



**Student Experience Assessments
Best Practices in Student Satisfaction and Retention Research**

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Abstract

Student Experience Assessments: Best Practices in Student Satisfaction and Retention Research

A student-centered educational experience is increasingly expected today in post-secondary education. Timely feedback from enrolled students is an invaluable “reality check” regarding how well an institution is delivering on its promises, maximizing student satisfaction, and implementing retention-enhancement initiatives. This presentation will summarize research with not only current students, but also voluntary dropouts at a variety of institutions, sharing best practices in instrument design and data collection and analysis. A dialogue will be facilitated with session participants to field questions and to generate further insights.

Student Experience Assessments: Best Practices in Student Satisfaction and Retention Research

Introduction

As students are asked to share more of the costs of a post-secondary education, the quality of their overall educational experience and perceived return on investment (ROI) are increasingly important. For prospective students and their parents, what they are told they can expect from the student experience at an institution often makes the most influential, genuine case for institutional value. According to Heskett, Sasser Jr. and Scholesinger (1997),

Customers today are strongly value-oriented. They seek results and service process quality that far exceeds the price and acquisition costs they incur for a service.

Asking for feedback from students provides a mechanism for monitoring student satisfaction and informing decisions to invest in all areas of student life – academic, social, recreational, etc. Institutions call this type of research by many names, such as “Student Satisfaction and Retention,” “Student Climate Assessment,” and “Student Life Study.” Whatever it is called, this type of research is motivated by common objectives, most often to:

- Determine the features of an institution that students identify as most important;
- Correlate these features with student satisfaction and dissatisfaction to understand the reasons why students stay or leave; and
- Make decisions about where to invest institutional resources to enhance satisfaction with the overall experience and increase student degree completion rates.

Maguire Associates (www.maguireassoc.com) is a research-based consulting firm serving the higher education community in the U.S. and abroad. Our experience serving over 350 colleges and universities over the last 25 years includes experience conducting research with current students at over 40 institutions since 2000. In this document, we summarize and share our experiences in this type of research and our best practices in this area.

Why is Student Satisfaction Important?

Today, most schools and administrators in the United States are acutely aware of the importance of student satisfaction and retention. For enrolled students, the delivery on promises is crucial. For alumni, the student experience is a tangible demonstration of the validity and meaning of institutional mission. For governing agencies, the quality of the student experience may become – as it has in the United States – a key component of demonstrating institutional effectiveness.

Some schools are beginning to assign responsibility for retention to the chief enrollment officer, while other schools assign this responsibility to student affairs staff. In 2005, Maguire Associates surveyed four-year college and university presidents on behalf of *The Chronicle of Higher Education* and surveys completed by 764 presidents (a 57% response rate) provide important insights into presidents’ views concerning the importance of student satisfaction and retention. When asked how important 13 different issues were to defining the success of their presidency, presidents placed a great deal of weight on “improved retention and graduation rates” (Table 1).

Table 1
Importance to the Success of Presidency

	Overall Mean Rating
Having a balanced budget	4.74
Excellent quality of educational programs	4.66
Quality of the faculty	4.59
Meeting fund-raising goals	4.55
Good faculty and staff morale	4.34
Good student morale	4.33
Improved retention and graduation rates	4.32
Good relations with constituent groups (e.g., alumni, parents, etc.)	4.29
Quality and size of the freshman class	4.27
Good town/gown relations	3.92
Favorable publicity	3.90
Good record of student placement (e.g., in jobs, admission to graduate programs, etc.)	3.79
Improved <i>US News</i> rankings	2.86

Scale: 1 = Not at all important to 5 = Extremely important

College and university presidents were also asked in the survey to indicate the degree to which different issues are of concern to them at their institution. Table 2 shows that presidents rated “student retention” as their second-highest concern among 29 issues tested. These results confirm that student retention is a lead concern of the top leadership of colleges and universities in the United States.

It is helpful to think of student satisfaction and persistence as two dimensions of the student experience. Figure 1 displays a Satisfaction-Retention Matrix in which student’ overall satisfaction is plotted against their persistence. This framework organizes students up into four distinct groups. In their article “*Why Satisfied Customers Defect*” Jones and Sasser (1995) label different customer types, which we have adapted to the student market as:

- **“Loyalists”** - Satisfied students who persist at the college or university.
- **“Mercenaries”** - Satisfied students who withdraw from the institution.
- **“Defectors”** - Dissatisfied students who have alternatives and use them.
- **“Hostages”** - Dissatisfied students who have few or no alternatives and reluctantly persist at an institution.

