Faculty Perceptions of Grades: Results from a National Survey of Economics Faculty

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ABSTRACT

Results from a survey of U.S. economics faculty (816 responses) indicate the extent to which grades are emphasized in their classes. We measure learning- and grade-orientations and relate our findings to empirical research in economics and educational psychology. We find agreement among economics faculty on a broad range of grade-oriented attitudes and behaviors. We note differences between views of economics faculty and empirical research on several key topics. Free-form comments indicate a concern with grade distributions, the influence of grades on student evaluations of teaching, and grade inflation.

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I. INTRODUCTION

Relatively little is known about the views of economics faculty concerning grades despite the important role grades play in educational settings. Studies by Becker and Watts (1996, 2001a, 2001b) and Schaur, Watts, and Becker (2008) provide a good idea of which assessment tools economics faculty use. We also have information about best practice in assessment (Walstad, 2006). But little is known of faculty attitudes or behaviors toward grading or their perceptions of how students react to grades. This lack of knowledge is particularly startling given the apparent importance placed by economics faculty on grades (as evidenced by responses to our survey) and the influence that grading policies have on student learning outcomes and affect.

We know from research in educational psychology that the grading policies of teachers affect students' performance (Meece et al., 2006). Policies that deemphasize grades and promote mastery (learning) goals generally are positively associated with desired student outcomes, including increased learning (e.g., Harter, 1978; Moeller and Reschke, 1993), effort (Grolnick and Ryan, 1987; Ames and Ames, 1991), help seeking (Karabenick,

2004; Linnenbrink, 2005), enjoyment (Pekrun et al., 2006), and long-term interest (Butler, 1987; Harackiewicz et al., 2000; Henderlong and Lepper, 2002; Senko and Harackiewicz, 2005).[1] In contrast, an emphasis on grades and competition generally is associated with anxiety, hopelessness, and shame (Linnenbrink, 2005; Pekrun et al., 2006), effort withholding (Thompson, 1994; Urdan et al., 1998; Thompson and Perry, 2005), and preference for less challenging tasks (Harter, 1978). Of course, some students respond favorably to conditions that emphasize grades and competition (Deci et al., 1999; Cherry and Ellis, 2005; Betts and Grogger, 2003) but, as we discuss below, even these studies report students who are left behind.

This paper reports views on grades and grading policies of economics faculty from nearly 600 departments across the U.S., adding to our knowledge of the extent to which economics faculty emphasize grades. Responses to our survey indicate that there is consensus among economics faculty on a range of grade-oriented views and behaviors and that economics faculty generally place great value on grades. We find that economics faculty tend to view grades as good motivators and are concerned about grading standards. Further, 40 percent of faculty indicate they are influenced either "some" or "a great deal" by departmental or college expectations when they grade students' work. Free-form comments indicate a concern with grade inflation, and use of student evaluations (which are seen to depend in part on grades) in promotion, tenure, and pay decisions.

An examination of how economics faculty view and use grades is worthwhile given the extensive evidence from educational psychology. While the behavioral view of human motivation (e.g., Skinner, 1976) dominates economics, with its reliance on extrinsic

[1] Subject interest was reported by economics alumnae as the second most important determinant in choosing to major in economics – behind positive experience in the principles class (Allgood et al., 2004).

motivation, cognitive psychologists have demonstrated that intrinsic motivation is important as well. In this more expansive view, people have some level of natural curiosity, seek to resolve discrepancies between what they see and what they know, and have aspirations and varying degrees of need for achievement. A comprehensive view of academic motivation takes into account the intrinsic as well as extrinsic motivations of students and sets classroom policies accordingly. While extrinsic rewards such as grades are effective motivators for some tasks (tedious, repetitive) they are less effective – and can even be detrimental – when applied to other tasks (those that are inherently interesting). In the latter case, the tasks are said to have intrinsic value and the extrinsic rewards may crowd out that value, reducing the student's interest (recent work in labor economics explores crowd-out as well; e.g., Falk and Kosfeld, 2006; Frey, 1998).

In short, an over-reliance on extrinsic rather than intrinsic motivation will often lead to suboptimal outcomes.[2] Our survey of the views of grades of economics faculty is made in light of this extensive evidence. Our primary goal is to measure the degree to which economics faculty emphasize extrinsic motivation (grades) and intrinsic motivation ("learning" goals) in their classrooms so that economics faculty as a whole can critically evaluate classroom policies.

In the next section, we describe the survey instrument and method. We then summarize and analyze the findings. A selection of free-form comments are offered in the following section. Our paper concludes with a few recommendations for incorporating into the teaching of economics the insights from this research.

