

Running Head: STUDENT AND ALUMNI RESPONSES

Are those Rose-Colored Glasses you are Wearing?:

Student and Alumni Survey Responses

Amber D. Lambert

Angie L. Miller

Indiana University

Abstract

Combining data from the Strategic National Arts Alumni Project and the National Survey of Student Engagement, this study examines self-reported college experiences and skill development of seniors and alumni who majored in the arts. Results suggest alumni rate their overall experience higher, while students more positively judge aspects of their institutional experience and their skill development.

Keywords: skill development, institutional satisfaction, arts graduates, alumni

Are those Rose-Colored Glasses you are Wearing?: Student and Alumni Survey Responses

As the economy struggles and funding to higher education institutions continues to be cut, there is an increasing trend for requiring colleges and universities to show measures of their effectiveness (Kuh & Ewell, 2010). One important measure of effectiveness is alumni success in the workplace (Cabrera, Weerts, & Zulick, 2005). Not only do institutions have to show evidence of their effectiveness to state funding and accreditation agencies, but students are also aware that in the current economy their employment prospects may be constrained, and they are concerned with getting the best return on their academic investment, in the form of employability. Using surveys to assess skill development and the quality of collegiate experiences is commonplace (Kuh & Ikenberry, 2009; Porter, 2004), but much of that research uses current or graduating students to collect information. Perhaps the viewpoints of alumni who are already in the field or struggling to enter their field would be more enlightening. However, little is known about how undergraduate student responses compare with those of alumni. Does the passage of time change the capacity of people to reflect on their learning experiences during college?

Literature Review

Institutions claim to prepare their students with a multitude of skills, ranging from effective communication practices to analytical and creative thinking skills, in addition to the pure content knowledge gained in a student's chosen major (Tait & Godfrey, 1999). Although not all skills learned in higher education settings may transfer to the workplace (Stasz, 2001), institutions must make every effort to prepare students to be suitable employees. A major function of higher education is to help students develop skills that will lead them to success in the workplace (Evers, Rush, Berdorw, 1998; Stasz, 2001). While some acquired skills are

considered discipline-specific, many of these “transferable skills,” such as problem solving and effective communication, are applicable to a broad range of fields (Bradshaw, 1985; Stasz, 1997). There is a need for generic skills across multiple types of jobs, and students possessing them appear more marketable to potential employers. The American Association of Colleges and Universities has recently addressed many of these skills, including critical and creative thinking, inquiry and analysis, and written and oral communication as essential learning outcomes for higher education, hoping to encourage deliberate progress in their development. If institutions are lacking in these areas, the employability of their graduates will decrease (Evers, Rush, & Berdrow, 1998).

Alumni surveys can provide direct information on career attainment, as alumni can report back to the institution not only their current job(s) and income, but how useful the skills they learned at their institution are to their current occupation and how their educational experiences may have shaped the development of these skills and competencies. Because of the need to develop such a range of different skills, many higher education institutions have begun to scrutinize whether they are effectively teaching these skills in their curriculum, and alumni surveys can provide this type of information. Arts programs are one disciplinary area that has been under fire for a lack of preparation in skills needed for the “real world” of work, and it is often difficult to align some of the arts curriculum with rigid accountability standards that may not take into account the unique skills and experiences of arts students (Johnson, 2002). However, research indicates that students in the arts are especially adept at certain types of skills, including incorporating verbal studio feedback into revisions of their work (Edstrom, 2008) and critical thinking and interpersonal understanding (Badcock, Pattison, & Harris, 2010).

Furthermore, arts programs, in particular, have recently been under scrutiny for the career outcomes of their graduates. Data indicates that those majoring in the arts have some of the lowest income levels, especially among recent college graduates (Carnevale, Cheah, & Strohl, 2012), and arts majors are widely considered in the popular press to be “worthless” in terms of income and employment (Cantor, 2012). Thus, especially when looking at the arts, alumni views of their educational experiences might shed some light on the true value of their time at their institutions. The current study compares information from an arts alumni survey and a survey of graduating seniors to explore how the views on the experiences of the two groups may differ.