Table 2
Institutional Concerns

	Overall Mean Rating
Rising health care costs	4.29
Student retention	3.98
Balancing financial aid costs with student needs	3.94
Rising tuition	3.93
Cost of technology	3.93
Inadequate faculty salaries	3.82
Rising cost of student services and student facilities	3.73
Insufficient racial/ethnic diversity among faculty	3.72
Decline in state support	3.63
Improving the academic profile of entering students	3.58
Ability to meet enrollment targets	3.53
Decline in federal support	3.42
Insufficient academic preparation for college among students	3.25
Quality of faculty	3.20
Visa difficulties for international students	2.97
Lack of racial and ethnic diversity among students	2.93
Government regulation	2.90
Competition from for-profit colleges	2.72
Too many part-time faculty on staff	2.64
Grade inflation	2.61
Cheating by students	2.59
Overcrowding	2.51
Litigation	2.50
Lack of economic diversity among students	2.43
Lack of political and philosophical diversity among students	2.35
Lack of political and philosophical diversity among the faculty	2.23
Illegal file sharing	2.18
Conflicts of interest, real or perceived, that arise because of the sources of research grants	1.56
Plagiarism by professors	1.47

Scale: 1 = Not a Concern at my Institution to 5 = Very Great Concern

While an initial reaction to the four student groups might direct one to focus on “Mercenaries” and “Defectors” as primary audiences of interest, it is important not to overlook “Hostages” or reluctant persisters. Indeed, Maguire, Butler et al. (2008) warn readers of the “*Persistence SatisFiction*” in their soon to be published book, *EM=C²: A New Formula for Enrollment Management*:

Students who persist at a school despite relatively low levels of satisfaction are not only at risk of becoming less than supportive alumni, but may also actually be proactive in spreading their negative opinions of the institution. Should they do so via the Internet with all its potential for viral amplification, the damage to the school’s reputation and future recruitment efforts could be substantial. To forestall such an outcome, the school would do well to continually monitor student satisfaction levels and take steps that improve those levels, especially on behalf of students in this category. Should such efforts fail, follow-up actions to mitigate the consequences of their disaffection would certainly be in order.

Figure 1
Satisfaction-Retention Matrix

<i>Satisfaction</i>	SATISFIED	LESS THAN SATISFIED
<i>Retention</i>	A "Loyalists" <i>Satisfied Staying</i>	B "Hostages" <i>Less than Satisfied Staying</i>
STAY		
LEAVE	C "Mercenaries" <i>Satisfied Leaving</i>	D "Defectors" <i>Less than Satisfied Leaving</i>

The following comparisons and transitions in the matrix merit special attention and study:

- A → B: Among persisters, what are the demographic and attitudinal differences between satisfied and less than satisfied students?
- B → D: Among less than satisfied students, which students stay versus dropout, and why?
- A → D: What are the differences between satisfied current students and dissatisfied dropouts?

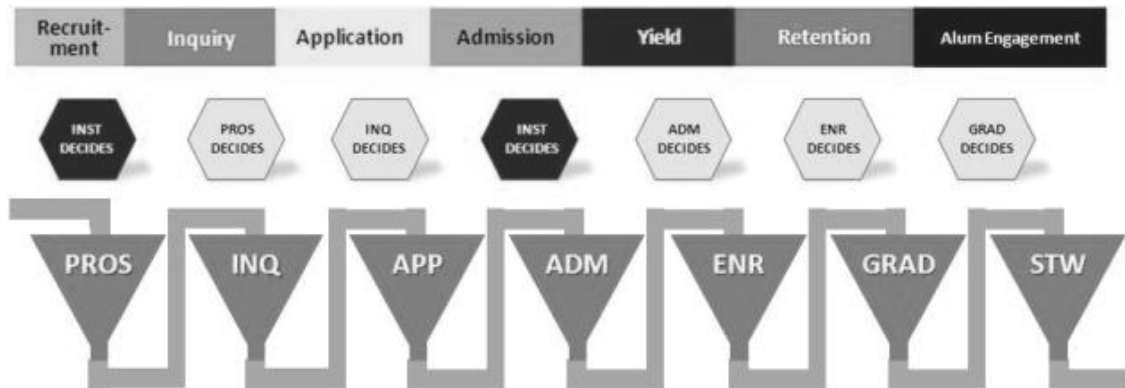
The concepts behind the Satisfaction-Retention Matrix should be thought of as extending beyond graduation. Figure 2 shows a Multiple Funnel Model depicting a series of funnels that encompasses a student's entire lifespan in relation to an institution. (Maguire, Butler, et al., 2008) The recruitment phase begins when an institution contacts prospects through a direct mail or "search" campaign or when prospective students express interest in the institution as inquirers. The recruitment phase ends after students apply to the institution and is followed by the admission, yield and retention phases. This lifespan continues beyond graduation into what might be called a stewardship or alumni engagement phase when, as an alumnus, the former student becomes an ongoing source of institutional support. The model illustrates the complex evolving nature of the student-college relationship and emphasizes student engagement and retention as an important component of a well functioning system:

On the principle that your most valuable (and least costly to acquire) 'customers' are those you already have, efforts to retain them through graduation – and beyond, as alumni supporters, donors and parents of future students – become essential components of any lifespan approach to Enrollment Management. Thus, 'student engagement' has emerged as an increasingly popular theme, especially as it impacts student retention. (Maguire, Butler, et al., 2008)

Bay and Daniel (2001) argue that institutions of higher education should not regard the student as the "customer" but as "collaborative partner":

Viewing the student as a partner rather than a customer allows for the recognition of a multifaceted relationship between the student and the institution and may be effective in informing efforts to improve that relationship not only during recruitment, but during the entire period in which the student is enrolled and beyond.

Figure 2
The Multiple Funnel Model of Enrollment Management



Instrument Design – What Does Your Institution Want to Learn?

