Journal of Economic Perspectives—Volume 5, Number 1—Winter 1991—Pages 159–170

Grade Inflation and Course Choice

Richard Sabot and John Wakeman-Linn

The number of students graduating from American colleges and universities who had majored in the sciences declined from 1970–71 to 1984–85, both as a proportion of the steadily growing total and in absolute terms (U.S. Department of Education, 1987). This decline has prompted forecasts of a nation of scientific illiterates and a loss of economic competitiveness. The Director of the National Science Foundation, Ernest Bloch, put it this way in a speech at Carleton College (July 13, 1988):

> The nation depends upon undergraduate education to prepare not only the small number of students who will become research scientists and engineers, but also the many other students who will have to function effectively in an increasingly technological world. That is a difficult and very important task. ... The college age population is shrinking. Declines (in science enrollments) are inevitable unless the proportion of students pursuing science and engineering increases—and there is little evidence of that. Somehow, we must persuade more students to study science and engineering.

Other trends in student course choice, like the rise in enrollments in "vocational" courses, have also elicited concern. The most common response by faculty and administration concerned with these patterns of demand has been to tighten quantitative restrictions: distribution requirements have been altered with the aim of bolstering enrollments in the sciences.

■ *Richard Sabot is Professor of Economics and John Wakeman-Linn is Assistant Professor of Economics, both at Williams College, Williamstown, Massachusetts. Sabot is also Senior Research Fellow at the International Food Policy Research Institute, Washington, D.C.*

However, faculty bear some responsibility for these patterns of student choice which they bemoan. Students make their course choices in response to a powerful set of incentives: grades. These incentives have been systematically distorted by the grade inflation of the past 25 years. As a consequence of inflation, many universities have split into high- and low-grading departments. Economics, along with Chemistry and Math, tends to be low-grading. Art, English, Philosophy, Psychology, and Political Science tend to be high-grading.

As a Yale senior, interviewed by *The New York Times* (1988) for an article on honors and grade inflation, explained, "It's pretty hard to get below a B – in most humanities courses. I hear it's a little different in science classes, though. There aren't really F's anymore. People look at a C and think it's an F." Another Yale student, who switched from a science major to English, said in a *Wall Street Journal* (1990) story attributing science dropouts to low grades, "In other classes, if you do the work, you'll get an A. In science, it just doesn't work that way..."

One result of varying rates of grade inflation between departments is that grades as a signal of relative strengths and weaknesses become more difficult for students to interpret. Grades therefore contribute less to students' assessment of their comparative advantage. But even if grades fail completely to perform this function—even if a high mark is less an indication of the student's strength than of the weakness of the instructor's resolve—grades, or more precisely the expectation of grades, are still likely to influence course choice. A conflict exists between the incentives offered to students and the institutional goal of increased science and math education.

This paper presents evidence from nine colleges and universities that grade inflation has led to a divergence among departments in grading policies. We then discuss the results of an econometric study we conducted at Williams College of the influence of grading policies on course choice. The impact that differences in grading policies across departments have on the distribution of enrollments was also estimated, and policy implications of the findings are discussed.

Evidence of Divergent Grading Policies

Grade inflation and a widening gap between low and high grading departments are a nationwide phenomenon. We begin with a close examination of what has happened to grades at Williams College, and then compare grades at Williams with those at a diverse group of colleges and universities.

Table 1 shows that grade inflation at Williams has been substantial. The mean grade in the introductory courses of eight large departments at Williams has risen from 2.49 on a 4-point scale (a bit above C +) in 1962–63 to 2.93 (roughly B) in 1985–86; the proportion of students receiving less than B – has fallen from 47 percent to 26 percent and the proportion receiving more than

Table 1
Mean Grades and Their Distributions in Introductory Courses in Eight Departments, Williams College, 1962–3 and 1985–6

	Mean Grade	*1962–3 Standard Deviation*	*% Above B +*	*% Below B –*
Departments:				
Art	2.62	.7033	9%	32%
Economics	2.40	.9600	17%	49%
English	2.58	.6767	10%	48%
Math	2.09	1.063	9%	65%
Music	2.74	.6600	14%	37%
Philosophy	2.38	.7200	13%	46%
Poli. Sci.	2.43	.6967	8%	55%
Psychology	2.64	.7933	15%	44%
Aggregate Average	2.49	.7857	11.9%	47.0%
Standard Deviation	.1916			
		1985–86		
High Grading Departments:				
Art	3.00	.6500	23%	20%
English	3.13	.5467	25%	12%
Music	3.26	.5733	28%	17%
Philosophy	2.94	.6067	20%	17%
Poli. Sci.	3.10	.5300	17%	19%
Average	3.09	.5800	22.6%	17%
Std. Dev.	.1105			
Low Grading Departments:				
Economics	2.67	.7333	15%	42%
Math	2.61	1.0033	20%	44%
Psychology	2.71	.8733	17%	37%
Average	2.66	.8700	17.3%	41%
Std. Dev.	.0411			
Aggregate Average	2.93	.6887	20.6%	26%
Standard Deviation	.2239			

B + has risen from 11.9 percent to 20.6 percent over the same period. This pattern is manifested by smaller departments as well.

