Academic Preparation, Effort and Success: A Comparison of Student and Faculty Perceptions

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In the spring of 2003, a survey was conducted to examine the differences in perceptions of academic rigor and engagement between faculty and undergraduate students at a small, liberal arts university in the Midwest. Although a sample bias in the student responses (students with higher GPAs had a higher tendency to respond) precluded a number of direct comparisons, a number of key inferences could be drawn. Faculty respondents correctly estimated the number of hours students spend studying outside of the classroom, and did not find this level of effort sufficient to obtain grades of A or B, while the student respondents achieving these grades with the level of effort predicted by faculty felt that their courses were reasonably challenging, and did not feel burdened with assigned out-of-class work. Although faculty respondents appear to recognize that a discrepancy between expected effort and grade assignments exists, they did not feel that they were a part of the problem. It would appear that in this instance, the greatest impediment to modifying grading practices to meet with stated expectations of effort will not be making faculty aware that a problem exists, but rather convincing faculty that they might be contributing to the problem.

The academic climate of institutions of higher education has been the focus of considerable research. Recent attention has focused on the disparity between expectations of academic effort conveyed by higher-education officials, and the effort actually required for students to be successful. Although most university officials inform incoming students that 2 hours of study outside of class will be required for every hour in class in order to obtain satisfactory grades, most students report substantially fewer hours of study outside of the classroom (National Survey of Student Engagement, 2000). Almost 60 percent of full-time college and university students are studying less than 15 hours outside of the classroom each week, and many of those students are not studying at all (National Survey of Student Engagement, 2000).

A comprehensive history of higher education reports a nationwide trend of undergraduates resisting the academic demands placed upon students by faculty and administration, and suggests a collegiate culture more focused on social than on academic activities (Horowitz, 1987). The resulting implicit and explicit negotiations between faculty and students to reach a collective consensus about how much effort should be required for academic success are undermined when students discover that far less effort than that suggested by faculty will result in satisfactory grades.

The present investigation measured the academic expectations of students and faculty in a Midwestern liberal arts university, with an enrollment approaching 6,000. The goal was to measure the academic expectations and opinions of both students and faculty, and to determine how attitudes toward academic preparation, effort, performance, and standards differed between students and faculty.

Methods

In the spring semester of 2003, separate questionnaires were delivered via an online delivery platform to a random sample of undergraduate students and to all faculty members who teach undergraduate classes at a liberal arts university in the Midwest, with an enrollment approaching 6,000 students. Admission is open at this institution for students that graduated high school prior to 2001, and for applicants over the age of 21. For students finishing high school during or after 2001, admission is contingent upon either completing a pre-college curriculum (4 units of English, 3 units of natural science, 3 units of math, 3 units of social sciences, and 1 unit of computer technology) with a minimum grade point average (GPA) of 2.0 on a 4.0 scale, achieving an ACT score of 21 or higher, or ranking in the top third of the students graduating from their high school class.

The questionnaire asked students and faculty whether they (or their students) felt they were living up to their academic potential, and whether high school had adequately prepared them (or their students) for university coursework. Students and faculty both were asked to rate, on a scale from 1 to 10, how academically challenging they thought that their (or their students) high school experience was, and how academically challenging their present institution is.

Students and faculty also were asked to respond on a Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree) to 3 statements describing the level of preparedness of professors for class, the level of concern professors expressed about students, the appropriateness of the amount of out-of-class work assigned, and 5

statements questioning whether professors should proceed with new material if not all of the students understand the present material, whether grades received (or assigned) accurately reflect student learning, the importance of general education courses, student motivation for enrolling in general education courses, and the academic standards of the professors.

Students and faculty also were asked to indicate how much time spent studying outside of class would be required to achieve a grade of A, and to achieve a grade of B. Students also were asked to indicate how much time they actually invested in studying outside of class, and faculty were asked to estimate how much time they felt that students actually spent studying. Students also were asked to indicate their actual GPA, and which of the 3 colleges (the College of Liberal Arts and Sciences, the School of Business, or the Teachers College) they were enrolled in as a major.

The type I error rate for all tests of significance, with the exception of the among-question correlations, was set at 0.05. They type I error rate for among-question correlations after Bonferroni correction was set at 0.0005.