[2] Those wishing a comprehensive review may consult Ames and Ames (1991), Deci et al. (1999), and Meece et al. (2006).

II. THE SURVEY AND METHOD

The survey measures faculty views of learning and grades along a two-dimensional scale first developed by educational psychologists (Janzow and Eison, 1990; Eison, Janzow, and Pollio, 1993). Learning oriented (LO) attitudes and behaviors (five statements each) and grade oriented (GO) attitudes and behaviors (five statements each) comprise the 20 statement survey. Respondents use a 5-point scale (1=Strongly disagree/Never; 5=Strongly agree/Always) to indicate level of agreement with the attitudinal statements (numbers 1 though 10) and frequency of use with the behavioral statements (numbers 11 through 20). The survey questions are shown in Table 2.

LO statements measure the extent to which faculty engage in attitudes or behaviors that have been identified in the educational psychology and education literatures as promoting in students a focus on learning (mastery). GO statements measure the extent to which faculty engage in attitudes or behaviors that promote in students a focus on grades (performance). Responses to the LO statements (2, 4, 7, 8, 10, 13, 14, 15, 16, 20) can be summed to form a total LO score. The remaining responses form the total GO score. Higher scores indicate greater LO or GO. Principal component analysis (on the data collected in this survey, and in prior surveys) supports the validity of this grouping of statements.

Each statement in the survey has empirical support in the educational psychology literature for its stated orientation. LO promotes collaboration, encourages improvement, and provides choice. GO emphasizes performance measurement, focus on the 'best and brightest' students, and competition. Faculty with higher LO scores tend to view grades as overemphasized and overvalued and tend to be flexible in grading and the way they view

disciplinary boundaries, while higher GO is associated with a concern with grade inflation and attention to the significance of GPA (Eison et al., 1993).

The survey was administered online on the Oneonta College website and consisted of the 20 statements measuring learning and grade orientations plus an additional 11 demographic questions (contained in the appendix), which asked for information about the respondent and institution and about such items as teaching loads, evaluation tools and weights of those tools when determining course grades at the undergraduate level. A request to complete the survey was emailed to 5915 members of 599 economics departments in the U.S.[3] Of the emails sent, 149 were returned as undeliverable. From the remaining 5766 recipients, 816 surveys were completed between September 23 and 30, 2008. The 816 responses represent a 14.2% response rate. This response rate is similar to other recent national surveys of economics faculty (Schaur et al., 2008).[4]

Table 1 provides a summary of the demographic and institutional data collected in our survey. These data indicate that 74% of respondents were male, 40% were full professors, and half were either associate (25%) or assistant (24%), and the average number of years teaching was just more than 17.[5] Half of the respondents taught in Ph.D. granting departments while 31% taught in departments where the bachelors is the highest degree awarded. Average department size across the entire sample was 15.5 members.

[Table 1 goes about here]

[3] The email addresses were collected manually from individual department web sites by the authors and several student assistants.

[4] The rate for Schaur et al. was 13.0% in a similar mailing in 2005. They received 477 responses from a mailing to 3658 faculty using a private market mailing list – one from Market Data Retrieval (MDR). The advantage of MDR is that it identifies recipients by instructor specialization, allowing researchers to determine response rates by specialization. A disadvantage of MDR is its cost and one-time use policy (researchers do not actually have the email addresses – and can not verify them).

[5] The percentage of females in the sample is generally reflective of the percentage in the profession (AEA CSWEP, 2008).

While the number of recipients and the method used for acquiring their addresses supports our belief that they are representative of the academic economists in the U.S. generally, we have no way of knowing for sure whether the same is true for the respondents.[6] Given the opportunistic nature of our sample, we cannot be certain that the respondents reflect the profession as a whole. One approach to evaluating the representativeness of a survey sample (i.e., test for non-response bias) is to compare the early and late responses (Bose, 2001; Oppenheim, 1966). The presumption is that late responses (rather than the early responses) are more similar to non-responses, so that any differences between early and late responses indicate a non-response bias. We examine the first 75 and last 75 responses in our sample, and perform a series of t-tests for differences in sample means (for each data series gathered). The results indicate no significant ($p<0.05$) difference between early and late responses, except for degree level of institution (MA were more likely to be late responders, PhD early) and number of graduate students and economics majors taught (early responders were more likely to teach more of both). Given that there were no significant differences in LO and GO scores, gender, years teaching, teaching in business schools, teaching principles, teaching intermediate, and teaching upper level, we conclude that non-response bias is not an issue in this study.