Asking for feedback from students is necessary to understand student satisfaction and retention and inform initiatives to enhance these areas at an institution. Among the first steps in any research undertaking is good instrument design. A key question to answer in preparation for this step is to be clear about the objectives of the research and what is it that you want to measure and learn. The typical objectives of student experience studies were outlined earlier in this paper. The core questions that should be considered for inclusion in student satisfaction and retention surveys are:

<u>Key Outcome Variables</u>	<u>Key Predictor or Explanatory Variables</u>
<ul style="list-style-type: none"> ▪ Overall, how satisfied are you with X University? ▪ How likely is it that you will complete your undergraduate degree at X University? <p><i>or</i></p> <p>To what extent have you considered leaving X University?</p> <ul style="list-style-type: none"> ▪ If you were able to go back to when you chose a university, knowing what you know now, would you choose to attend X University again, choose to attend another university, or not go to university at all? 	<ul style="list-style-type: none"> ▪ Demographic/socioeconomic characteristics ▪ Attitudes/opinions about X University on specific areas within: <ul style="list-style-type: none"> – Affordability/value – Resources – Academics – Faculty – Supporting/advising services – Preparation for the future – Social life – Extracurricular activities – Educational goals

A constant challenge in instrument design is achieving the right balance between breadth and length. One technique that can be used to achieve greater parsimony in surveys is to measure “derived” rather than “stated” importance:

- **Stated** importance is measured at the individual level and simply means asking respondents to state how important an attribute is to them. While it is the simplest and most direct method, stated importance may be misleading and often everything is rated as important by students.

- **Derived** importance, on the other hand, is measured at a group level. It is calculated by correlating satisfaction on particular attributes with another measure such as an overall satisfaction rating. The derived approach will uncover items which are most important to the satisfaction of students and will not always be the same features students themselves identify as being important. Rather, they would be the ones which, if improved, are most likely to increase overall satisfaction. However, satisfaction ratings with small standard deviations will not be correlated with dependent measures, or vice versa.

Finally, it is worth noting that one survey may not fit all student audiences and different surveys may need to be designed for different enrolled student groups – undergraduate, graduate, non-traditional – as these audiences will likely have very different priorities and expectations for their educational experience. It is advisable to include a core set of questions across the multiple instruments so comparisons can be made across the audiences to understand the similarities and differences across them.

Best Practices in Current Student Data Collection

The primary goal of any data collection endeavor is to attain a sample with good representation that is large enough for planned analyses. With over 43 current student surveys administered in the last eight years, Maguire Associates has developed the following best practices in administration of our surveys:

- **On-line Administration** – Most high school and college or university students in the United States are regular and adept users of the Internet, so researchers who hope to use the Internet to administer surveys to prospective and current college students have fewer obstacles to overcome in their use of this technology for collecting data than do business and consumer researchers.

The on-line research approach involves inviting students to visit a Web site to complete an electronic questionnaire. One of the advantages of this approach is that one can collect large samples cost-efficiently – and the larger sample sizes bring increased power to segmentation and multivariate analyses. This methodology is also faster than traditional collection techniques and elicits more candid feedback. Table 3 details the advantages and disadvantages of on-line and other data collection methodologies (adapted from Scholder, McNiece, Gearan, and Casey, 2001).

- **Sampling and Recruitment** – As this type of research is often a form of outreach to the student body, we typically recommend inviting all students at an institution to participate. Invitations are disseminated via email as most colleges and universities in the U.S. provide students an institutional e-mail account upon orientation or registration and communicate with them regularly via this medium. Survey invitations include an overview of the purpose of the research and instructions for logging onto a designated Web site. Typically some type of incentive is offered. For current students a prize drawing is adequate incentive; for voluntary dropouts we recommend per survey payments.

Table 3
Top Advantages and Disadvantages of Data Collection Methods

Method	Advantages	Disadvantages
Internet or On-line Survey	Larger sample sizes are more manageable, less costly to collect and process, and facilitate more sophisticated analyses Can customize and use complex skip patterns Shorter turnaround time 24-hour access to respondents Best ability to incorporate visual stimuli or dynamic content (video) Not subject to interviewer bias Respondents work at their own pace or return later Collect more in-depth verbatim responses Environmentally friendly	Not necessarily the lowest in cost (for simple questionnaires with few questions, the Internet is often a more expensive method) Sampling limitations (availability of e-mail addresses) Lose ability to probe and clarify on open-ended responses or explain ambiguous questions Often need to offer incentive to boost participation
Mail Survey	Some ability to incorporate visual stimuli Not subject to interviewer bias Respondents work at their own pace	Sequence bias as respondents can see the entire questionnaire as they respond Limited ability to customize and include skip patterns in survey Not environmentally friendly Lose ability to probe and clarify on open-ended responses or explain ambiguous questions Handwriting problems Longer turnaround time
Phone Survey	Can customize and use complex skip patterns Response rates are often higher Sequence of questions easily changed	Increasing respondent non-compliance Cannot include dynamic content or visual stimuli Often the most expensive method Difficult to establish representative sampling frame due to unlisted numbers Subject to some degree of interview bias

- **Response Rate** - We have records for forty-three (43) surveys of current students we have conducted since 2000 for a variety of private and public higher education institutions across the United States. Analysis was undertaken on these records in order to better understand response rates and their relationship with other variables. Due to missing data 12 of the 43 records were excluded from this analysis, leaving 31 survey records for our analysis which represent 22 undergraduate surveys and 9 graduate surveys for 24 different colleges and universities.

