

University of Alaska Fairbanks National Survey of Student Engagement 2009 Analysis and Recommended Actions

Introduction

The University of Alaska Fairbanks has decided to use selected results from the National Survey of Student Engagement (NSSE) as indicators relative to the objectives “Prepare undergraduate students for further study, future employment and contemporary life” and “Involve baccalaureate students in extracurricular and co-curricular activities” within its Educate theme. Further, NSSE is one of a variety of assessments that UAF uses in its efforts to improve educational programs and services to students. Other assessments that have been conducted include the CSSE (Community College Survey of Student Engagement) and the Graduation Survey, which is distributed to graduating students.

A committee representing faculty, staff, and administration¹ was charged with interpreting the results of the 2009 NSSE and making recommendations for improvement of academic programs and student services. These recommendations apply to baccalaureate programs and baccalaureate-seeking students. Community campus programs and students will be addressed after the next administration of the Community College Survey of Student Engagement. Implementation of the recommendations contained in this report will be overseen by the Provost. She will distribute the report, the results of the NSSE, and a cover memo highlighting specific recommendations to responsible organizations and administrators. For example, recommendations on the Core curriculum will be sent to the Committee for Core Revitalization and Assessment, and recommendations concerning degree programs will be sent to deans and department chairs. The responsible individuals will be instructed to report back to the Provost on actions taken relative to the recommendations.

Respondent Characteristics

UAF has administered the NSSE to its students twice, in 2007 and 2009. This report will analyze and make recommendations based upon the 2009 report. The 2009 and 2007 results will not be compared, because the 2007 survey was sent to all UAF freshmen and seniors, including some attending UAF community campuses. The 2009 survey was sent only to baccalaureate-seeking students attending the Fairbanks campus. The results of the two surveys were rather similar, and the small differences observed might be due to the different groups sampled rather than any temporal changes.

In analyzing the results of the 2009 NSSE, it is important to consider the effects of differences in the UAF respondents and the respondents at institutions used for comparison. Some key differences are shown in Table 1.

¹Committee members included Susan Henrichs, Provost (chair); Lillian Anderson-Misel, Associate Registrar for Graduation and Curriculum; Kevin Berry, Associate Professor of Accounting and Associate Dean of the School of Management; Richard Boone, Professor of Biology and Associate Dean of the College of Natural Sciences and Mathematics; Linda Hapsmith, Director of the Academic Advising Center; Anita Hartmann, Associate Dean of the College of Liberal Arts; Joan Hornig, Assistant Professor of Education; Charles Mayer, Professor of Electrical Engineering and Associate Dean of the College of Engineering and Mines; Jamie Napolski, First Year Experience coordinator, Residence Life; Andrew Seitz, Assistant Professor, School of Fisheries and Ocean Sciences; and David Veazey, Instructor and Director of Enrollment Management, School of Natural Resources and Agricultural Sciences.

Table 1. Selected NSSE 2009 Respondent Characteristics

Characteristic	UAF	Standard Peers	Selected Peers	Similar Universities
% of seniors attending less than full-time	31%	26%	24%	17%
% of seniors who were female	54%	61%	58%	60%
% of Alaska Native/Native American freshmen & seniors	9% & 9%	2% & 2%	1% & 2%	1% & 1%
% of freshmen & seniors residing on campus	53% & 21%	65% & 9%	68% & 10%	57% & 10%
% of freshmen who were transfer students ²	27%	7%	6%	10%
% nontraditional freshmen & seniors	9% & 58%	3% & 37%	1% & 27%	6% & 42%
% of freshmen & seniors majoring in engineering	20% & 14% ³	11% & 11%	7% & 7%	9% and 8%
% of freshmen & seniors majoring in physical science	8% & 9%	4% & 3%	4% & 3%	3% & 4%

As shown in the table, UAF respondents are older, include fewer females, are more likely to be transfer students as freshmen, are more likely to be campus residents as seniors, and are more likely to be Alaska Native (or Native American). UAF students are also about twice as likely to be engineering or physical sciences majors as those at comparison institutions. The % of international students was similar at UAF and in the comparison groups, and the response rates (about 30%) were also about the same.

The committee also noted that nearly all of the respondents were academically successful, with only a few per cent of freshmen reporting a GPA below “C”. This is not representative of UAF freshmen as a whole, since 19% have a GPA below “C” at the end of their first year, and an additional 9% who enrolled in fall do not return for the spring semester. Those non-returning students also mostly had low GPAs and were not available to take the NSSE study, which was administered in Spring.