More central to our concern is the variation in the pace of inflation. In some departments the rate of inflation is high; in Political Science the mean grade has risen by .67 and the proportion receiving below B – has fallen by nearly two-thirds. In others, the increase has been modest; the mean grade has risen only .27 in Economics, while the proportion receiving below B – declined by one-seventh. As a consequence of this differential grade inflation, the variation of mean grades across departments has increased. In 1962–63, with the exception of the unusually low grading Math department, there was little difference across departments either in mean grades or in the distribution of grades. After 25 years of grade inflation, the situation is markedly different.

Williams College now divides itself into low-grading departments, in which the mean grade is 2.66 and 41 percent of students receive less than a B – , and high grading departments, in which the mean grade is 3.09 and only 17 percent of students receive less than B – . This difference in means between high- and low-grading departments is significant at the 1 percent level. Further, in those departments in which the grade distribution shifted higher, given the fixed limit on the highest possible grade, the distribution became more compressed. Within a typical low-grading department, the dispersion of grades is about the same as in 1962–63. But in the typical high grading department, dispersion is much less. The correlation between mean grade and the standard deviation of grades within departments is –.886, and is statistically significant.

The difference in grades between these two groups of departments cannot be explained simply by a difference in the quality of students; there is no significant difference between students in high- and low-grading departments in either SAT scores or grades in other courses.

We compared the grades at Williams to grades at Amherst College, Duke University, Hamilton College, Haverford College, Pomona College, the University of Michigan, the University of North Carolina and the University of Wisconsin. This sample is admittedly small, but was selected so as to include private and state schools, large universities and small colleges, and Eastern, Southern, Midwestern and Western schools. We promised these schools that we would publish the data only in the relatively anonymous way that it appears in what follows.

Seven of these eight schools have experienced substantial grade inflation. Table 2 provides data (unweighted averages) for these seven schools comparable to that in Table 1. Grades were relatively low and very similar across departments in 1962–63.[1] In 1985–86, grades were higher and all seven exhibited the same phenomenon that we have described at Williams: each school is now divided into low- and high-grading departments. Averaging across the schools, 32 percent of all students in high-grading departments receive grades above B + , while in low-grading departments only 19 percent do. Only 19 percent of students in high-grading departments receive grades below B – , while 40 percent of students in low-grading departments do.

In four of the seven schools, interdepartmental differences in grading policies are about equal to Williams, while in the others the differences are even more marked than at Williams. In one case the proportion of students receiv-

[1]We lack 1962–63 data for two of these schools. As at Williams, the Math and Chemistry departments are an occasional exception.

Table 2

Mean Grades and Their Distributions in Introductory Courses in Seven Other Colleges, 1962–63 and 1985–86

	1962–63[a]			
	Mean Grade	*Standard Deviation*	*% Above B +*	*% Below B –*
Departments:				
Art	2.45	.8312	11%	53%
Biology	2.22	1.045	11%	56%
Chemistry	2.19	1.032	12%	60%
Economics	2.23	.9421	11%	61%
English	2.30	.7517	5%	60%
Math	2.21	1.199	18%	57%
Music	2.67	.9123	20%	35%
Philosophy	2.48	.8302	11%	51%
Poli. Sci.	2.51	.7833	13%	50%
Psychology	2.59	.8142	20%	45%
Aggregate Average	2.38	.9141	13.4%	52.7%
Standard Deviation	.1682			
		1985–86[b]		
High Grading Departments:				
Art	2.95	.7223	29%	24%
English	3.12	.5437	27%	12%
Music	3.16	.6657	44%	21%
Philosophy	2.99	.6698	29%	21%
Poli. Sci.	2.95	.7115	24%	23%
Psychology	3.02	.6879	28%	23%
Average	3.03	.6668	30.2%	20.8%
Std. Dev.	.0809			
Low Grading Departments:				
Chemistry	2.66	.9847	17%	44%
Economics	2.81	.8905	20%	31%
Math	2.53	1.042	22%	46%
Average	2.67	.9722	19.9%	40.3%
Std. Dev.	.1126			
Aggregate Average	2.91	.7686	26.8%	27.3%
Standard Deviation	.1936			

[a]The data are not all from the same semesters. For one school the data is from 1962–63, for two the data is from Fall 1962, for one it is from Fall 1963 and for one it is from Fall 1969. We lack 1960s data for two schools.