[6] We used a single survey address to collect all the responses. In retrospect, we could have provided a separate survey for each Carnegie classification. That is, we could have created separate mailing lists by classification and directed recipients to a particular survey site depending on their classification. This would have provided response rates by type of institution. As it stands, we are not able to determine the response rate by classification. We do know that 50 percent of the respondents indicated that the highest degree offered at their institution was the Ph.D. whereas 54 percent of all economics faculty (and presumably 54 percent of the recipients) belong to Ph.D. institutions (Kamath et al., 2007). In our sample, 18 percent belong to Masters institutions and 31 percent to bachelors, whereas nationally the percentages are 30 and 10, respectively.

III. SURVEY RESULTS

A. Individual Statements

Summary statistics of responses are shown in Table 2. These results show that faculty generally exhibited strong grade oriented attitudes (GOA). Their broad agreement to GOA statements generally indicates support for grades as incentives (statements 1, 5) and the validity of grades as a measure of performance or ability (3, 6, 9). Statements 1 and 5 are the most agreed upon statements in the survey: 91 percent of respondents agreed that grades were useful tools for increasing student performance; 89 percent agreed that regularly scheduled exams were necessary for students to be expected to learn. Economics faculty appear to have a strong inclination to believe in the effectiveness of grades as extrinsic motivators - despite the limitations of grades noted earlier. Mixed reviews of the effectiveness of grades as an extrinsic motivator have also been reported in the recent economics education literature. Grove and Wasserman (2004), for example, find that freshmen score better on exams when assignments are graded but other students do not, and Betts and Grogger (2003) find that while tougher grading (in high school) is initially correlated with higher scores on standardized tests the long-term effect on scores is negligible – with the exception of minority students, for whom the effects are negative. And in a study involving students in introductory microeconomics, Dickie (2006) finds that grade incentives appear to exert a negative influence that offsets the beneficial effect of classroom experiments.

[Table 2 goes about here]

The responses to statement 6 (and 9) indicate that economics faculty think faculty in other disciplines are easy graders. Grade inflation is a concern as well. Further, only 11

percent disagreed with statement 3, "I think college grades are good predictors of [career] success in later life," even though research findings indicate a tenuous relationship between grades and future career success (Cohen, 1984; Baird, 1985; Davidson and Lewis, 1997).[7] Thus, economics faculty place a heavy emphasis on grading and grades.

The next section of Table 2 shows that economics faculty exhibit mixed learning oriented attitudes (LOA), with strong LOA in their responses to statements 2 and 7, which generally deemphasizes the role of grades, but anti-LO in their responses to statements 8 and 10, which indicate a belief that grades are a necessary motivator for students (consistent with the strong GOA). A majority favor collaboration over competition (statement 2) and enrollment under the pass/fail/audit option (statement 7), both of which have been shown to promote positive learning outcomes. On the other hand, a majority disagree that faculty in other disciplines place too much emphasis on using grades to motivate students (mirroring the responses for statements 6 and 9).

In response to statement 4 ("Students concern about grades often interferes with learning in my classroom"), a large minority of faculty identified concern with students' focus on grades (41% agreed or strongly agreed to the statement). At 41% agreed, we can reasonably conclude that for many faculty students' concern about grades is a problem.[8]

Given the strong GOA noted above, it is surprising that respondents exhibit very little overt grade oriented behavior (GOB), as shown in the next set of responses in Table 2.

[7] Davidson and Lewis (1997) find that less prepared medical school applicants earned lower GPAs in medical school but did equally as well in their careers as those with better GPAs or scores going into med school. Cohen (1984) conducts a meta-analysis of 108 studies correlating grade average in college to various criteria of adult achievement or success. His conclusions "may be somewhat discouraging to those placing great importance on grades and their predictive power. It seems that how well a student does in college relates only marginally with success in a career" (p. 292). Professors, who typically have earned high GPAs during their many years of academic study, may be expected to believe that grades are strong indicators of future success. Nonetheless, the evidence is much less certain.

[8] The 39% who disagreed or strongly disagreed don't cancel out the agrees. If 2 out of 5 faculty indicate it's a problem then the fact that its not a problem for the others is not central.

Teaching style and grading standards are not designed to accommodate more capable students at the expense of the less capable (statements 11 and 17). Further, faculty do not emphasize the importance of grades in conversations with students (statements 12, 18, and 19).

Respondents also score low on the LO behavior (LOB) scale. Faculty allow students little choice in completing assignments, at least in an effort to enhance motivation (statement 13). As discussed in a previous section, choice has been shown to be an important factor in student motivation. Responses to statement 13, indicate that economics faculty provide little opportunity to "choose among alternative assignments as a way to enhance motivation." Anderman and Midgley (1998) note that allowing some degree of control over learning by giving students choices between different assignments doesn't mean teachers must relinquish control of the classroom: "Even small opportunities for choice, such as whether to work with a partner or independently," give students a greater sense of autonomy.