Results and Discussion

Eighty-nine of the 248 faculty (36%), and 108 of the 352 students (31%) that were sent the survey completed the questionnaire. The distributions of both student (X^2=1.712; df=2; p=0.425) and faculty (X^2=4.03; df=2; p=0.133) respondents among the 3 colleges on campus did not deviate significantly from those expected based on the actual distributions of students and faculty on campus. The reported grade point average (GPA) of the student respondents (3.21) was significantly higher (single-sample z-score; $p<0.01$) than the institution-wide undergraduate GPA for that semester. Thus, it appears that there is a response bias for the student data, with the more academically successful students (in terms of GPA) having been more likely to respond.

The significant (after Bonferroni correction) among-question correlations indicated that the survey was internally consistent. The ratings of student and faculty respondents for academic standards of the faculty positively correlated with their ratings of how prepared faculty were for class (Pearson's Rho (student's/faculty): 0.312/0.512), how concerned faculty were for students (0.38/0.367), and the academic challenge of the institution (0.333/0.692). Ratings for faculty preparedness and concern for students also were positively correlated for both student and faculty respondents (0.667/0.588). For both student and faculty respondents, estimates of the number of hours of

study required to earn a grade of B covaried positively with the number of hours of study required to earn a grade of A (0.935/0.866), and indications/estimates of the actual hours that students spend studying (0.796/0.392). Student estimates of the number of hours of study required to earn a grade of A also positively covaried with their indications of the number of hours actually spent on studying (0.793). A positive correlation between the ratings of the academic challenge presented by the institution, and the ratings of the challenge offered by the high school experience (0.486/0.599) of the students also existed for both student and faculty respondents.

Significant (after Bonferroni correction) among-question correlations that were unique to the student respondents showed a positive correlation between reported GPA and the actual hours spent studying (Pearson's Rho: 0.386), student ratings of faculty concern (0.372), and how reflective student grades were of actual learning (0.386). Positive correlations also existed for student respondent rankings of how reflective grades were of learning and student rankings of faculty concern for the students (0.345) and the perceived value of general education classes. The only significant negative correlation between student responses was for student respondent rankings of the value of general education classes, and whether they enrolled in general education classes only because they were required to (-0.522). The only significant correlation unique to the faculty respondents was a positive correlation between their rankings of faculty academic standards, and their perception of how academically challenging the student's high school experience was (0.475).

Whereas 69 percent of the student respondents indicated that they were achieving their academic potential, only 22% of the faculty respondents felt that their students were reaching their academic potential. The aforementioned response bias precludes meaningful comparison of these numbers, because faculty respondents were generalizing about the student body as a whole, while the students with higher GPAs, who might, in fact, be reaching their potential, were more likely to participate in the survey. One conclusion, however, can be drawn from these results. Only a small proportion of the faculty respondents felt that their students are reaching their academic potential.

Although a significantly higher proportion (X^2=4.933, df=1, $p<0.05$) of faculty respondents from the Teacher's College felt that their students were achieving their academic potential, the GPAs and hours spent studying outside of class reported by the students of the Teachers College, did not differ significantly from those reported by

responding students from the College of Liberal Arts and Sciences, or from the School of Business (Table 1).

Table 1. Grade point average and study time of undergraduates by college.

Grade point average and study time by college		
	GPA	s.d.
Liberal Arts and Science	3.14	.54
School of Business	3.11	.66
Teachers College	3.38	.46
Average Number of Hours Spent Studying Outside of Class per Week		
	Study	s.d.
Liberal Arts and Sciences	8.68	6.50
School of Business	7.96	7.82
Teachers College	10.02	8.20

Responses for the question of whether high school prepared students for university classes followed a trend similar to that for the question pertaining to academic potential with 69.5% of the student respondents reporting that they were prepared, while only 31.5% of the faculty respondents felt the students were adequately prepared. The same response bias affects any comparison of these responses, but a similar conclusion arises. The majority of the faculty respondents do not feel that their students are adequately prepared for university classes.

Table 2. Student and faculty ratings of how academically challenging university and high school are including means, standard deviation and difference in means t tests.

