



NORTHERN ARIZONA UNIVERSITY

2006 Graduating Senior Survey Report:

Student Assessment of Their Experiences (Academic and Non-Academic) at Northern Arizona University by Campus and College

Introduction

For the past nine years, a survey of graduating seniors has been conducted at Northern Arizona University (NAU). This survey assesses student satisfaction and opinions about their experience at the university, while also addressing specific questions that are asked by the Arizona Board of Regents (ABOR) for the Undergraduate Consolidated Accountability Report (UCAR) each year. Student satisfaction is measured in several areas: general academics, major department, faculty, skills development, advising, and experiences outside the classroom.

Methods¹

In 2006 the Graduating Senior Survey was administered via a web survey. In 2006 the office of Planning, Budget and Institutional Research sent the survey via an email invitation to all students who had applied for graduation with the Registrar's Office during fiscal year 2006 (July 1, 2005 – June 30, 2006). Prior to FY2005, the Graduating Senior Survey was a phone survey that was administered by the Social Research Laboratory to approximately 400 students expecting to graduate in the Fall, Spring, or Summer of the survey administration's academic year. For the 2006 administration, 1361 students participated. This sample size yields an error rate below ± 2 percent². The survey sample was similar to the overall population of seniors on most characteristics examined. Table A (in Appendix A) shows the background characteristics of the survey sample compared to all students that applied for graduation.

Summary of Results

Changing the administration of the Graduating Senior Survey from a phone to a web survey has provided a significantly larger sample size for the FY2006 administration. Due to the larger sample size additional analyses are provided in this report than in previous reports. Specifically, this year's results are provided by campus and by college.

I. Overall Indicators of Satisfaction

Ninety-six percent (96%) of all respondents reported their overall experience at Northern Arizona University was either "excellent" or "very good." There was no variation in satisfaction across the three campuses.

¹ Refer to Appendix A for a more complete methodology

² The sampling error describes the probable difference between interviewing everyone in the population versus interviewing a sample drawn from this population. For example, if 80% of the graduating seniors sampled indicated satisfaction in a specific content area, the actual population parameter falls in the range of 78% - 82% (80% +/- 2%) satisfaction

When asked if they were given the opportunity to begin over, would they still chose NAU, 87 percent of the respondents replied “definitely yes” or “probably yes.” Statewide students were the most likely to reply yes (92%).

II. Satisfaction for the Six Content Areas Evaluated by Campus

Across the six content areas evaluated (general academics, major field of study, faculty, skill development, advising, and experiences outside the classroom), satisfaction was highest in the area of faculty with 93 percent of all respondents indicating that they were satisfied with faculty (quality and availability).

A. General Academics

There was little difference in satisfaction across the three campuses for satisfaction with the challenge of coursework and course registration outside of their majors. Yuma students were less likely to be satisfied with the variety of courses outside their major when compared to both the Flagstaff and the statewide students, and the Flagstaff students were less satisfied with the academic advising at the lower division level than statewide and Yuma students.

B. Major Field of Study

Overall satisfaction with the respondents major field of study was high with 85 percent or more of respondents satisfied with the challenge of coursework (93%), the overall quality of their major department (89%), their ability to register for courses (88%), and their preparation for a career (85%). Both the Flagstaff and Yuma respondents were less satisfied with the variety of courses offered when compared to the statewide respondents. And the Flagstaff respondents were less satisfied with academic advising and advising for future career goals than the respondents from other campuses.

C. Faculty

There are two questions on the survey that ask students specifically about their satisfaction with the quality of faculty instruction and the availability of faculty. Satisfaction was high with 92 percent of the students satisfied with the quality of faculty instruction and 93 percent of the students satisfied with the availability of faculty. There were no significant differences in satisfaction across the three campuses.

D. Skill Development

Respondents were asked to rate how effective NAU was in facilitating their development in a variety of skills areas. There were quite a few differences when evaluating the impact NAU had in facilitating the development of skills across the campuses. Statewide respondents were more likely than the Yuma respondents to indicate NAU helped in their development of critical thinking and analytic skills and more likely than Flagstaff respondents to indicate NAU helped them in developing a tolerance for diversity, understanding the relationship between people and the environment, acting upon ethnical principles, reading critically and understanding the impact of technology.