Response rates among undergraduate students range from 11% to 45% with an average of 25%. In contrast, response rates among graduate students are somewhat lower, ranging from 7% to 34%, with a mean of 21%.

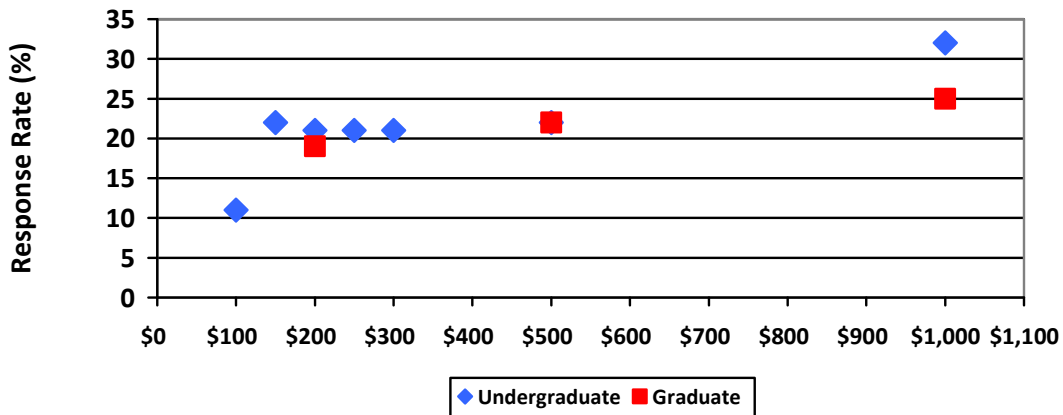
Further analysis was undertaken to understand other factors that might contribute to variations in response rates. Specific variables we examined include:

- Setting (urban, suburban, rural);
- Religious affiliation (has an affiliation, does not have an affiliation);
- Timing of the data collection;
- Incentives; and
- Students' overall satisfaction levels and self assessed likelihood of graduating.

With relatively small sample sizes it is difficult to achieve statistical significance; however, one interesting finding regards the top prize amount offered (Figure 3). We found that when just the top prize offered is examined in relation to response rates, a significant positive

correlation is revealed ($r = .413$, $p\text{-level} = .045$), indicating that offering a higher top prize seems to have a positive impact on participation.

Figure 3
Response Rate by Top Prize Amount



Data Analysis and Reporting – Highlighting Selected Research Results

In this next section, we share selected data and findings from our satisfaction and retention studies and summarize some of the methods that we have found to be most useful in converting research results into insights for decision-making. Results from segmentation analyses and modeling are highlighted in addition to summarizing baseline measures of overall satisfaction and likelihood of graduation.

Overall Satisfaction. Often the first step in understanding the results of a research undertaking is to examine the top line or univariate findings. One key measure in student experience studies is students’ overall satisfaction with their college or university experience. This is often asked of currently enrolled students as well as voluntary dropouts. The box plot in Figure 4 summarizes the median, quartiles and extreme values of overall satisfaction we have observed across 35 different surveys. Among undergraduates, the mean is 5.16 with a range of 4.61 to 5.65 (on a 7-point scale where 1 = Not at all satisfied and 7 = Very Satisfied). Among graduate students, the mean is 5.45 with a range of 4.83 to 6.16. Independent t-test analysis reveals a statistically significant difference ($p\text{-level} = .017$), indicating that the graduate students in our studies have tended to report higher overall satisfaction ratings than undergraduate students.

Likelihood of Graduating. Another question that is often valuable to ask currently enrolled students is: How likely is it that they will complete their undergraduate degree at their current institution? The box plot in Figure 5 summarizes the median, quartiles and extreme values of students’ self-assessed likelihood of graduating across 22 different surveys. Among undergraduates, the mean is 6.40 with a range of 5.86 to 6.64 (on a 7-point scale where 1 = Not at all likely to 7 = Definitely). Among graduate students, the mean is 6.51 with a range of 6.25 to 6.76. T-test analysis reveals no statistically significant difference between the two groups ($p\text{-level} = .283$).