University	m	s.d.	t
Students	6.65	1.52	6.68*
Faculty	5.04	1.88	
High School	m	s.d.	t score
Students	5.01	1.96	6.59*
Faculty	3.31	1.58	

***P<.01**

Although student respondents rated both their high-school experience and their current university coursework (on a scale of 1 to 10) as being significantly more challenging than was perceived by the faculty respondents, neither group of respondents rated either high school or the coursework at the institution in question as being

particularly challenging (Table 2). The perceived lack of challenge at the high-school level by the student respondents accords with recent research indicating that, although the amount of homework assigned to students in public schools in the United States has changed little in the past 50 years (Gill, 2003), only 5% of high school students report having more than 2 hours of homework assigned each night (Loveless, 2003).

Table 3. Student and faculty study time estimates means, standard deviations and difference in means t tests.

	Mean	s.d.	t
Study to earn A's			
Students	13.13	8.11	8.80*
Faculty	24.03	9.22	
Study to earn B's			
Students	8.94	6.35	8.50*
Faculty	18.44	9.21	
Actual Study Time			
Students	8.88	7.35	.77
Faculty	8.07	4.55	

***p<.01**

Although the apparent bias of students with higher GPAs being more likely to respond to the questionnaire does preclude a number of comparisons, there are a number of appropriate comparisons that can be made in order to better understand the differences in the perceptions of student and faculty respondents related to the academic challenges offered by the institution under investigation. Whereas faculty and student respondents differed significantly in their estimates of the number of hours of out-of-classroom effort that would need to be expended in order to earn a grade of A or B, the faculty respondent's estimates of the number of hours of effort students actually were expending did not differ significantly from the hours reported by the students (Table 3). Given that the bias in the student response was towards students actually earning grades of A and B in their classes, it would appear that responding faculty do not seem to be requiring the effort that they expect, or feel that faculty other than themselves have lower expectations. Given that, on average, faculty respondents rated their fellow faculty members as having lower academic standards (relative to the student respondent ratings), and reported that students are not assigned a sufficient amount of homework, but agreed that the grades they assigned were, in fact, indicative of student learning, it

would appear that the latter contention is best supported. In contrast, student respondents felt that their professors have high academic standards, that their grades are an accurate reflection of their learning, and that they are not unduly burdened with homework (Table 4).

Table 4. Student and faculty responses to statements about academic standards in percents.

	SA	A	N	D	SD
Professors assign too much homework—students	1	10	61	26	2
Professors assign too much homework—faculty	1	3	29	45	22
Most professors have high academic standards—students	11	64	21	3	1
Most professors have high academic standards—faculty	8	36	29	20	6
Grades I've earned accurately reflect what I've learned—students	10	46	15	20	8
Grades I give accurately reflect student learning—faculty	35	43	12	7	1

Summary

Although any inference that could be made from a direct comparison of faculty and student perceptions demands a prohibitive amount of caution in this instance (because the student respondent sample was composed primarily of student with higher GPAs), there are a number of key inferences that can be made from these data regarding expected and required levels of effort. First and foremost is that while the estimates made by faculty respondents of how many hours students spend studying agree with those reported by the student respondents, the faculty respondent estimates of how many hours of study should be required to obtain grades of A or B are inflated. Student perceptions of the amount of effort actually required to succeed are being reinforced by the grades they receive, which undermines the expectations of effort stated by higher-education officials.

The second inference is that, although the responding faculty feel that students are unprepared, and are not working up to the requisite standard, they are satisfied that the grades they themselves

assign reflect student learning. Moreover, a substantial proportion of the faculty respondents question the academic standards of their colleagues. Thus, it would appear that a number of faculty do recognize that inflation of grades relative to student effort is a problem, but do not perceive themselves as contributing to the problem. Although a number of potential causes for discrepancies between expected student effort and the grading practices of faculty could be identified, such as a shift from a scholar-oriented to a consumer-oriented academic culture, or unreasonable weighting of student evaluations in assessing faculty performance, it would appear from these data that identifying causality in this instance is not of prime importance. In this instance it would appear that that faculty recognize that a discrepancy between expected effort and grade assignments exists, but are unwilling to admit that they themselves might be contributing to the problem. If faculty are unwilling, or unable to objectively evaluate their contribution to the problem of grade inflation, demonstrating that a problem exists will not be sufficient to generate a solution.

References

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