Two out of every five faculty indicated that improved performance is not weighed in grading decisions (statement 20). Further, many faculty are not willing to make exceptions to stated grading criteria when unusual circumstances arise (statement 15), perhaps concerned with the implications of breaking a "contract" – as the syllabus is often viewed as representing. Faculty also are reluctant to encourage students to read from outside of the economics discipline (statement 16), despite the inherent multidisciplinary nature of economics. In many respects, this is understandable, given time constraints and training typically provided to economics faculty.

Overall, economics faculty are in most agreement (as measured by standard deviation of the responses) to GO statements more so than LO statements (8 of the 10 most agreed upon

statements are GO). In sum, the survey responses suggest that economics faculty place heavy emphasis on the extrinsic motivating qualities of grades. This view of grades is distinct compared to faculty generally, who tend to place much less emphasis on the power of grades to motivate students to learn (Eison et al., 1993). But because Eison et al.'s study of general faculty views is dated, we draw no firm conclusion about the relative standing of economists.

B. Demographic and Institutional Influences

The views of economics faculty also seem to differ by certain individual and environmental characteristics. Tests for equality of means across groups indicates that gender, tenure status, and business school affiliation are all correlated with learning and grade orientation. Table 3 presents summary results showing that females tend to be less GO and more LO compared to males; tenured faculty tend to be more GO and less LO compared to non-tenured faculty; and economics faculty affiliated with business schools tend to be more GO and less LO than economics faculty not affiliated with business schools.

[Table 3 goes about here]

The differences between groups can be seen in their distributions (kernel densities), as shown in Figure 1. We see a general shift of the distribution in each case. We hesitate to speculate on the reasons for the differences between males and females. With regard to differences by tenure status, one interpretation is that to get tenure, economics faculty likely have to be judged hard graders (be very concerned with grades), based on our survey findings. In other words, faculty who appear to be soft graders may tend to not get tenure. Likewise, business schools may have an environment that encourages GO and less LO, or encourages faculty with those characteristics to select business schools. Given the

limitations of our data, we leave for future research a rigorous examination of the reasons for these differences.

[Figure 1 goes about here]

IV. FREE-FORM COMMENTS

Two hundred two respondents (25 percent of all respondents) submitted free-form comments. Many of the comments fall into three closely related areas: (1) Standards and cross-faculty comparison of grade distributions; (2) the influence of grades on student evaluations and the influence of those evaluations on personnel decisions; and (3) grade inflation.

A. Standards and pressure to conform

Many respondents were concerned with pressure to conform to department grading norms. Views were wide-ranging. For example, it was often stated or implied that being at the low end of the distribution (relative to colleagues) is better than being at the high end. Others cited pressure from Deans to provide higher grades and not to fail students.

Ten percent of respondents indicated (on item # 31) that department or college grading expectations had a "great deal" of influence on how they grade. Another 33% responded "some" to that question. Roughly 29% responded "not at all."

Many indicated that they adjust their grade distribution to be near the department average. "I do compare my grade distributions with colleagues to determine if I am somewhat consistent." "I give fewer As, but aside from that I want my grade distributions to resemble those of my colleagues." "Implicitly I adjust the level of the course taught so the grade distribution looks like the rest of my colleages [sic]." This last comment seems natural

– standards must vary from school to school (introductory economics at Harvard is very different than at SUNY Oneonta). It also suggests a relative standard, with the measurement of student performance in one class being gauged by student performance in another.

One respondent wrote, "In my intro classes it's difficult to hold higher standards than other faculty in my department. If I do, then about 30% of my students hate me…." The same respondent continues, "I have been redesigning my intro micro class for the past 7 years & I believe that I am getting closer to an optimal model using Aplia, clickers & no exams."

Several faculty compared the grades awarded in economics to those awarded in other disciplines. Lower grades in economics were most often seen as an indication of higher standards and rigor. They also may be driving students away from economics. As one put it, "The signal value of grades is therefore eroded as many students do not really know where their comarative [sic] advantage lies."

Not once did a respondent suggest that low grades are an indicator of poor teaching or irrelevant topics. Always, poor/low/harsh/tough grades were seen as upholding high standards. Almost always high standards were relative to other disciplines, which were often viewed as vaguely loose in their standards.