Yuma respondents were also more likely than the Flagstaff respondents to indicate development in reading critically, analyzing quantitative problems, understanding the principles of scientific inquiry, and understanding the impact of technology. Yuma respondents were more likely to

indicate development in their ability to work effectively with others when compared to the statewide respondents.

E. Advising

Overall, satisfaction was the highest in lower-division academic advising (75%) and lowest in advising for future career goals (64%). The Flagstaff respondents were the least satisfied on all three dimensions of advising (lower division, major, and future career goals) compared to respondents from the other campuses.

F. Experiences Outside the Classroom

Students overall were satisfied (80 percent or more) on a variety of dimensions of experiences outside the classroom. Flagstaff students were more satisfied with extracurricular activities than respondents at the other campuses. Yuma respondents were the most satisfied with the availability of computer labs and statewide students were the most satisfied with the campus social life at NAU.

III. Evaluation of Major Department and Skill Development by College

A. Major Department

There is quite a bit of variation between the six colleges on all seven measures of the major department. The highest rated area across all schools was the level of academic challenge of coursework. This varied from a high of 97 percent satisfied in Engineering and Natural Sciences to a low of 89 percent in Arts and Letters. The overall quality of the major department was rated the highest in Education (95%) and Engineering and Natural Sciences (93%) and the lowest in Arts and Letters (82%). The ability to register for courses (95%), career preparation (94%), the variety of courses offered (89%), academic advising (86%), and advising with future career goals (83%) were all rated the highest in Education.

B. Faculty

The quality and availability of faculty is rated high across all six colleges with little variation in satisfaction.

C. Skill Development

There is significant variation between the six colleges on student evaluation of the level of help their NAU education provided them in developing key skills. While variation is certainly expected given the different skills required for various degrees, it should also be noted that many of the skills evaluated are drawn from the liberal studies skill objectives.

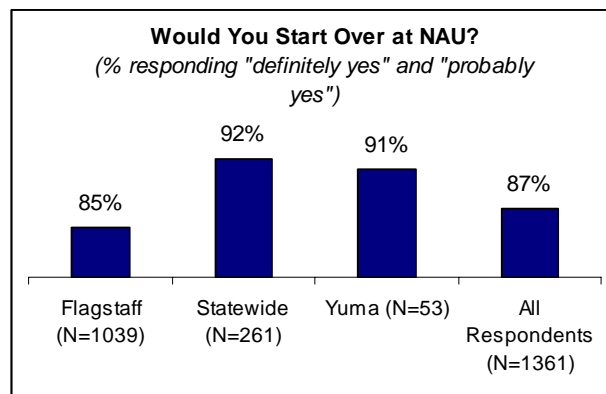
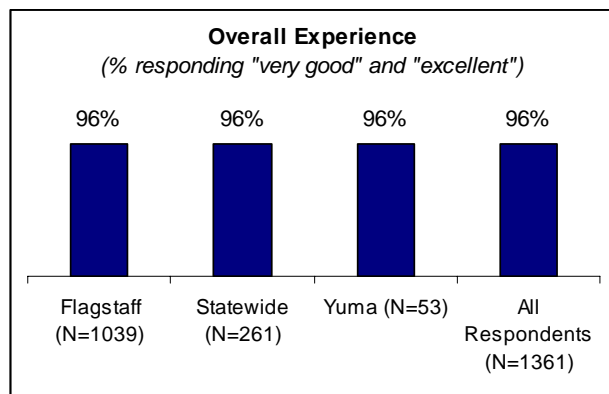
Plans After Graduation

Sixty-four percent of respondents reported their plans after graduation as a job opportunity related to their major, 15 percent reported a job opportunity not related to their major, 18 percent of graduating seniors plan on traveling upon graduation, and 43 percent reported graduate school as their plan after graduation. Ten percent of respondents didn't know what their plans were for after graduation. (Students were given the option of choosing multiple plans, therefore, the above percentages would not add to 100).