Figure 4
Summary of Overall Satisfaction across 35 Surveys

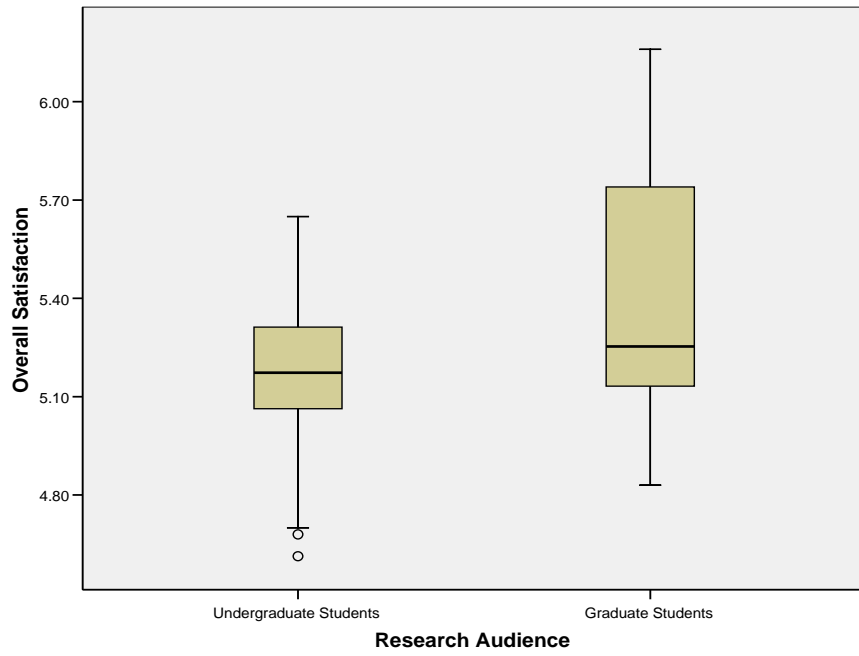
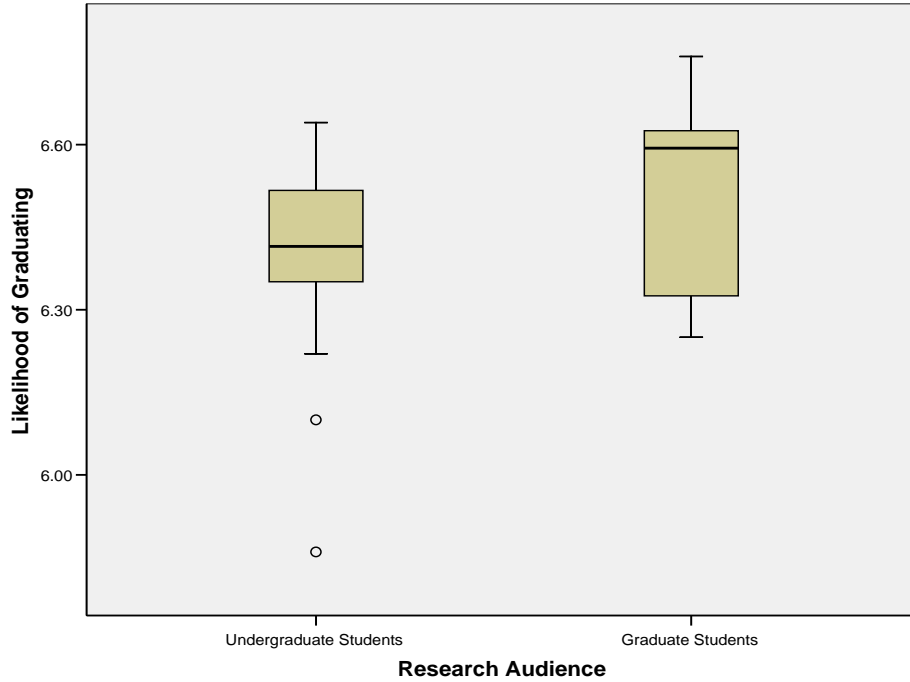


Figure 5
Summary of Likelihood of Graduating Across 21 Surveys



Satisfaction by Likelihood of Graduating. While top-line survey findings are often a good first step in understanding research results, further analysis is necessary to understand the interrelationships between variables and the demographic and behavioral or attitudinal factors that are related to overall satisfaction and retention. Figure 1 referenced earlier in this paper displayed the Satisfaction-Retention Matrix in which student' overall satisfaction is plotted against their persistence. This provides a framework for data analysis.

Specifically, among current students, it is useful to cross-tabulate overall satisfaction and students' self-assessed likelihood of graduating. Cross-tabulation of these data for one college is displayed in Table 4, revealing that 27 of the 190 responding students (14%) are dissatisfied but say they are likely to graduate, while one student is satisfied yet unlikely to graduate.

Table 4
Overall Satisfaction by Likelihood of Completing Undergraduate Degree

		Likelihood of Completing Undergraduate Degree						Total
		1 = Definitely will Not Graduate	3	4 = Neutral	5	6	7 = Definitely Will Graduate	
Overall Satisfaction	1 = Extremely Dissatisfied			1			2	3
	2	1				1	11	13
	3	1	3	1	2	1	10	18
	4 = Neutral			4	1	4	16	25
	5			2	3	8	27	40
	6		1	1	5	4	62	73
	7 = Extremely Satisfied					1	17	18
Total		2	4	9	11	19	145	190

If surveys of both currently enrolled students and voluntary dropouts are conducted, cross-tabulation of overall satisfaction by student group is often valuable to understand profile and attitudinal differences among the students. Figure 6 shows data that confirms that not all students who drop out are dissatisfied with their overall experience, and not all persisters are satisfied. At this institution, 29% of currently enrolled students gave an overall satisfaction rating of '5' or below on the 10-point scale and 32% of voluntary dropouts gave a score of '6' or higher on the same scale.

Figure 6
Overall Satisfaction of Current and Former Students

	Currently Enrolled Students	Voluntary Dropouts
	% Total	% Total
Satisfaction Rating of 6-10	71.3%	32.2%
Satisfaction Rating of 1-5	28.7%	67.8%

Scale: 1 = Very Dissatisfied to 10 = Very Satisfied

First-choice Institution. In the United States, students do not always enroll at their first choice school. Top reasons include not being admitted or not receiving enough financial assistance to be able to afford to enroll there. This is a variable of interest as students tend to be less satisfied if the school they are attending was not their first choice (Figure 7a). We have observed quite a range in the percent of students who say the school they are enrolled at was their first-choice institution. Indeed, at least 18% of the students are not enrolled at their first-choice school across the 16 colleges and universities displayed in Figure 7b.