B. Grades, student evaluations, and personnel decisions

The role of course evaluations in tenure and promotion decisions was mentioned often. A few respondents explicitly stated that they did not grade as harshly as they might otherwise because harsh grades would hurt their student evaluations, which will then hurt their tenure, promotion, and salary decisions. As one respondent noted, "there is a noticable

[sic] cost to holding to standards." Another wrote, there is "pressure not to set standards or expectations too high."

On the other hand, too many high grades cause alarm. One respondent noted, "when evaluating faculty colleagues exceptionally high student evaluations coupled with exceptionally high grades sets off alarms." Another noted, "Grading policies of faculty are more affected by the weight placed on course evaluations in promotion and tenure than any other policy."

Several other comments indicated similar concern by others. The pernicious influence of grades in personnel decisions seems to be a cause for alarm. Students play a key role. One responder wrote, "Students (most of them) are obsessed with grades. They will do anything to get a higher grade (again, not all students but most). They will try to move their grade up by tallying their points against my grade cuts and asking (or demanding) a point or two more."

C. Grade inflation

The concerns with promotion and tenure and standards were intertwined with a concern with grade inflation. "I want the grades in my class to be comparable to grades in other classes and therefore participate in the inflation" one respondent wrote.

While many economics faculty bemoan the pressure to accommodate students' expectations for high grades ("The pressure to give high grades both from the departmental colleagues and from the Dean of the College have reached epic levels"), others note pressure from colleagues and deans to avoid grade inflation ("Our department and college is very concerned about grade infation [sic]. if we started giving an unusual number of As, someone would speak to us about it to be sure we were upholding standards").

Grade inflation in other departments was seen by one faculty as an explanation for economics faculty not winning teaching awards ("It is however the case that faculty from our department almost never win college or university teaching awards, because these rely heavily on student's evaluations (which are biased upward when grades are inflated).").[9]

V. CONCLUDING REMARKS

Grades are pervasive in higher education. Financial aid, continuation in a major, parental approval, potential employment, and acceptance to graduate school are all tied to some extent to grades. It is only natural that faculty and students exhibit a "grade orientation." Indeed, economics faculty in our study agree that it is "useful to use grades as incentives to increase student performance." But, by emphasizing grades as an incentive, economics faculty may be promoting the very orientation toward grades that many consider to be a problem. In our survey, 41% of economic faculty agreed or strongly agreed that "Students concern about grades often interferes with learning in my classroom." Certainly, faculty want students to be less concerned with grades and more focused on learning. Students apparently want this also, yet feel constrained by the emphasis teachers place on grades (Pollio and Beck, 2000).

Milton et al. (1986, p. 141) report that, "Faculty may emphasize grades in their classrooms more than they need to or should. Faculty members have it within their power to reduce this pernicious and distorting aspect of educational practice that often seems to work against learning. If faculty would relax their emphasis on grades, this might serve not to lower standards but to encourage an orientation toward learning." Based on our survey

[9] A more detailed discussion of grade inflation is left for a future paper. But interested readers can examine a California State – Northridge study of grade inflation available at http://www.csun.edu/coc/report06.html. The website contains supporting data by school and department.

results, this is likely to be viewed with considerable skepticism by economics faculty. Yet, decades of empirical work in educational psychology, and even some recent findings in economics education, lends support to this claim.

There are practical issues limiting one's ability to de-emphasize grades. One respondent wrote: "My approach to grading has to take into account the system of grades that students have learned in 14+ years of schooling. I would LOVE to do away with grades altogether, but the students in a single semester course do not often know how to act in that new environment...." The job is even more complicated when one considers the need to also convince colleagues, department chairs, deans, and others. But note that grades do not have to be completely removed, simply de-emphasized. Repeated and widespread de-emphasis of grades in economics classes (as may already occur in other college classes) may be necessary to undo students' learned behavior from many prior years.

For those looking for concrete recommendations for de-emphasizing grades we provide the following short list, incorporating some findings from educational psychology, with examples of methods the authors have used in their classes:[10]

1. Use extrinsic rewards sparingly and in a non-controlling manner.
    a. Do not grade classroom experiments or class discussion, although other 'rewards' (e.g., small candies) may be used without an emphasis on the reward or the performance itself. Appealing experiments and discussion will be enough to stimulate student effort. If students are not participating, change the activity (Dickie, 2006; Moeller and Reschke, 1993; Hahn et al., 1989).

[10] Barbara Gross-Davis of UC-Berkeley provides details and additional suggestions, with references (http://teaching.berkeley.edu/bgd/motivate.html).

b. Grade assignments satisfactory or unsatisfactory (with a minimum acceptable level of quality, e.g., B-, necessary for satisfactory work) as this will likely be seen as non-controlling, given that perfection is not required for full credit (Deci et al., 1999; Grolnick and Ryan, 1987; Ames and Ames, 1991).