Research Questions

The purpose of this study is to explore the relationship between student and alumni views. The following research questions guide this study:

- (1) Are there differences in how students and alumni perceive aspects of their institutional experiences and the skills and competencies that they acquire at their institutions?
- (2) Do alumni evaluate their institutions with rose-colored glasses, or do they evaluate their education more harshly once they gain a more practical knowledge of the working world?
- (3) Finally, if differences between students and alumni do exist, whose account should be given precedence?

Methodology

To address these questions, this study uses data from the Strategic National Arts Alumni Project (SNAAP) and the National Survey of Student Engagement (NSSE). SNAAP is an on-line annual survey of arts graduates from a broad spectrum of institutions, including independent colleges of art and design, music conservatories, and arts schools, departments, or programs at comprehensive colleges and universities. The arts are defined broadly to include a range of

fields such as music, theater, dance, design, architecture, creative writing, film, media arts, illustration, and fine arts. SNAAP surveys alumni on a wide range of content, including formal education and degrees, institutional experiences, postgraduate resources for artists, past and current career information, avocational arts engagement, income and debt, and demographic information. The 2011 SNAAP administration included over 36,000 total respondents at 66 participating institutions. Participants were sent an invitation email including a link to the survey with a unique identification number. Participants could log in to complete the survey multiple times, so they were not constrained to complete all questions during a single setting. The median completion time was 22 minutes.

NSSE is an annual survey of first-year and senior students that gives a snapshot of college student experiences in and outside of the classroom. The items on NSSE gather information on the extent to which students engage in and are exposed to educational experiences that represent good practices related to desirable college outcomes. The 2012 NSSE administration included over 285,000 respondents at 546 institutions. The median completion time for the core NSSE survey was 13 minutes. Each year, experimental item sets are appended to the end of the core NSSE survey. As part of the 2012 NSSE administration, a set of experimental items asked first-year and senior students at selected institutions about skills and experiences that matched questions on the SNAAP questionnaire.

Sample

For the purposes of this study, only data from those institutions that participated in both the 2011 SNAAP administration and the additional item set on the 2012 NSSE administration were used. The sample consisted of more than 222 seniors and 593 alumni, graduating between 2001 and 2010, at 6 different four-year institutions. The seniors were selected based on reporting

an arts major in one of the corresponding SNAAP arts programs of participation. The alumni cohorts of 2000 to 2010 were chosen because their experiences were closer to those of the graduating seniors, and no major curricular changes had occurred in those years at these six institutions. As with most survey research, females responded at a higher rate than their male counterparts. Nearly two-thirds of both the graduating senior and alumni respondents were female (72% and 61% respectively). In contrast, the race of respondents was similar to the population of these six institutions with Asian respondents being slightly over-represented for SNAAP respondents (5%). About one-third of the respondents were first-generation students (37% and 30%) and nearly all respondents were U.S. citizens (98% for both surveys). The response rates for the six institutions ranged from 14% to 25% for SNAAP and 27% to 51% for NSSE, with an average institutional response rate of 19% for SNAAP and 34% for NSSE.

Variables

The measures that are the focus of this study are taken from one individual item and two additional item sets. The first question asked students and alumni to give an overall rating of their institutional experience on a four-point Likert scale ranging from “Poor” to “Excellent.” This question is on the core survey for both NSSE and SNAAP. In contrast, the next two sets were developed for SNAAP and are on the SNAAP core survey, but were added to NSSE as additional questions at the end of the core NSSE survey. The second set of questions asked participants to rate their satisfaction with nine aspects of their time at the institution, including academic advising, opportunities for degree-related internships or work, instructors, sense of belonging and attachment, and opportunities to network with alumni and others. The set was on a four-point Likert scale from “Very dissatisfied” to “Very satisfied” with an additional “Not relevant” option. For the purposes of this study, the “Not Applicable” responses were removed

from the data to create ordinal variables. Finally, the third question set asked about skills and competencies developed at their institution. Participants were asked “how much did [your institution] help you acquire or develop each of the following skills and abilities?” and provided responses using a four-point Likert scale with the end points of “Not at all” to “Very much.” The skills and competencies used included critical thinking, broad knowledge and education, creative thinking, research skills, persuasive speaking, project management skills, technological skills, artistic technique, financial and business management skills, leadership skills, networking and relationship building, and teaching skills. All skills and aspects of time at institution included in the question sets can be found in Table 1.