[b]For four schools the data is from 1985–86 and for three schools the data is from Fall 1985.

ing below B − ranges from 9 percent to 60 percent; in another the share below B − ranges from 0 percent to 39 percent, while the proportion above B + ranges from 10 percent to 57 percent. In addition, the departments that grade low and high display a consistent pattern. Economics, Chemistry, and Math are consistently low-grading departments, while Art, English, Music, Philosophy, Psychology and Political Science are almost always high-grading departments. Only Biology varies, being a low-grading department in just over half the cases.

The one school in our sample which did not experience grade inflation is the exception that proves the rule. At this school, mean grades rose only .022 on a 4-point scale. It is also the one school that *has* managed to maintain uniform grades; in 1985–86, the standard deviation of mean grades across departments was only .1508, which is actually less than it was in 1962–63.

Some Intuition about Course Choice

An individual's choice among courses can be viewed in a utility maximizing framework.[2] There are two aspects of course choice as it pertains to utility maximization; one involves the intrinsic and extrinsic satisfaction derived from taking the course and from the grade received. The other involves students' knowledge of their learning abilities.

Learning can be intrinsically satisfying. Or the course may not be much fun in itself but still deemed useful; organic chemistry and microeconomics are often considered a pain worth tolerating because they lead to future courses or careers that are expected to be highly pleasurable or profitable. In the same way, good grades yield intrinsic satisfaction (the A that brings the warm glow of achievement) and extrinsic satisfaction (Dean's list, good jobs, and graduate scholarships). Bad grades, of course, may result in disappointment, restrictions on participation in sports, academic probation, and parental disapproval.

In addition to entering the student's utility function directly, grades have an indirect influence as signals of the student's strengths. Students do not typically know which subjects they learn most efficiently. Grades signal to students their relative strengths and weaknesses. They can be an integral part of the educational process, a feedback mechanism which helps the student define her comparative advantage and choose courses on that basis. They can reveal whether a student is good at Physics or English, poor at History or Economics.

If grading policies are uniform across departments, maximizing grades and exploiting comparative advantage are mutually consistent; by choosing those subjects in which she is good, a student will both learn more and get better grades. Departure from a uniform grading policy doesn't necessarily

[2]The analysis of this section is based on the activity choice model (Winston, 1982), which is an extension of the familiar Becker (1965) analysis.

obscure signals to students of their comparative advantage or alter course choice. A student who receives a higher grade in English than in Economics, but whose higher English grade is lower relative to her classmates than is her Economics grade, may correctly conclude that her comparative advantage is in Economics. She may then go with her relative strength, and choose a second course in Economics over a second course in English. Or she may choose a second course in the subject in which she is an inefficient learner, English, over a second course in Economics, because of the expected consequences of that choice for her grade point average. So, whether course choice is influenced by differences across departments in grading policy depends on the weight students give to grades as signals of comparative advantage, relative to the weight they give to grades as rewards.

Course Choice at Williams College

To investigate how grades affect student course choices, we studied a representative sample of 376 students enrolled at Williams College during the academic year 1985–86. Our data on these students were from three sources: student transcripts, student files including application forms, and a survey which we administered to these students which yielded a measure of the student's "need for achievement" (Gough, 1952). For each student, we had data on all courses taken and grades received through June 1987: 6842 total course choices. In addition, we had demographic and family background data, indicators of abilities, cognitive skills and academic performance prior to enrolling at Williams, as well as indicators of course preference and academic motivation. This panel data set is rich, but not unique. Similar data are to be found in the Registrars' Offices of all colleges and universities. While this study represents one of the first attempts by economists to exploit these data, replication and extension of this work at other institutions should be quite simple.

We chose for our analysis, from our sample, the five departments with the largest enrollments in their introductory course: Economics, English, Math, Political Science and Psychology. We used probit functions to measure the influence of the grade received by a student on the probability of that student taking a second course in the same department.[3]

In the two departments with the greatest number of observations—Economics, a low-grading department, and English, a high-grading depart-

[3]We derived maximum likelihood estimates of the parameters in the reduced form equation, $\text{Prob}(Y = 1) = D(X'B)$, where Y is a dichotomous variable which takes the value 1 when the individual has taken a second course in the discipline and 0 when she has not, X is a vector of exogenous variables (discussed below), and $D(X'B)$ is the cumulative normal distribution function. We focussed on the decision to take one more course, rather than on the number of courses taken (or the choice of major), because the decision to take a third course (or to major in a department) depends on the grade received in the second and subsequent course(s).

ment—we also assessed the independent influence on course choice of a measure of comparative advantage. Our hypothesis was that in assessing comparative advantage, students will deflate the grades they receive in high-grading departments. Thus, controlling for the absolute level of the grade received in Economics 101, students should be more likely to take additional economics courses the higher is their rank in the distribution of Economics grades relative to their rank in other courses.