Figure 7a
Overall Satisfaction by
Whether or Not Student is Enrolled at their First-Choice School

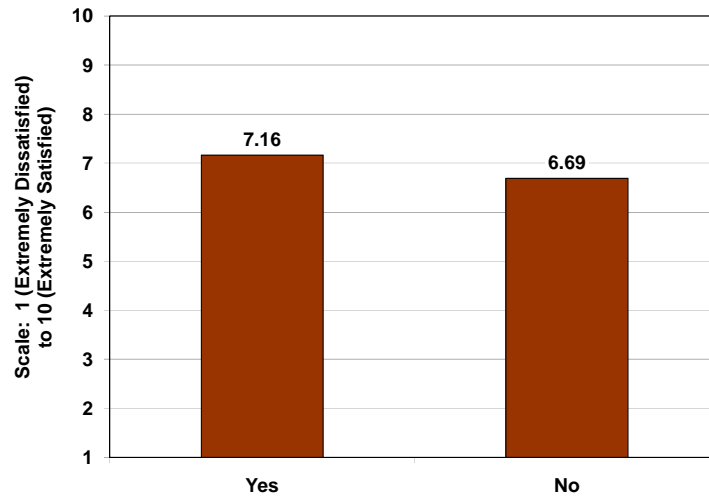
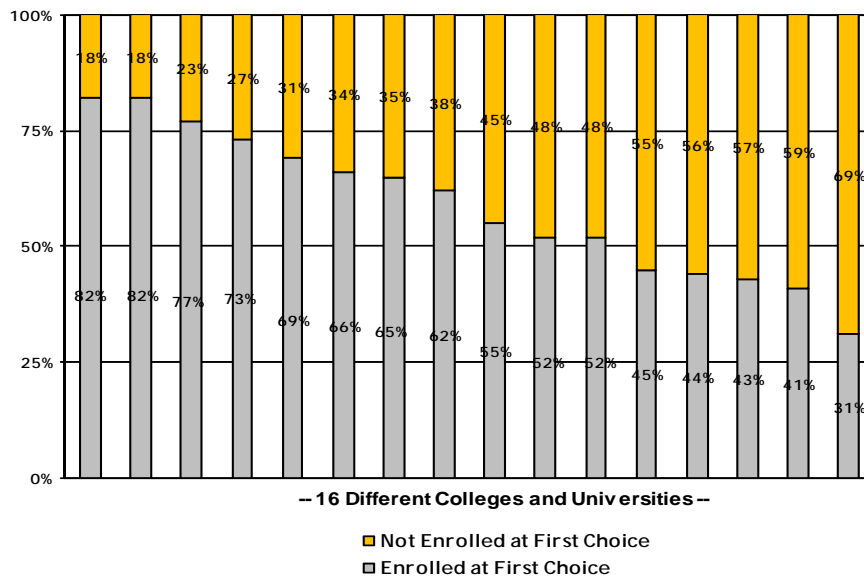
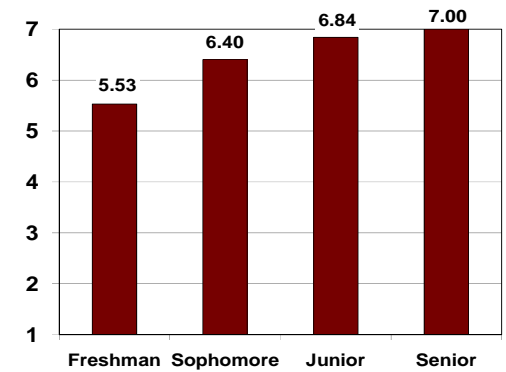


Figure 7b
Percent of Undergraduate Students at 16 Different Colleges and Universities
Who are Enrolled and Not Enrolled at their First-Choice School



In-depth Segmentation Analysis. In segmentation analyses, research results are broken out by important subgroups (such as overall satisfaction, likelihood of graduating, class year or semester, gender, etc.) to provide further insights into the attitudes and experiences of important target audiences. Class year, for example, is often an important variable to consider in examining the results of any student experience study. Figure 8a illustrates that likelihood of graduating, not surprisingly, tends to increase as students progress. On the other hand, we sometimes find that satisfaction tends to decline on some measures as students progress at an institution (Figure 8b). This is often an indication of some expectations versus performance gaps.

Figure 8a
Likelihood of Graduating by Class Year



Scale: 1 (Definitely Will Not Graduate) to 7 (Definitely Will Graduate)

