

UNDERSTANDING BUSINESS STUDENT SUCCESS AND SATISFACTION IN HIGHER EDUCATION – AN EXPLORATORY STUDY

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ABSTRACT

The paper presents preliminary results from an exploratory study measuring business student success and satisfaction at the end of their undergraduate degree. In addition to measuring satisfaction with specific aspects such as students' major, minor and student organization, general satisfaction levels were measured as well. Student success was measured in terms of employment and salary levels or admission to graduate school. The purpose of the study was to explore the relationships between student involvement, student success and satisfaction.

STUDY OF PROGRAM EFFECTIVENESS

More than any time in the history of higher education, colleges and universities are being asked to be accountable to various constituencies for the quality of their educational programs (Kuh, Kinzie, Schuh, & Whitt, 2005). Education Secretary, Margaret Spellings, has threatened federal intervention if the higher education institutions do not help students evaluate their effectiveness (Basken, 2008). In light of escalating college tuitions, especially at private institutions, and the criticality of good higher education in the intensely competitive global world, stakes are high for the American society, students and their loved ones who support and sponsor them (The Spellings Report, 2006). The federal and state agencies as well as accreditation bodies are seeking concrete evidence of program effectiveness. It is hard for any respectable program to ignore the pressures for measuring student satisfaction, achievement and success.

Background Information

The exploratory study was conducted at a business school of a mid-western private comprehensive university.

In order to measure the success of its undergraduate students, the Business College implemented a one credit hour assessment course for the seniors. In this course, the students completed an ETS (Educational Testing Service) major field test, a writing essay, an individual presentation, as well as a portfolio of their accomplishments. It was part of a competency development framework implemented through business core courses in a four year degree program. Prior to the course, it was difficult to find a common time for the students to complete these assignments and there was no incentive for the

students to perform well on the assignments. The course did address the concern about time but it did not provide significant motivation to all students for a better performance. It became evident that at this later stage in their academic careers, the students did not see it very beneficial to document or demonstrate these competencies as an academic exercise. Moreover, the data was neither generating any significant debate nor any action in the College for programmatic improvements. The individual academic departments did not seem to have a stake in these outcomes.

To improve upon the existing status-quo, on an experimental basis, an additional survey was designed and conducted (see Appendix 1). The goal of the survey was to measure student satisfaction and student success in a succinct fashion. Satisfaction with various specific aspects of academic life was measured but two summary questions captured general satisfaction levels. This is not an uncommon practice in social sciences. Success was measured in terms of employment and salary levels or graduate school admission. These are the most commonly stated goals of college students. Also, these success measures resonate with the individual departments more clearly (e.g., statements such as, "We are a great ABC department because X percent of our students find jobs at an average salary of Y dollars," can be used to market programs). In addition, students' GPA was considered a measure of their academic success. Students were asked to identify their involvement in College events, internship programs and the College student organizations to understand the determinants of student success and satisfaction. The determinants could guide corrective actions or future resource allocations. Above all, none of these measures required additional performance tests on the part of students and thus solving the issue of student motivation. Here are the key questions the study explored:

1. Is student satisfaction specific to individual aspects or are various aspects of satisfaction correlated with each other as well as overall satisfaction?
2. Is student satisfaction related to students' success (i.e. GPA, employment status)?
3. Is student satisfaction related to their involvement in college activities, student organizations or internships?

Sample

A total of 62 graduating senior students completed the survey in spring 2008. As per the University registrar, there were a total of 87 total qualified business graduates for the May commencement. Hence, the sample is a significant portion of the entire population. The sample was evenly split between males and females. Fifty percent of the students had secured employment and 3% were going to graduate school. Six students noted receiving a signing bonus ranging from \$1,500-\$5,000. Similarly, 50% of the students noted that they had participated in internships. The mean student GPA was 3.2 (SD .397). Students represented six different majors as noted in the table 1 and descriptive statistics for student satisfaction are provided in table 2.