2. Provide choice (concerning assignments, topics to be discussed, due dates) (Anderman and Midgley, 1998).
    a. Allow students to choose which assignments to submit for credit (either requiring a minimum number of satisfactory assignments or reducing the weight on exam scores for each satisfactory assignment).
    b. Allow students to choose topics for class discussion from a list of possible topics.
3. Promote mastery learning by providing opportunities to revise unsatisfactory work.
    a. Encourage students to revise and resubmit unsatisfactory work – even if it is graded 0-100 or A-F .
4. Avoid competition; base evaluation on criterion-referenced standards.
    a. Communicate to students that work is evaluated on set standards, not relative to other students' work (Urdan et al., 1998; Thompson and Perry, 2005).
5. Encourage attributing success to effort and interpreting mistakes as learning opportunities.
    a. Repeatedly impress upon students that effort is the most important determinant of success in your course (not ability or luck); offer students concrete examples of how and on what they should be exerting effort.
    b. Praise effort rather than outcome (Henderlong and Lepper, 2002).

c. Allow students to replace poor grades (e.g., by allowing the score on a comprehensive final exam to replace lower exam scores), keeping them "in the game" throughout the semester.

The healthy response rate to our survey is an indicator of the high interest in this topic among economics faculty. For many, grades have become a sore spot. This paper provides a record of the attitudes and behaviors of economics faculty on a variety of grade-related topics and serves as an important attempt to open a dialogue among economics faculty and between faculty of economics and other disciplines. Comparing the views of economics faculty to the empirical evidence sheds light on the likely effects of our common policies. Future research should apply insights from educational psychology to the economics classroom. This would extend beyond simple replication of prior studies – which may be warranted at first – to an extension, incorporating fundamental economic concepts such as opportunity costs and formal modeling (possibly of the type recently being explored in labor economics).[11] The focus of current research in economics education would then expand from content and methods of instruction, both very important areas, to include student motivation and incentives.

[11] Frey (1998), Falk and Kosfeld (2006), and Murdock (2002).

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Table 1 - Summary Statistics
(counts, unless otherwise noted)

Gender	Male	Female	N/R				
	581	191	8				
	74%	24%	1%				
Academic Rank	Full	Associate	Assistant	Other			
	316	197	185	83			
	40%	25%	24%	11%			
Years of teaching experience, average	17.51						
Number of faculty in department, average	15.48						
	Ph.D.	MA	Bachelors	MBA	N/R		
Highest degree offered	392	143	238	2	3		
	50%	18%	31%	0%	0%		
	Agriculture	Business	Humanities	Liberal Arts	Public Policy	Science	N/R
School in which department is housed	3	283	230	114	11	118	8
	0%	37%	30%	15%	1%	15%	1%
Influence of departmental grading expectations (Survey item #31)	A great deal	Some	Very little	Not at all			
	78	255	210	224			
	10%	33%	27%	29%			

Sections taught, number of students (averages for those who taught each level)	Sections	Students
Principles	2.59	162.2
Intermediate	1.62	65.3
Upper	1.82	55.8
Masters	1.29	35.6
Ph.D.	0.91	12.1

	Principles		Intermediate		Upper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Multiple Choice Exam	28%	9%	7%	5%	4%	3%
Short Answer Exam	29%	6%	48%	7%	52%	8%
Homework	2%	25%	3%	28%	2%	20%
Papers	1%	7%	3%	13%	13%	27%
Quizzes	1%	9%	1%	3%	1%	2%
Class Participation	0%	3%	0%	3%	1%	10%