Data Analysis

Analysis of covariance (ANCOVA) was conducted to determine whether differences of reported satisfaction and skill development exist between graduating seniors and alumni. Prior to estimation of the models, exploratory analyses were conducted testing the assumptions underlying the application of ANCOVA and all were met. The adjusted means are reported for each of the groups, along with the statistical significance of the difference between the two groups. Next, effect sizes (standardized mean differences using Cohen’s d for ANCOVAs, calculated by the dividing the adjusted mean difference by the square root of the mean square error) were calculated to determine the magnitude of the graduating senior and alumni differences. The effect size with controls represents how much of the raw difference is left unexplained after adjusting the means for student and alumni characteristics. Control variables included gender, race, U.S. citizenship status, and first-generation status.

Results

Comparison of the ratings of their overall institutional experience suggests that alumni give higher general appraisals than their graduating senior counterparts for their educational experience as a whole ($p < .05$, Cohen's $d = .17$). Using the adjusted means, significant differences were found for three of the nine specific aspects of time at institution (academic advising, career advising, and opportunities for internships). These results suggest that alumni give lower specific approval for particular aspects (Cohen's $d = -.16$, $d = -.35$, $d = -.27$, respectively). Means comparisons for amount of institutional contribution to acquired skills and competencies show a similar pattern, with alumni giving statistically significant, lower appraisals for 8 of the 16 skills (Cohen's d ranging from $-.21$ to $-.38$). The skills with significantly lower ratings were clear writing, persuasive speaking, networking and relationship building, leadership skills, research skills, project management, financial and business skills, and entrepreneurial skills. All ANCOVA results are shown in Table 1.

Limitations

Although there are strengths of this study, some limitations should be noted. Given the data collection procedures and response rates, the sample may not be representative of all arts alumni and caution should be made when making generalizations. It may also be the case that respondents to student surveys are different than respondents to alumni surveys, but there is evidence to suggest that despite their lower response rates respondents to alumni surveys are just as representative as student surveys (Lambert & Miller, in press). Furthermore, this study relied on self-reported data, which may not always be completely objective. However, most studies looking at self-reports in higher education suggest that self-reports and actual measures of

constructs such as abilities are positively related (Anaya, 1999; Converse & Presser, 1989; Hayek, Carini, O'Day, & Kuh, 2002; Laing, Sawyer, & Noble, 1988; Pace, 1985; Pike, 1995).

Discussion & Conclusions

When thinking back to their overall institutional experience, alumni very well may be viewing it through rose-colored glasses. The arts graduates included in this study tend to rate their institutions slightly more favorably than the surveyed, senior students graduating with arts majors when making universal assessments. However, when considering more nuanced aspects of their educational experiences, alumni perceptions may have a more lackluster pallor. In terms of their satisfaction with aspects of their time at the institution, post-graduation experiences in the workplace may better enable alumni to reflect on certain aspects of their time and realize where improvements could help them in their current careers. Alumni were less satisfied than graduating seniors in the areas of academic advising, career advising, and opportunities for internships or degree-related work. It may be the case that as students, respondents do not realize that they need better advising or an internship until they enter the workforce, and this provides a more realistic perception.

