the path to college, individuals experience a series of personal growth and developmental stages that cumulatively prepare them for success in college and beyond (Cabrera and La Nasa, 2000; Cabrera, La Nasa, and Burkum, 2001).

We propose that data collection strategies should follow these stages of student development from early college decision to student engagement, to alumni outcomes, to alumni giving. This approach would allow universities to form strong conclusions about the links between college experiences and student and alumni outcomes at critical stages of development. In addition, this approach would simplify data collection, reduce the length of the survey, and minimize measurement errors.

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