Summary of Responses on the Graduating Senior Survey

I. Overall Indicators of Satisfaction

Ninety-six percent (96%) of all respondents reported their overall experience at Northern Arizona University was either “excellent” or “very good.” There was no variation in satisfaction across the three campuses.



When asked if they were given the opportunity to begin over, would they still chose NAU, 87 percent of the respondents replied “definitely yes” or “probably yes.” Statewide students were the most likely to reply yes (92%).

II. Satisfaction for the Six Content Areas Evaluated by Campus

While the sample error for the entire sample is +/-2 percent, once the data is analyzed by campus the sample error changes to +/- 2 percent for Flagstaff, +/-4 percent for statewide, and +/-10 percent for Yuma (please see footnote #2 on page 1 for an explanation of sampling error).

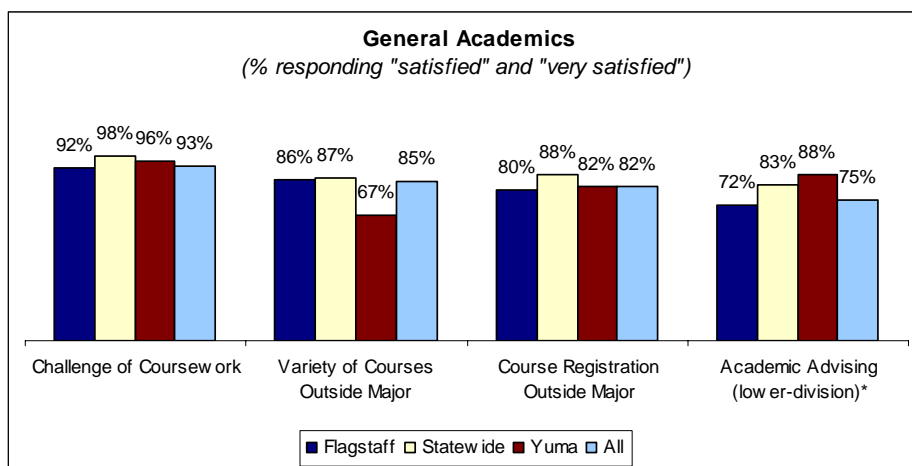
The average satisfaction for the six areas measured on the survey were computed and compared. The table below summarizes the results of this comparison. Across the six content areas evaluated (general academics, major field of study, faculty, skill development, advising, and experiences outside the classroom), satisfaction was highest in the area of faculty with 93 percent of all respondents indicating that they were satisfied with faculty (quality and availability). Each of these six areas is subsequently examined in greater detail below.

Area	# of Questions Measuring Content Area	2003	2004	2005	2006
		Faculty	93%	95%	92%
Outside Classroom	Five	83%	70%	84%	85%
General Academic	Four	83%	88%	82%	84%
Major	Seven	86%	87%	79%	81%
Advising	Three	71%	78%	69%	70%
Skill Development*	Thirteen	64%	65%	58%	67%

* For skill development, response choices were “Quite a Bit” and “Very Much,” not “Satisfied” and “Very Satisfied” as in the other content areas.

A. General Academics

The below graph summarizes the results from the questions addressing satisfaction in the area of general academics. Respondents had the option of rating the following academic areas by: very dissatisfied, dissatisfied, satisfied, or very satisfied. The below graph includes the percentage of students that answered “very satisfied” and “satisfied.” There was little difference in satisfaction across the three campuses for satisfaction with the challenge of coursework and course registration outside of their majors. Yuma students were less likely to be satisfied with the variety of courses outside their major when compared to both the Flagstaff and the statewide students, and the Flagstaff students were less satisfied with the academic advising at the lower division level than statewide and Yuma students.



* Thirty-seven percent of respondents indicated that they had received lower-division academic advising prior to declaring a major. These satisfaction ratings are based upon the 499 respondents that had received LD advising.