In addition to this more complex understanding of satisfaction with certain aspects of their time, alumni may also learn that they needed to develop some skills more once they have gained work experience. Alumni were less satisfied than graduating seniors with their institution's contribution to their development of clear writing, persuasive speaking, networking and relationship building, leadership skills, research skills, project management, financial and business skills, and entrepreneurial skills. These results suggest that upon leaving the institution and entering the workplace, alumni perceptions shift in terms of some communicative and procedural skills. Writing, speaking, networking, and leadership are important aspects of

communication that may be experienced differently in an applied setting, such as the workplace, in comparison to a classroom situation. Likewise, some task-based procedural skills like research, project management, finance, and entrepreneurship may also be more completely understood and valued once an individual transitions from student to employee. When current senior students answer that their institution has contributed “very much” to the development of a certain skill, it may be that they are referencing their development since their first year at the institution and think that they have made great strides. There is also the possibility that once alumni enter the workforce, they are referencing their skill levels in comparison with colleagues who are quite advanced in these skills resulting from years, or perhaps even decades, of actual use.

Taken together, the general pattern suggested in these results is that alumni provide more positive evaluations of their institutions overall, yet more critical judgments when certain specific aspects are concerned. However, it should also be noted that in terms of the magnitude of the differences between the alumni and student responses, the effect sizes were all in the moderate to small range (Cohen, 1992). Although this is common for social science and educational research (Gonyea & Sarraf, 2009; Hayek, Gonyea, & Zhao, 2001), it is still a consideration in the interpretation of the results. The statistical significance of the comparisons is certainly important, but the practical significance of the comparisons, most of which were small to moderate is an essential component for a complete understanding of the results as well.

While it is hard to determine which group has a more accurate report of the experience, important institutional information can be gained through surveying both students and alumni. Students may be better able to provide information about affective components of their experience, while alumni may be better judges of specific things needed in the workplace. Being

closer in time to the experience may have the advantage in terms of memory accuracy, but temporal distance may have the advantage of reflective insight. Thus, if administrators and faculty want the complete picture of what can help create the optimal institutional experiences for students and also prepare them for the workforce, gathering information from both students and alumni may be the best way to approach this situation.

References

- Anaya, G. (1999). College impact on student learning: Comparing the use of self-reported gains, standardized test scores, and college grades. *Research in Higher Education, 40*, 499-526.
- Badcock, P.B.T., Pattison, P.E., & Harris, K.L. (2010). Developing generic skills through university study: A study of arts, science and engineering in Australia. *Higher Education, 60*, 441-458. doi: 10.1007/s10734-010-9308-8
- Bradshaw, D. (1985). Transferable intellectual and personal skills. *Oxford Review of Education, 11*(2), 201-216.
- Cabrera, A.F., Weerts, D.J., & Zulick, B.J. (2005). Making an impact with alumni surveys. *New Directions for Institutional Research, 2005*: 5-17. doi: 10.1002/ir.144
- Cantor, M. (2012, April 23). The 13 most worthless majors. *Newser*. Retrieved from www.newser.com
- Carnevale, A.P., Cheah, B., & Strohl, J. (2012). *College majors, unemployment, and earnings: Not all college degrees are created equal*. Washington, DC: Center of Education and the Workforce, Georgetown University.
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.
- Converse, J. M., & Presser, S. (1989). *Survey questions: Handcrafting the standardized questionnaire*. Newbury Park: Sage.
- Edstrom, A.M. (2008). Art students making use of studio conversations. *Art, Design & Communication in Higher Education, 7*(1), 31-44. doi: 10.1386/adche.7.1.31/1
- Evers, F.T., Rush, J.C., & Berdrow, I. (1998). *The bases of competence: Skills for lifelong learning and employability*. San Francisco, CA: Jossey-Bass.
- Gonyea, R., & Sarraf, S. (2009, June). Contextualizing NSSE effect sizes: Empirical analysis and interpretation of benchmark comparisons. Paper presented at the Annual Forum of the Association for Institutional Research, Atlanta, GA.
- Hayek, J. C., Carini, R. M., O'Day, P. T., & Kuh, G. D. (2002). Triumph or tragedy: Comparing student engagement levels of members of Greek-letter organizations and other students. *Journal of College Student Development, 43*(5), 643-663.
- Hayek, J., Gonyea, R., & Zhao, C. (2001, November). Reporting and interpreting effect sizes in higher education research. Paper presented at the Annual Conference for the Association for the Study of Higher Education, Richmond, VA.