The Standard Peers and Selected Peers are mostly institutions that were identified by UAF as being comparable institutions. Most of these institutions are public, Carnegie RU/H or RU/VH doctoral granting institutions located in small or medium-sized communities in northern or western states. However, the “Similar Universities” are in reality not very similar to UAF at all. They include private institutions such as Willamette University and Pacific Lutheran University; institutions in large urban

² The question asked was actually, “Did you begin college at your current institution or elsewhere?” UAF students answering “elsewhere” could be classic community college transfer students, but could also be students who took college classes while still in high school, a common occurrence within the University of Alaska system, which has active Tech Prep programs and which welcomes qualified high school students to enroll in regular college courses.

³ While the decline in % engineering majors from freshmen to seniors may partly reflect attrition, engineering began a major recruiting drive in 2007, which greatly increased freshman engineering enrollments.

areas like the University of Washington, Portland State University, and UCLA; many institutions with a more selective admission standard than UAF; and many institutions that are either much above UAF's research category or well below it. In fact the only apparent criterion for inclusion in the "Similar Universities" group is location in a western state. Hence the committee did not consider differences between UAF and "Similar Universities" to be particularly noteworthy.

UAF's Relative Strengths

Both UAF's freshmen and seniors were significantly more likely than students at peer institutions to have "Asked questions/contributed to class discussions" and "Made a class presentation". We infer that the former result is due to UAF's small average class sizes. If research, thesis, individual study, practica, internships, externships, and music private lessons are excluded, the average section enrollment for Fall semesters, 2007-2010, was 13 students. The fact that many of UAF's science and engineering faculty and some social science faculty have partial appointments in research institutes, which derive much of their funding from Federal grants and contracts, is partly responsible, since this contributes to UAF's relatively high faculty/student ratio. UAF also has relatively high State funding per student compared with peers. Since funding from both sources is likely to be limited in the future:

Recommendation 1: UAF should monitor changes in class sizes. The Provost will request that programs with substantial class size increases assess impacts on student learning outcomes.

The relatively high proportion of students who have made class presentations is likely due to the Core Curriculum, which includes a Communication course requirement commonly taken by freshmen, and Oral Intensive upper division course requirements. UAF Core Curriculum requirements are currently under review. Since good written and oral communications skills are highly desired by employers⁴:

Recommendation 2: UAF should retain oral communication as a component of the Core Curriculum.⁵

UAF students are more likely than those at peer institutions to have had "serious conversations with students of another race or ethnicity". While this is a positive result, it did not translate into a particularly positive response to "Understanding people of other racial and ethnic backgrounds".

Recommendation 3: UAF should consider changes to the Core Curriculum that would improve students' understanding of people from other racial or ethnic backgrounds.

⁴ Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn. A Survey Among Employers Conducted on Behalf of the Association of American Colleges and Universities by Hart Research Associates. http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

⁵ On May 2, 2011, the UAF Faculty Senate approved revised Core Curriculum learning outcomes that include oral communication, an important step toward implementing this recommendation.

The relatively high proportion of UAF students who “Did an independent study or self-designed major” probably reflects two things. First, UAF is a smaller institution that does not offer all of the courses or majors students may desire. Second, UAF has more students who have begun their studies elsewhere. Some transfer students (especially those who have attended multiple institutions) can have difficulty completing the requirements for an established major, especially if they have pursued studies in degree programs that UAF does not offer. The committee understands the necessity of continuing to offer these options to students, but thinks that formally established courses and programs are the best approach for most students. The formal courses and programs are carefully reviewed for academic quality before offering, and are regularly assessed as part of student learning outcomes assessment and program review.

Recommendation 4: UAF should not emphasize nor broadly promote individual study courses or self-designed majors.

UAF has relatively more students working in on-campus jobs and relatively fewer working off-campus. This is a positive for student success.

Recommendation 5: UAF should continue to offer as many on-campus student jobs as possible.

UAF’s Relative Weaknesses

UAF scored relatively low on several items related to “Level of Academic Challenge”. The specific items that were rated lowest differed between the freshmen and senior respondents. Compared with peers, relatively few freshmen said that courses emphasized making judgments about the value of information, or emphasized applying theories or concepts to new situations. However some committee members thought that perhaps freshmen simply did not recognize these elements in their courses, even though they were present, because faculty did not identify the class activities in the same terms. Relatively few seniors said they had worked harder than they expected to meet an instructor’s expectations⁶ or had read more than 10 assigned books or book-length packs of readings. Committee members felt that some seniors might not have understood the question that asked whether they had a “Culminating senior experience”, since UAF was rated below peers even though such courses (senior design courses in Engineering, for example) are common at UAF. A more positive result for a “Level of Academic Challenge” item was recorded for “Number of problem sets that take you more than an hour to complete”. UAF’s relatively high rating on this item probably reflects its higher proportion of science and engineering majors, and may explain lower ratings on reading-related items, since humanities and social sciences tend to have more emphasis on reading and less on quantitative problem-solving. Beyond these specific responses, the aggregate of responses to questions related to Level of Academic Challenge placed UAF below peer institutions.