B. Major Field of Study

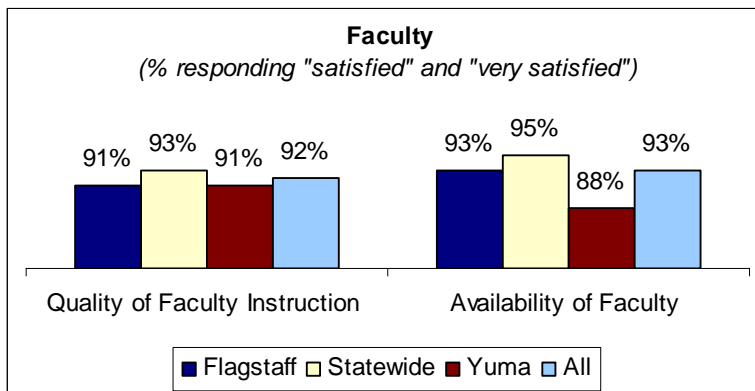
Respondents were asked to evaluate their major field of study at the time of graduation. Overall satisfaction was high with 85 percent or more of respondents satisfied with the challenge of coursework (93%), the overall quality of their major department (89%), their ability to register for courses (88%), and their preparation for a career (85%). Both the Flagstaff and Yuma respondents were less satisfied with the variety of courses offered when compared to the statewide respondents. And the Flagstaff respondents were less satisfied with academic advising and advising for future career goals than the respondents from other campuses.

Major Field of Study	Flagstaff	Statewide	Yuma	All
Challenge of Coursework	92%	95%	98%	93%
Overall Quality of Major Department	90%	92%	90%	89%
Ability to Register for Courses	86%	93%	87%	88%
Preparation for a Career	83%	92%	90%	85%
Variety of Courses Offered	76%	89%	70%	78%
Academic Advising	69%	82%	75%	72%
Advising with Future Career Goals	62%	73%	72%	64%
Number of respondents	1039	261	53	1353 ³

³ Eight students were unable to be matched to institutional data and therefore were not included in the campus level analysis.

C. Faculty

There are two questions on the survey that ask students specifically about their satisfaction with the quality of faculty instruction and the availability of faculty. Satisfaction was high with 92 percent of the students satisfied with the quality of faculty instruction and 93 percent of the students satisfied with the availability of faculty. There were no significant differences in satisfaction across the three campuses.



D. Skill Development

Respondents were asked to rate how effective NAU was in facilitating their development in a variety of skills areas. The below percentages represent the proportion of students by campus that indicated NAU helped them “quite a bit” or “very much” in the stated skill. Several of these questions are also asked on the National Survey of Student Engagement – a national survey that NAU participated in during FY2005. The results from all participating doctoral intensive institutions are included in the below table as a point of reference.

There were quite a few differences in the evaluation of impact NAU had in facilitating the development of the below skills across the campuses. Statewide respondents were more likely than the Yuma respondents to indicate NAU helped in their development of critical thinking and analytic skills. Statewide respondents were more likely than Flagstaff respondents to indicate skill development in developing a tolerance for diversity, understanding the relationship between people and the environment, reading critically (Yuma respondents were more likely than the Flagstaff respondents to indicate skill development for critical reading also), acting upon ethical principles, and understanding the impact of technology (Yuma respondents were also more likely than the Flagstaff respondents to indicate development for this skill also). Yuma respondents were more likely to indicate development in their ability to work effectively with others when compared to the statewide respondents and greater skill development in analyzing quantitative problems and understanding the principles of scientific inquiry when compared to the Flagstaff respondents.