Table 2

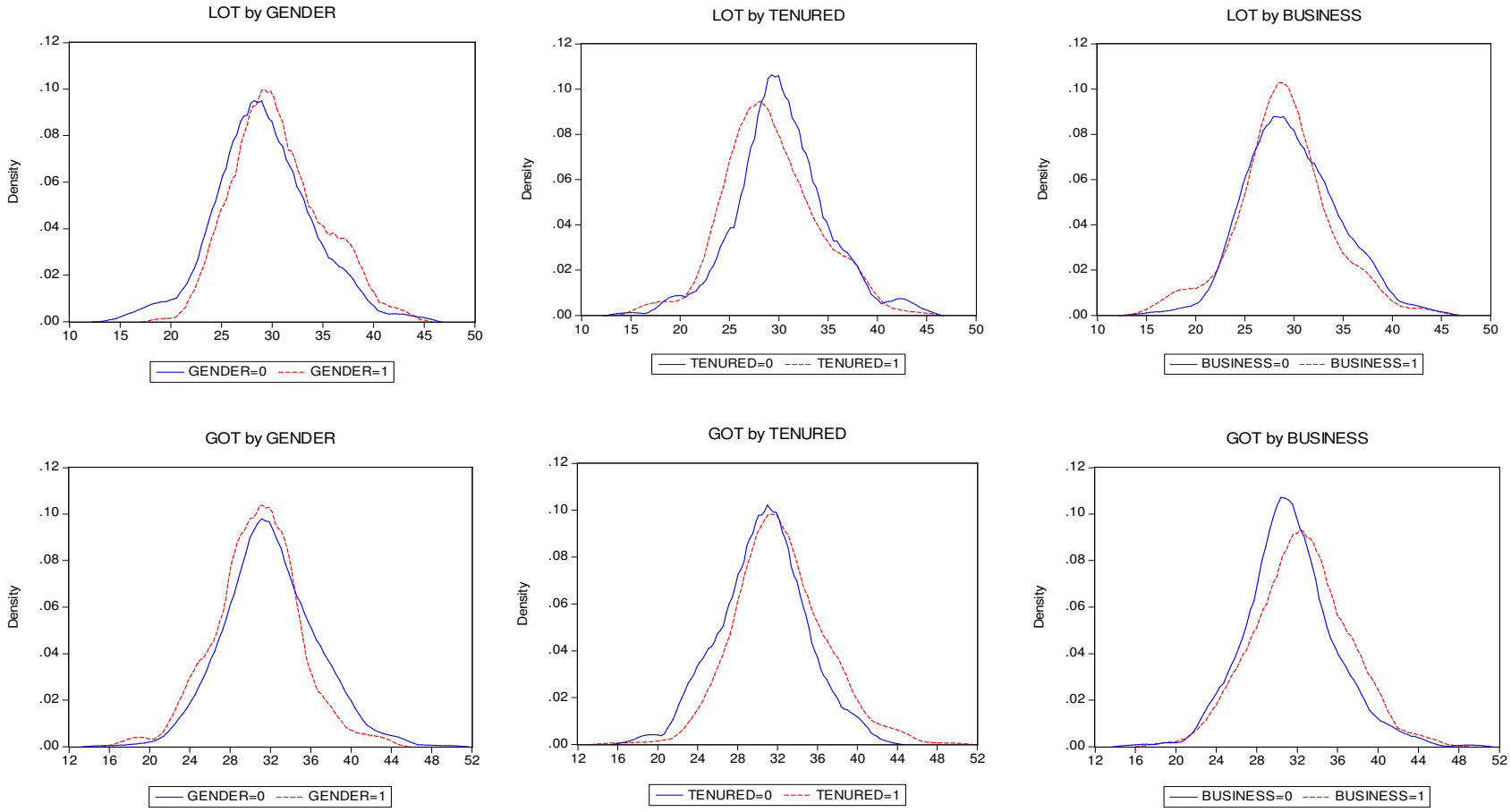
#	Statement	Type	Ave	s.d.	(5)	(4)	(3)	(2)	(1)
	"Attitudes" statements 1-10				Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Without regularly scheduled exams most students would not learn the material I present.	GOA	4.26	0.87	45%	44%	5%	5%	1%
3	I think college grades are good predictors of career success in later life.	GOA	3.43	0.76	3%	49%	36%	10%	1%
5	I think it is useful to use grades as incentives to increase student performance.	GOA	4.14	0.64	26%	65%	7%	2%	0%
6	I wish my colleagues across the campus were tougher graders.	GOA	3.96	0.84	30%	41%	25%	4%	0%
9	I worry about colleagues who are giving an ever increasing number of As and Bs.	GOA	3.93	0.92	29%	45%	18%	8%	1%
2	I think students should be encouraged to collaborate rather than compete.	LOA	3.54	1.01	16%	42%	27%	12%	4%
4	Students' concern about grades often interferes with learning in my classroom.	LOA	3.07	1.12	9%	32%	20%	33%	6%
7	I don't mind if students enroll in my classes under the pass/fail/audit options.	LOA	3.60	1.06	20%	40%	23%	13%	4%
8	I think my colleagues across campus place too much emphasis on using grades to motivate students.	LOA	2.43	0.79	1%	5%	40%	44%	10%
10	I would prefer teaching a course in which no grades were given rather than a typical graded course.	LOA	2.26	1.09	5%	10%	20%	40%	27%
	"Behaviors" statements 11-20				Always	Often	Sometimes	Seldom	Never
11	I set grading standards that are designed primarily to challenge the brightest students in my classes.	GOB	3.08	1.07	8%	28%	37%	18%	9%
12	I emphasize in my conversations with students the importance of studying to obtain 'good grades.'	GOB	2.71	1.18	7%	21%	26%	29%	18%
17	I orient my teaching style (e.g., content, pace, difficulty level) to satisfy the needs of upper level students and hope that the others can keep up.	GOB	2.74	0.95	4%	16%	38%	34%	8%
18	I encourage students to focus primarily on their studies and to limit their participation in extracurricular activities which might jeopardize their GPA.	GOB	1.78	0.96	1%	4%	15%	29%	50%
19	I tell students that competition for grades prepares them for the competitive nature of adult life.	GOB	1.60	0.91	1%	4%	11%	21%	63%
13	I allow students the opportunity to choose among alternative assignments as a way to enhance motivation.	LOB	2.12	1.05	2%	9%	24%	31%	35%
14	I encourage students to raise questions in class that are topic-related but which also go beyond the scope of the tests which I prepare.	LOB	4.26	0.77	44%	41%	14%	2%	0%
15	I am willing to make exceptions to stated grading criteria when unusual circumstances arise.	LOB	2.83	1.05	8%	15%	36%	32%	8%
16	I design course assignments that encourage students to read outside my discipline.	LOB	2.65	1.03	5%	15%	33%	35%	12%
20	I reward student improvement and growth by weighing the students' progress in my grading system.	LOB	2.81	1.18	8%	20%	32%	22%	17%