Figure 8b
Satisfaction by Class Year

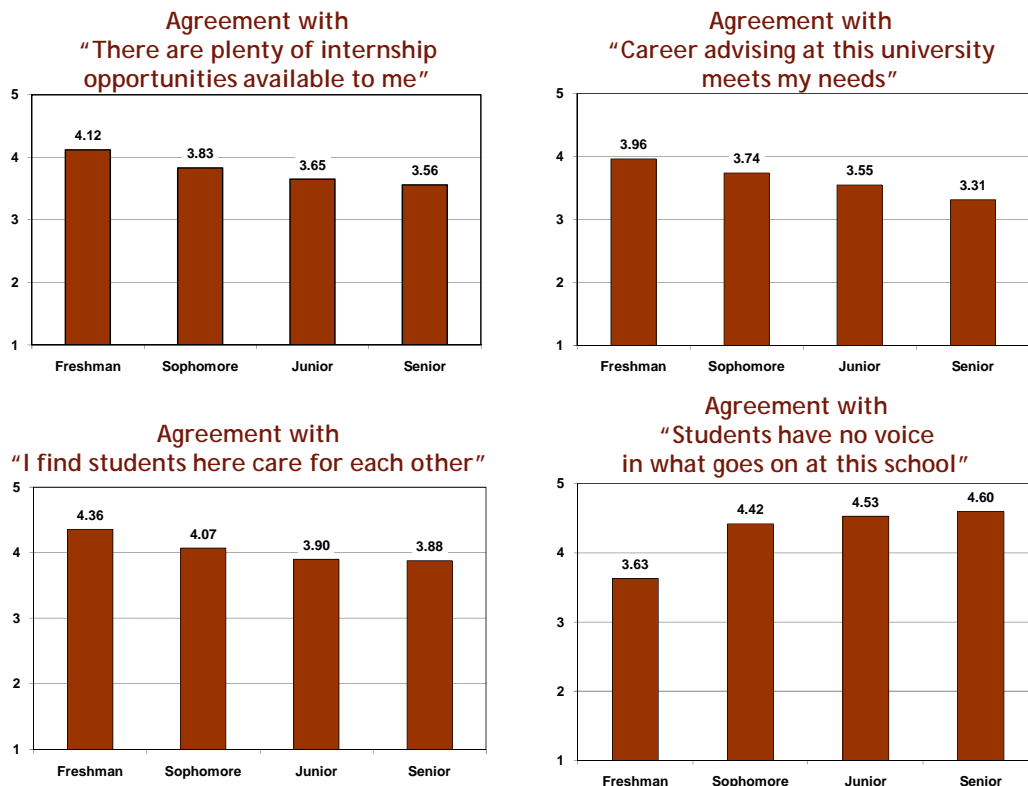


Table 5 shows the results of segmentation analysis conducted to examine whether there exists any demographic differences between current and former students for one institution. These results reveal a demographic profile of withdrawn students that differs from current students in important ways:

- Students who had voluntarily withdrawn from the university are slightly more likely to be **male** (46% vs. 36% of current students), **Caucasian/White** (75% vs. 69%), and report a family income of **\$60,000 or more** (53% vs. 44%). Also, dropouts tend to report lower high school grade point averages (61% vs. 53%).
- The withdrawn students tend to live farther away from the university: a higher percentage of current than former students says their home is **50 or fewer miles** (65% vs. 57%).

Table 5
Demographic Profile of Current and Former Students

	Current Students n ~ 1,200	Former Students n ~ 150
<i>Distance of Home from School</i>		
50 or fewer miles	64.9%	56.7%
<i>Gender</i>		
Male	35.5%	46.2%
<i>Ethnicity</i>		
Caucasian/White	68.6%	74.8%
<i>Family Income</i>		
> \$60,000	44.4%	52.5%
<i>High School Type</i>		
Public	78.9%	82.5%
<i>High School GPA</i>		
3.50 or higher	34.9%	23.8%
3.00-3.49	37.1%	41.3%
Below 3.0	16.2%	19.6%

Attitudinal and experiential differences between students are also important to examine. Table 6, for instance, shows differences in students’ quality assessments of their university on selected features by overall satisfaction. As we often see in this type of research, this table reveals that more satisfied students tend to give the university more favorable evaluations of the institution than do less satisfied students. Multivariate techniques such as regression analysis allow us to better understand which of the myriad institutional features a college or university should focus on to most influence outcomes such as satisfaction and persistence.

Regression analysis is a powerful analytic tool used to examine the predictive relationship between an outcome and several independent or predictor variables. It allows one to go beyond what students tell us to what actually influences their decisions and motivates their behaviors and decisions. It quantifies the contributions of the potential “drivers” of these behaviors, and at times, uncovers subtle but notable effects that are not apparent when looking at the overall means and frequencies or the results of market segmentation.

In student experience studies, we typically use regression analysis to learn which educational priorities and image impressions are most predictive of current students’ satisfaction with their overall experience at, and likelihood of graduating from, an institution. Each institution is unique, and regression analysis helps identify those drivers specific to each school.

Table 6
Independent T-Test Analysis of Quality Ratings of a University
on Characteristics by Overall Satisfaction