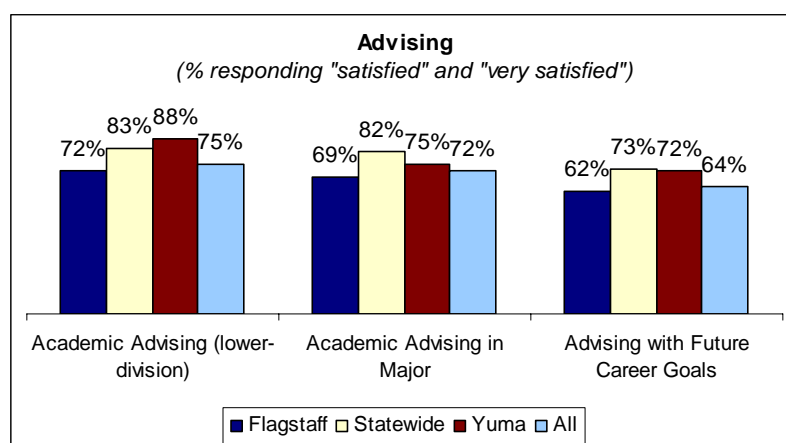
Skill Category (% responding “quite a bit” and “very much”)	Flagstaff	Statewide	Yuma	All	From 2005 NSSE ⁴
Thinking critically & analytically	76%	82%	72%	77%	85%
Working effectively with others	73%	65%	77%	74%	77%
Learning effectively on own	71%	77%	75%	73%	72%
Developing a tolerance for diversity	67%	78%	74%	69%	
Understanding relationship b/w people & env’t	66%	79%	74%	69%	
Writing clearly & effectively	65%	73%	70%	67%	75%

⁴ These results are for all participating doctoral intensive institutions in the FY2005 NSSE administration.

Skill Category (% responding “quite a bit” and “very much”)	Flagstaff	Statewide	Yuma	All	From 2005 NSSE⁴
Using computer/info technology	64%	73%	73%	66%	69%
Reading critically	61%	78%	77%	65%	
Acting upon ethical principles	60%	71%	66%	62%	
Understanding impact of technology	59%	73%	70%	62%	
Speaking clearly & effectively	60%	68%	64%	61%	68%
Analyzing quantitative problems	59%	68%	72%	61%	72%
Understanding principles of scientific inquiry	58%	63%	70%	59%	
Number of respondents	1039	261	53	1353	

E. Advising

Overall, satisfaction was the highest in lower-division academic advising (75%) and lowest in advising for future career goals (64%). The Flagstaff respondents were the least satisfied on all three dimensions of advising (lower division, major, and future career goals) compared to respondents from the other campuses.



F. Experiences Outside the Classroom

Students overall were satisfied (80 percent or more) on a variety of dimensions of experiences outside the classroom. Flagstaff students were more satisfied with extracurricular activities than respondents at the other campuses. Yuma respondents were the most satisfied with the availability of computer labs and statewide students were the most satisfied with the campus social life at NAU.

As some of these experiences outside of the classroom are arguably less relevant to some respondents depending upon their location, respondents were given the option of choosing “not applicable.” The below percentages are based only upon the proportion of respondents that evaluated the factors and excludes those that said the experience was not relevant.

% responding “satisfied” and “very satisfied”	Flagstaff	Statewide	Yuma	All
Extracurricular Activities	90%	76%	72%	88%
Availability of Computer Labs	85%	82%	94%	85%
Town Social Life	85%	87%	81%	85%
Diversity on Campus	84%	90%	90%	85%
Campus Social Life at NAU	79%	92%	75%	80%

III. Evaluation of Major Department and Skill Development by College

A main objective for changing the method of data collection for the graduating senior survey from a phone survey to a web based survey was to allow for analyses at the college level. In the past, the total sample size was approximately 400 students which did not allow for a valid analysis at the college level. Due to the significantly larger sample size this year, the sampling error, which describes the probable difference between interviewing everyone in the population versus interviewing a sample drawn from this population, for the college level analyses fluctuates from 4% to 6% depending upon the college (refer to the below table for the specific error rate for each college) and allows for college level analyses.

A. Major Department

There is quite a bit of variation between the six colleges on all seven measures of the major department. The highest rated area across all schools was the level of academic challenge of coursework. This varied from a high of 97 percent satisfied in Engineering and Natural Sciences to a low of 89 percent in Arts and Letters. The overall quality of the major department was rated the highest in Education (95%) and Engineering and Natural Sciences (93%) and the lowest in Arts and Letters (82%). The ability to register for courses (95%), career preparation (94%), the variety of courses offered (89%), academic advising (86%), and advising with future career goals (83%) were all rated the highest in Education.