⁶ However, UAF was rated close to peers on this question. UAF scored below “Similar Universities”, which as noted were not really similar at all.

Overall, students didn't perceive writing as a particular weakness of the curriculum; the only item on which UAF fell well below peers was the number of medium-length papers (5 to 19 pp.) required. However, the committee agrees with a national study that advanced writing skills are very important⁷, and thinks that just performing as well as peers in this area is not sufficient.

Even though the committee was not entirely convinced that the results for "Level of Academic Challenge" were accurate, we do think this area merits further consideration.

Recommendation 6: Assessment of the Core Curriculum student learning outcomes should continue to include assessment of individual courses as well as collective assessments of learning in the Core as a whole. The Faculty Senate should regularly review core course assessments and require improvements to courses that do not hold students to rigorous academic standards, including appropriate requirements for oral communication, reading, writing, and problem-solving.

Recommendation 7: UAF degree programs should continue to carry out student learning outcomes assessment and to make improvements based on assessment findings. Where appropriate, programs should assess students relative to national standards for learning outcomes.⁸

Recommendation 8: Majors that lack a culminating academic experience should consider adding one, and all baccalaureate programs should consider whether critical and analytical thinking skills need to be further developed in the required courses. Programs offering culminating academic experiences should make sure that students understand the nature and value of these courses.

UAF was rated relatively low by freshmen on their relationships with other students and institutional support for students' social needs. The committee inferred that the relatively high number of non-traditional (older) freshmen may mean that conventional campus activities are not appealing. Also, UAF serves a relatively high proportion of veterans, military, and their dependents, and this population is likewise much different from the traditional freshmen. It's not entirely clear whether nontraditional freshmen desire more on-campus relationships and social activities, since they may have families or other off-campus social outlets. However, since there is some indication that freshmen are not satisfied with the campus environment:

⁷ Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn. A Survey Among Employers Conducted on Behalf of the Association of American Colleges and Universities by Hart Research Associates. http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

⁸ While nationally standardized tests are available and appropriate in some disciplines, this is certainly not the only valid approach. The Provost's Office will continue to maintain records of the results of student learning outcomes assessment and will alert responsible faculty and administration to any positive or negative trends.

Recommendation 9: UAF should conduct an assessment of campus life activities that includes non-traditional, military and veteran, and commuter students as well as campus residents.

UAF seniors reported spending a relatively large amount of time caring for dependents, and both levels of students indicated that UAF provided less support than peers to help them cope with non-academic responsibilities. These responses are consistent with the fact that increased options for on (or near) campus child care has been identified as a need by UAF faculty, staff, and students.

Relatively few UAF seniors had worked with classmates outside of class to prepare class assignments in the past year. The committee is not sure how to interpret this result. Is it because UAF faculty make relatively few collaborative assignments, because faculty provide class time for such assignments, because nontraditional students are less likely to work with other students in informal study groups, or because of increasing enrollments in distance education courses? We note that employers want employees that have had experiences working in diverse teams⁹, so programs should consider whether they include such experiences in their curriculum. In the area of educational and personal growth, UAF students rated themselves relatively low compared with students at peer institutions in “Understanding yourself” (freshmen only), “Developing a personal code of values and ethics (freshmen only), “Thinking critically and analytically”, “Working effectively with others” (seniors only), “Voting”, “Contributing to the welfare of your community”, and “Developing a deepened sense of spirituality”. The last response reflects the fact that religious education is not within UAF’s mission as a public university, but the others are consistent with the NSSE results that indicate that UAF emphasizes collaboration, teamwork, and community service less than peers. For example UAF students were relatively unlikely to have participated in a community-based project as part of a regular course or in a co-curricular activity.

Recommendation 10: In revising the Core Curriculum, faculty should consider whether requirements for teamwork should be embedded in some courses.

Recommendation 11: Academic programs should consider adding teamwork requirements to courses, including opportunities for community-based learning when appropriate.

General Recommendation and Conclusion

Recommendation 12: The UAF Provost’s Office should arrange for the administration of the NSSE and the Community College Survey of Student Engagement to the respective student populations at least twice in each accreditation cycle, with each survey being administered at intervals of three or four years. This will allow enough time to see the effects of actions taken. Other student input (e.g., the Graduation Survey, the campus life survey recommended in this report) should be considered in analysis of the results.

⁹ Raising the Bar: Employers’ Views on College Learning in the Wake of the Economic Downturn. A Survey Among Employers Conducted on Behalf of the Association of American Colleges and Universities by Hart Research Associates. http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

Overall the results of the NSSE indicate that UAF students view their experiences similarly to students at peer institutions. The most concerning result is the perception that the level of academic challenge at UAF is not as high as for peers, especially because this was also a finding of the 2007 NSSE. The committee thinks that changing this perception, including implementation of Recommendations 6, 7, and 8, should be the highest priority emerging from this analysis.