	Overall Satisfaction		Significant Differences
	More Satisfied	Less Satisfied	
	(1)	(2)	
Total Costs (tuition, room and board, and other expenses)	2.94	2.22	1>2
Availability of Financial Aid to Meet Need	2.95	2.27	1>2
Attractive Campus	4.24	3.72	1>2
Geographic Location	4.01	3.41	1>2
Social Life	3.40	2.64	1>2
Prestige of College or University	3.59	2.87	1>2
Size of Student Body	3.62	3.11	1>2
Diversity of Student Body	3.49	2.92	1>2
Sense of Campus Community	3.10	2.25	1>2
Access to City	3.92	3.57	1>2
Academic Reputation	3.71	2.98	1>2
Quality of Major	4.14	3.48	1>2
Interdisciplinary Courses/Majors	3.79	3.15	1>2
Academic Facilities (library, computers, classrooms, labs, etc.)	3.97	3.47	1>2
Close Contact with Faculty	3.64	2.91	1>2
Preparation for Graduate/Professional School	3.52	2.80	1>2
Availability of Majors/Programs	4.03	3.37	1>2
Value of Education (combination of quality and costs)	3.63	2.58	1>2
Area Surrounding Campus	2.76	2.19	1>2
Parents' Preference	3.26	2.75	1>2
Employment Opportunities After Graduation	3.52	2.83	1>2
Quality of Faculty	3.82	3.04	1>2
Ratings in Guidebooks/Magazines	3.18	2.51	1>2
Extracurricular Activities	3.33	2.69	1>2
Instruction Enhanced by Technology	3.49	2.99	1>2
Accreditation from National Professional Associations	3.50	2.91	1>2
Quality of On-Campus Housing	2.97	2.43	1>2
Small Class Size	3.65	3.16	1>2
Emphasis on Teaching Undergraduates by Professors	3.84	3.21	1>2
Undergraduate Research/Internship Opportunities	3.44	2.79	1>2
Quality of Students	3.20	2.47	1>2
Reputation of Alumni	3.34	2.80	1>2
Merit-Based Financial Aid	3.14	2.53	1>2
Varsity Athletics	3.06	2.70	1>2
Campus Safety and Security	3.20	2.65	1>2
Availability of an Honors College	3.44	3.03	1>2
Recreational Sports/Fitness Facilities	3.43	2.99	1>2

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Scale: 1 (Very Low Quality) to 5 (Very High Quality)

Notes: Bold indicates significant market segment differences ($p < .01$).

The example in Figure 9 illustrates the best-fitting model of students' overall satisfaction at a university using quality ratings for the institution as predictor variables. The analysis reveals that students who rate the university more highly for ratings in guidebooks, value of education, quality of students, social life, and campus safety and security tend to be more satisfied with their experiences there. In other words, of 36 variables tested for quality at this institution, students' experiences in these five areas combined have the most impact on their overall satisfaction. This is a rather simple example; demographic and other attitudinal assessments can be incorporated into a model to better understand the multivariate factors that go into students' decision making.

Logistic regression can also be used to analyze transitions in the Satisfaction-Retention Matrix. Figure 10 shows the results of one such analysis.

Figure 9

Multiple Regression Analysis
 Predictive Model of Overall Satisfaction
 Using Quality Ratings on the College Characteristics

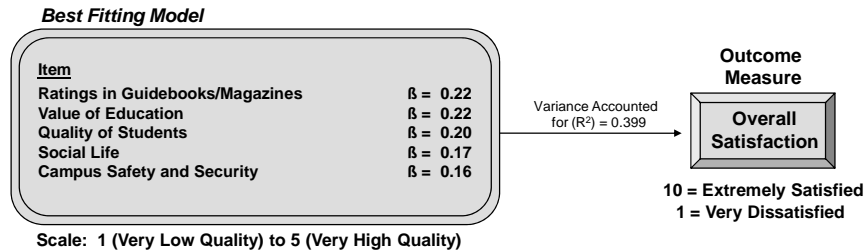


Figure 10

Satisfaction-Retention Matrix

		Satisfaction	
		SATISFIED	LESS THAN SATISFIED
Retention	STAY	A <i>Satisfied Staying</i>	B <i>Less than Satisfied Staying</i>
	LEAVE	C <i>Satisfied Leaving</i>	D <i>Less than Satisfied Leaving</i>

A → B, B → D, A → D

- The following variables are in model for all three transitions:
 - ▶ Quality of students
 - ▶ Quality of major
- The following variables are in model for two out of three transitions:
 - ▶ Parents' preference (A → B, B → D)
 - ▶ Value of education (A → B, A → D)

A → B, B → D, A → D

- The following variables are in model for two out of three transitions:
 - A → B & A → D**
 - ▶ Felt school was not worth the money
 - ▶ Disliked atmosphere on campus
 - ▶ Did not feel the school cared about me
 - D → B & D → A**
 - ▶ Wanted to attend a school farther from home
 - ▶ Conflict between job and studies
 - ▶ Found courses too difficult
 - ▶ Concerned about safety and security

From Research to Action

Research reveals the factors that contribute to satisfaction/dissatisfaction and retention; however, the ultimate goal of this type of research is to translate insights into new initiatives. We find it is often helpful to think of, and organize, recommended actions that are suggested by the research in a thematic fashion such as by academic community, future outcomes, campus atmosphere and student life, value and affordability, location, etc.

One recommendation that we almost always make is that the results of this type of research should be shared with current students, faculty, and staff. An institution makes a substantial commitment in conducting research. In order to reap the full benefits of this investment, it should communicate the results back to the community. Public forms of communication might include a “town meeting” with students, an article in a student newspaper, and/or references to the findings at faculty and staff meetings. These communications should include actions that have already been taken as well as challenges and plans for the future.

Conclusion

There is no substitution for timely feedback from current students in understanding student satisfaction levels and informing initiatives to enhance retention and the student experience. The drivers of satisfaction will be unique to each institution and can change over time. Customized, well-designed research is vital, and satisfaction and retention levels should be reassessed on a regular basis at educational institutions. The health and vitality of an institution is founded on not only its ability to attract and retain desired students through graduation, but also beyond, as alumni supporters, donors, and parents of future students.

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