% responding “satisfied” and “very satisfied”	Arts & Letters	Bus Admin	Prof Schools	Educ	Engin & NS	SBS	All
Challenge of Coursework	89%	92%	92%	96%	97%	91%	93%
Overall Quality of Major Department	82%	85%	88%	95%	93%	88%	89%
Ability to Register for Courses	86%	88%	90%	95%	86%	83%	88%
Preparation for a Career	77%	81%	91%	94%	86%	78%	85%
Variety of Courses Offered	72%	77%	85%	89%	73%	74%	78%
Academic Advising	70%	64%	79%	86%	71%	62%	72%
Advising with Future Career Goals	66%	53%	75%	83%	65%	50%	64%
Sampling Error	+/-6%	+/-6%	+/-5%	+/-5%	+/-5%	+/-5%	+/-2%
Number of Respondents:	150	145	207	236	226	367	1331 ⁵

⁵ It should be noted that only students who were graduating in one of the six colleges are included in this analysis. Several students were assigned to the undergraduate college and some students were unable to be matched to university data and therefore are excluded from the above analysis. Additionally, some students (11) graduated during FY2006 with degrees from two different colleges. They were randomly assigned to one of the two colleges that they graduated from.

B. Faculty

The quality and availability of faculty is rated high across all six colleges with little variation in satisfaction.

% responding “satisfied” and “very satisfied”	Arts & Letters	Bus Admin	Prof Schools	Educ	Engin & NS	SBS	All
The quality of faculty instruction	88%	90%	92%	94%	94%	91%	92%
The availability of faculty	93%	93%	92%	92%	93%	93%	93%
Sampling Error	+/-6%	+/-6%	+/-5%	+/-5%	+/-5%	+/-5%	+/-2%
Number of Respondents:	150	145	207	236	226	367	1331

C. Skill Development

There is significant variation between the six colleges on student evaluation of the level of help their NAU education provided them in developing the below skills. While variation is certainly expected given the different skills required for various degrees, it should also be noted that many of the below skills are drawn from the liberal studies skill objectives.

Skill Category (% responding “quite a bit” and “very much”)	Arts & Letters	Bus Admin	Prof Schools	Educ	Engin & NS	SBS	All
Thinking critically and analytically	68%	74%	77%	79%	81%	78%	77%
Working effectively with others	61%	79%	76%	79%	72%	73%	74%
Learning effectively with others	62%	77%	76%	78%	70%	71%	73%
Writing clearly and effectively	66%	63%	61%	68%	65%	72%	67%
Ability to use computer and information technology	49%	67%	70%	74%	65%	66%	66%
Reading critically	62%	66%	63%	72%	62%	64%	65%
Acting upon ethical principles	50%	63%	72%	67%	50%	65%	62%
Analyzing quantitative problems	41%	60%	64%	66%	77%	55%	61%
Speaking clearly and effectively	57%	70%	58%	65%	54%	64%	61%
Understanding principles of scientific inquiry	32%	46%	57%	66%	85%	55%	59%
Sampling Error	+/-6%	+/-6%	+/-5%	+/-5%	+/-5%	+/-5%	+/-2%
Number of Respondents:	150	145	207	236	226	367	1331

IV. Trend Study from 1998 – 2006

With the completion of the 2006 survey administration, the Graduating Senior Survey has been completed at NAU for nine consecutive years. Due to changes in the survey questions during this nine year period, only six content areas are available for a historical comparison⁶. These six

⁶ It should be noted that this is a rather rough trend comparison, since the wording and response choices for some questions have changed over the years. The four that have remained stable over the seven years are the three advising areas and the overall experience rating. The other two questions, however, have response categories that shifted from stating the level of satisfaction (“Poor” to “Excellent”) to rating a student’s satisfaction (“Very Dissatisfied” to “Very Satisfied”). In addition,

areas are: (1) faculty/quality of instruction, (2) lower-division academic advising, (3) major academic advising, (4) career goals advising, (5) preparation for a career in the chosen field, and (6) overall experience rating. The below table presents the satisfaction levels by year for the six areas.