GOA = Grade Oriented Attitude statement
LOA = Learning Oriented Attitude statement
GOB = Grade Oriented Behavior statement
LOB = Learning Oriented Behavior statement

Table 3 – Differences in Learning Orientation (LO) and Grade Orientation (GO) by Individual and institutional characteristics

Measure	Differences by	df	t-value	Probability
GOT	Gender	770	3.56	0.0004
	Tenure Status	772	-5.19	0.0000
	Business School affiliation	762	-3.33	0.0009
LOT	Gender	770	-3.68	0.0003
	Tenure Status	772	3.17	0.0016
	Business School affiliation	762	2.55	0.0110

Figure 1. Kernel densities for Learning Orientation (LO) and Grade Orientation (GO) by gender (0=males), tenure status (0=non-tenured), business school affiliation (0=non-business school economics faculty).



APPENDIX – Demographic questions

21. Are you Male or Female?
___ Male ___ Female

22. What is your academic status (rank)?
___ Assistant Professor (tenure track)
___ Associate Professor (tenured)
___ Professor (tenured)
___ Full-time: Lecturer/Visiting (non-tenured)
___ Part-time: Lecturer/Visiting (non-tenured)
___ Other, please specify

23. How many years have you been teaching? ___

24. What is the highest degree awarded by your department?
___ Bachelors
___ Masters
___ Doctorate
___ Other, please specify

25. In which school/division is your department?
___ School of Business
___ School of Social Sciences
___ Other, please specify

26. Approximately how many full-time economics faculty are in your department? ___

27. How many course sections and students do you teach in a typical academic year in each of the areas listed below? (Leave blank areas not taught.)

	Course sections	Number of students (total)
Principles, undergrad	_____	_____
Intermediate, undergrad	_____	_____
Upper level, undergrad	_____	_____
MA or MBA	_____	_____
PhD	_____	_____

28. For each course level that you teach, indicate the TWO most significant evaluation tools by placing a 1 in the box for the method that accounts for the greatest portion of the course grade and a 2 in the appropriate box for the second greatest portion. Leave blank if you do not teach the course level shown.

	Essay / Short answer exams	Multiple choice exams	Homework	Quizzes	Papers	Class participation / presentations
Introductory Level						
Intermediate						
Upper level, graduate						

29. What subject area do you regularly teach? Check all that apply.
Select no more than 5.
___ Micro
___ Macro
___ International (trade/finance)
___ Econometrics/statistics
___ Financial (incl. Money & Banking)

___ Public Finance
___ Urban/Regional
___ Industrial Org/Regulation/Government
___ Labor
___ Environmental
___ Other, please specify

30. What percentage of all the students that you teach in a typical academic year are of each type listed below? (Use 100 for 100%, 50 for 50%,....). Skip this question if you are unsure.

	percentage
Econ majors	_____
Business / Business economics majors (non-econ)	_____
Non-econ, non-business	_____

31. To what extent does department or college grading expectations, whether explicit or implicit, influence how you grade students or the course grades you submit? We invite you to use the comment box at the end of the survey to explain.

___ Not at All
___ Very Little
___ Some
___ A great Deal

32. Please enter comments in the space below.