- Johnson, C. (2002). The position of the fine art student in the context of public accountability of higher education, with specific reference to the Quality Assurance Agency experience. *Teaching in Higher Education*, 7(2), 215-224. doi: 10.1080/13562510220124277
- Kuh, G. D. & Ewell, P. T. (2010). The state of learning outcomes assessment in the United States. *Higher Education Management and Policy*, 22(1), 1-20.
- Kuh, G. D. & Ikenberry, S. O. (2009). *More than you think, less than we need: Learning outcomes assessment in American higher education*, Urbana, IL: University of Illinois and Indiana University, National Institute of Learning Outcomes Assessment.
- Lambert, A.D., & Miller, A.L. (in press). Lower response rates on alumni surveys might not mean lower response representativeness. *Educational Research Quarterly*, vol and pp TDB.
- Laing, J., Swayer, R., & Noble, J. (1989). Accuracy of self-reported activities and accomplishments of college-bound seniors. *Journal of College Student Development*, 29(4), 362-368.
- Pace, C. R. (1985). *The credibility of student self-reports*. Los Angeles: The Center for the Study of Evaluation, Graduate School of Education, University of California at Los Angeles.
- Pike, G. R. (1995). The relationship between self-reports of college experiences and achievement test scores. *Research in Higher Education*, 36(1), 1-22.
- Porter, S.R. (2004). Raising response rates: What works? *New Directions for Institutional Research*, 121, 5-21.
- Stasz, C. (1997). Do employers need the skills they want? Evidence from technical work. *Journal of Education and Work*, 10(3), 205-223.
- Stasz, C. (2001). Assessing skills for work: Two perspectives. *Oxford Economic Papers*, 3, 385-405.
- Tait, H., & Godfrey, H. (1999). Defining and assessing competence in generic skills. *Quality in Higher Education*, 5(3), 245-253.

Table 1
Comparison of graduating seniors and alumni on institutional experiences and development of skills

	Adjusted Means ^a		Sig.	Effect Size(d)
	Student	Alumni		
Overall Experience	3.27	3.39	*	.17
Aspects of Time at Institution				
Opportunities to present, perform, or exhibit your work	3.30	3.29		
Opportunities to take classes outside of your major/discipline	3.12	3.25		
Instructors in classrooms, labs, and studios	3.37	3.37		
Academic advising	2.99	2.84	*	-.16
Advising about career or further education	2.80	2.44	***	-.35
Opportunities for degree-related internships or work	2.68	2.41	**	-.27
Opportunities to network with alumni and others	2.71	2.61		
Sense of belonging and attachment	3.09	3.19		
Freedom and encouragement to take risks	3.17	3.16		
Skills and Abilities				
Critical thinking and analysis of arguments and information	3.41	3.34		
Broad knowledge and education	3.30	3.30		
Listening and revising	3.49	3.44		
Creative thinking and problem solving	3.59	3.53		
Research skills	3.30	3.11	**	-.23
Clear writing	3.21	2.96	***	-.30
Persuasive speaking	2.96	2.78	*	-.21
Project management skills	3.21	3.02	*	-.21
Technological skills	3.23	3.12		
Artistic Technique	3.71	3.63		
Financial and business management skills	2.24	1.92	***	-.38
Entrepreneurial skills	2.23	1.99	**	-.27
Interpersonal relations and working collaboratively	3.18	3.17		
Leadership skills	3.05	2.88	*	-.21
Networking and relationship building	3.07	2.83	***	-.28
Teaching skills	2.86	2.73		

^a Adjusted for gender, race, U.S. citizenship status, and first-generation status.

* p < .05, ** p < .01, *** p < .001