Satisfaction by year for each content area (1998-2006)

Content Area	Percentage of Satisfied Respondents								
	1998 N=353	1999 N=353	2000 N=350	2001 N=358	2002 N=471	2003 N=404	2004 N=404	2005 [^] N=629	2006 N=1361
NAU Faculty/Quality of Instruction	89%	90%	87%	85%	92%	95%	97%	91%	92%
Academic Advising: Lower-Division	52%	51%	78%	73%	59%	64%	80%*	73%	75%
Academic Advising: Major	78%	77%	80%	74%	69%	78%	80%	72%	72%
Advising: Career Goals	49%	60%	78%	75%	69%	72%	75%	62%	64%
Preparation For a Career	80%	82%	79%	77%	84%	86%	89%	82%	85%
Overall Experience	98%	97%	97%	96%	96%	97%	98%	95%	96%

Plans for After Graduation

Sixty-four percent of respondents reported their plans after graduation as a job opportunity related to their major, 15 percent reported a job opportunity not related to their major, 18 percent of graduating seniors plan on traveling upon graduation, and 43 percent reported graduate school as their plan after graduation. Ten percent of respondents didn't know what their plans were for after graduation. (Students were given the option of choosing multiple plans, therefore, the above percentages would not add to 100).

The Office of Planning, Budget, and Institutional Research welcomes feedback concerning this and other studies and how they can continue to be improved.

the question from previous years assessing satisfaction with "NAU faculty" has been changed to satisfaction with "the quality of faculty instruction." These changes to the questions began with the 2002 administration.

*In regards to the advising questions, it should be noted that beginning with the 2004 administration, students were first asked if they received lower division academic advising prior to declaring a major. Only those students that answered in the affirmative were asked to evaluate their level of satisfaction with lower-division advising.

[^] 2005 was the first year that the Graduating Senior Survey was administered via the web. It is not known how the change in administration may have affected the results.

Appendix A: Methodology

This report summarizes the most recent administration of the Graduating Senior Survey. The survey assesses the satisfaction and opinions of NAU's graduating seniors and provides data that is reported to ABOR for their annual accountability report.

The survey consisted of 47 multiple-choice and open-ended questions administered via a web survey. Questions addressed satisfaction in key areas, development of certain essential skills, and opinions about the university environment. See Appendix B for a copy of the survey instrument. The survey was administered via a web survey designed by the Office of Planning, Budget, and Institutional Research to all students who had applied for registration during fiscal year 2006 (July 1, 2005 – June 20, 2006).

It is important to note that response categories are dichotomized to represent satisfaction versus dissatisfaction. For example, students were asked "How satisfied have you been with the quality of faculty instruction in general – very dissatisfied, dissatisfied, satisfied, or very satisfied?" For the purpose of this analysis, these possible response categories were subsequently recoded as dissatisfied, which includes the original categories of "very dissatisfied" and "dissatisfied", and satisfied, which includes the original categories of "satisfied" and "very satisfied".

The survey sample was similar to the overall population of seniors on most characteristics examined. Table A shows the background characteristics of the survey sample compared to the overall graduating senior population at NAU. As is common in survey research, females tended to be overrepresented as survey respondents, whereas males tend to be underrepresented. It is unclear how, if at all, these discrepancies in the sample population affect the overall results of this study.

Table A. Demographic characteristics of survey respondents compared to all students that applied for graduation

	Survey Respondents	All Students who Applied for Graduation
Gender		
Female	69%	64%
Ethnicity*		
African American	1%	1%
Native American	5%	5%
Asian American	2%	2%
Hispanic / Latino	10%	13%
International	1%	1%
Caucasian	77%	75%
Unknown	2%	2%
AZ Resident	86%	85%
Group Size	1361	2796

*Column % does not add to 100 due to rounding