TABLE 1
Sample by majors (N=62)

Major	count
Accounting	9
Business Management	16
Economics	1
Finance	12
Hospitality Management	3
Marketing	19
Management Information Systems	2

TABLE 2
Mean of student satisfaction variables

Satisfaction with	N	Minimum	Maximum	Mean	Std. Deviation
College Experience	62	3	5	4.44	.590
Major Curricula	62	2	5	4.26	.745
Minor Curricula	56	1	5	4.02	.944
Core curricula	62	1	5	3.85	.846
Student Organizations	62	2	5	3.89	.791
Events/Speakers etc.	62	2	5	3.94	.807
Academic Advising	62	1	5	4.03	.991
Staff/Administration	62	3	5	4.34	.599
Faculty	62	3	5	4.27	.632
Valid N (listwise)	56				

Results

In order to understand the content of student satisfaction, two types of analyses were performed – matrix of correlations (table 2) and factor analysis (table 3).

TABLE 3

Pearson Correlations among satisfaction variables
(n=62)

Satisfaction With	College Exp.	Major Curr.	Minor Curr.	Core Curr.	Event s	Advising	Faculty	Staff	Orgs.
College Experience	1								
Major curricula	.560**	1							
Minor Curricula	.372**	.391**	1						
Core Curricula	.424**	.476**	.491**	1					
Events/speakers	.439**	.192	.374**	.490**	1				
Academic Advising	.256*	.210	.322*	.318*	.249	1			
Faculty	.378**	.230	.113	.290*	.421**	.221	1		
Staff/administration	.364**	.168	.180	.390**	.521**	.313*	.747**	1	
St. Organizations	.528**	.300*	.339*	.391**	.681**	.297*	.260*	.359**	1

**p<.01

*p<.05

Noteworthy trends in this matrix are: (a) as expected, students' overall satisfaction is related to all the key subcomponents of satisfaction in the survey; (b) Student satisfaction with College faculty, however, is not related to student satisfaction with their curricula in major, minor or academic advising; (c) understandably, student satisfaction with their major or minor curricula is not related to their satisfaction with the College staff and administration.

Factor analysis of the student satisfaction with their major, minor and College core curricula, College events and organizations as well advising, faculty and staff provide further insight. Principal Components analysis, using the Varimax rotation results in two factors with Eigenvalues greater than 1. Satisfaction with major curricula, minor curricula and core curricula decisively load on the first factor with values greater than .71. This factor explains 44.7% of the total variance. Satisfaction with guest speakers/lectures/events, staff and faculty decisively load on the second component with values of .68, .90 and .86 respectively. Satisfaction with advising load on the first component with values of .50, but satisfaction with student organizations had very similar loading values on both factors. The second factor explains an additional 16% of the variance.

TABLE 4

Varimax Rotated Component Matrix

Satisfaction with College's	Component 1	Component 2
Major Curricula	.714	.037
Core Curricula	.741	.333
Minor Curricula	.796	.027
Events/speakers/lectures	.439	.682
Staff & Administration	.127	.896
Faculty	.037	.856
Academic Advising	.501	.255
Student Organizations	.534	.507

These analyses suggest that students view curricula and personnel as somewhat distinct and unrelated aspects of their satisfaction. In the future analyses, construction of two satisfaction scales may be in order. In this paper, overall satisfaction with the College of Business is used for other analyses as it is highly correlated with all the other measures of satisfaction.

Student success can be categorized into academic success as measured through their GPA. Their applied success can be measured through employment status (if they already had a job), their salary level and the amount of their bonus. The correlation between student GPA and their satisfaction with the overall College was insignificant ($r=.112$, $n=62$). Actually, their GPA was not significantly related to any of the satisfaction variables. The student means on their overall College experience were very similar regardless if they had job, were still looking for a job or were going to graduate school (see Table 4). Interestingly, the scores of the two students going to graduate school were the highest and the mean of the group that had jobs was higher than the group that did not have jobs. One Way ANOVA showed no statistically significant differences, however, between and within employment groups ($F=.969$, $p=.386$) for satisfaction with the College experience.

TABLE 5

Satisfaction with Overall College Experience and Employment Status

Employment	Mean	N	Std. Deviation
Have a job	4.43	30	.626
Still Looking	4.40	30	.563
Grad School	5.00	2	.000
Total	4.44	62	.590

Similarly, satisfaction levels were not statistically different among the groups with various salary levels (Table 5). As per One Way ANOVA, the differences between and within groups were significant at .07 level ($F=2.457$). It is, however, interesting to note that satisfaction levels increase with the salary levels except for the group with the highest levels of salary.

TABLE 6

Satisfaction with Overall College Experience and Salary Level

Salary Level	N	Mean	Std. Deviation
\$30,000 or less	3	3.67	1.155
\$30,001- 40,000	12	4.33	.492
\$40,001-45,000	6	4.67	.516
\$45,001-49,999	3	5.00	.000
\$50,000 or more	7	4.43	.535
Total	31	4.42	.620

In response to our last question, students' overall satisfaction with College was compared between groups of students who had experienced internship and those who had not. The sample was evenly split between the two groups and their mean was almost identical (4.45 and 4.42 respectively). Only five students out of 62 had participated in a shadowing experience, and comparing the two groups would not have resulted in reliable results. Twenty students noted participating in one or more of the College events, and their mean, while higher, was not statistically significant from those who did not indicate participating in the student organizations (4.50 and 4.40 respectively). Similarly the mean satisfaction of students who participated in student organizations (mean 4.5, n=34) was higher than those who indicated no participation (mean 4.36; n=28) but the differences were not statistically significant.

Summary

At a time when there is great deal of pressure to document the effectiveness of academic programs, this paper has yielded some interesting insights. The students expressed high levels of satisfaction with their overall experience in the College of Business as well as with other specific aspects such as curricula, extra-curricular activities and personnel. Student satisfaction, however, was not significantly correlated with their academic success, their employment status or their salary levels. The directionality of the means was as expected, however. Similarly, it was a surprise that overall satisfaction did not have statistically significant correlation with students' involvement in organizations, College events and even internships. Again, the directionality of the means was in the expected order though the group with the highest salary levels was the exception.

Various explanations are possible for lack of significant results. Students may be happy to be graduating and satisfaction levels are reported at such high levels by most students that there is not sufficient variance in the data. Also, having students complete the survey as a class assignment in the assessment course may have yielded a perfect response, but it might not have captured the range of their sentiments. The study is very exploratory and has its limitations. Follow-up and further analyses are warranted.

APPENDIX

Graduating Seniors Questionnaire

Name _____ Graduation Date _____
Major _____ Minor _____
E-mail after graduation _____ Phone Number _____
Permanent address _____

Employment status (circle one):

- a) Have a job.
Title _____
Employer _____
Address _____

- Did you receive multiple offers? Yes or No If yes, how many? _____
- b) Still looking for a position.
- c) Going for advanced education.
Degree/Education _____
School _____

Starting salary range if you already have accepted a position:

- \$30,000 or less
 \$30,001 – 40,000
 \$40,001 – 45,000
 \$45,001 – 49,999
 \$50,000 or more

Signing bonus (if applicable) \$ _____

Did you participate in any of the following while at AU (check all that apply):

- Internship
 Shadowing experience
 The Magic of Business, Meet the Accountant Night or a Workshop/Event of the Burton D Morgan Center
 SIFE, Delta Mu Delta, Eagle Investment Group, IMA Accounting Club, AMA or any other COBE student organization.

Are you planning on sitting for an accounting certification, investment (series 6, 7 etc.) or insurance licensure (Life, Health etc.) or any other professional certification within the next year? Yes or No

If yes, list which ones _____

Do you plan on continuing with a graduate degree at some point? Yes or No
 If yes, circle which degree

- a. Master in Business Administration – General
- b. Master in Business Administration – Accounting concentration
- c. Master of Accountancy
- d. Other _____

How satisfied are you with the following:		Not at all Satisfied		Neutral		Very Satisfied
1)	Overall experience in the Dauch College	1	2	3	4	5
2)	Curricula in your major	1	2	3	4	5
3)	Curricula in your minor	1	2	3	4	5
4)	COBE's core courses	1	2	3	4	5
5)	COBE's student organizations	1	2	3	4	5
6)	COBE's guest speakers, lectures and events	1	2	3	4	5
7)	Academic advising	1	2	3	4	5
8)	COBE staff and administration	1	2	3	4	5
9)	COBE faculty	1	2	3	4	5

Would you recommend Dauch College of Business and Economics to a relative or a friend?

- 5 Most definitely – with enthusiasm
- 4 Yes
- 3 Yes, but with some reservations
- 2 No
- 1 I would recommend against it

Additional comments:

Thank you!

REFERENCES

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(3) Kuh, G., Kinzie, J., Schuh, J.H., Whitt, E.J. and associates. *Student Success in College – creating conditions that matter*. San Francisco, CA:Jossey-Bass, 2005.