When measuring the influence of grades we controlled for such other influences on course choice as intrinsic interest in the discipline, beliefs concerning the level of rewards associated with different disciplines, prior evidence of comparative advantage, and the student's need for achievement. To do this, we included a variable which reflected whether the student intended to major in that department, a gender dummy and a measure of the student's need for achievement, as well as the grade received. Details of the empirical work and our results can be found in Sabot and Wakeman-Linn (1988).

We first estimated course choice functions that did not include measures of comparative advantage. F-tests for four of the five equations are significant at the 1 percent level. We found that in Economics, English and Math, the probability of taking a second course declines significantly as the grade the student received declines.[4] Political Science and Psychology also fit this pattern, although the grade variables were not statistically significant in these departments. However, these two departments had the fewest observations, and the significance levels of the coefficients on grades are sensitive to the number of observations.[5]

The probabilities of taking an additional course in Economics, the largest low-grading department, and English, the largest high-grading department, are revealing. Of the students in Economics 101 who do not intend to major in the subject (the large majority) and who are male (also the majority), the probability of taking a second course is 18.2 percent less if they received a B than if they received an A, and 27.6 percent less if they received a C than if they received an A. Responsiveness to grade is lower for those who intend to major in Economics than those who do not; likewise, it is lower for males than for females in Economics 101.

Students in English 101 are also responsive to their grade, though somewhat less so than students in Economics 101. Of those who do not intend to major in English (the large majority) and are male (again the majority) the

[4]Our results also show that intended majors are more likely than other students to take a second course in the department. Gender has no consistent effect on course choice. Women are less likely to take a second course in Economics or Political Science than men, but gender made no difference in the other departments. Need for achievement significantly influences course choice only in Economics.

[5]Course choice functions were estimated using random sub-samples of the Economics and English students in our sample. The coefficients on the grade variables became insignificant as N declined from 375 to 200. N was less than 200 in both Political Science and Psychology.

probability of taking a second course in English is 14 percent less if they received a B than if they received an A, and 20.3 percent less if they received a C than if they received an A. As in Economics, responsiveness to grade is lower for those who intend to major in English than for those who do not. In contrast to Economics, males and females in English 101 do not differ in their degree of responsiveness to grades. The structure of predicted probabilities for students in introductory courses in Math, Political Science and Psychology are similar to those for students in Economics and English.

Does the comparative advantage signal contained in grades influence course choice? To answer this, we added to our list of variables a continuous variable signifying the difference between the student's relative performance in the introductory course and relative performance in all courses, as measured by grade point average up to and including the semester in which the introductory course is taken. Our analysis focussed on Economics and English, the two departments with more than 300 observations.[6]

There are two notable findings. First, comparative advantage does influence course choice in both Economics and English. As students' rank in the introductory class increases relative to their grade point average rank, their probability of taking a second course increases. Despite discrepancies across departments in grading policies, students are able to derive a signal of comparative advantage from their grades, and they respond to that signal.

Second, accounting for signals of comparative advantage only marginally reduces the incentive effects of grades. While students do consider comparative advantage, the incentive effects of absolute grades on course choice are far more powerful. Changing a student's grade in Economics from B to A would increase his indicator of comparative advantage in Economics, and as a consequence would increase his probability of taking another course by about 4.5 percent. That same change in grade would increase his grade incentive to take a second Economics course, increasing the probability of doing so by about 15 percent.

Simulations and Implications for Altering Enrollments

What are the implications of differences in grading policies across departments for enrollments in courses beyond the introductory level? To answer this question, we conducted simulations with the probabilities generated by our course choice functions. Details of the simulation procedure are available in Sabot and Wakeman-Linn (1988). In particular, we address the question of how many more students would enroll in post-introductory courses in low-grading

[6]The sample size necessary for significant results is increased by the inclusion of the comparative advantage variable; exercises with the largest departments indicate sample sizes below 300 produce insignificant results. As with our earlier assessment of sensitivity to sample size, this exercise involved a random exclusion of cases.

departments, like Economics, if that department adopted for its introductory courses the grading policy followed in a high-grading department, like English. The results that follow do not use the comparative advantage variable, but its inclusion has very little effect.

Our simulation indicated that if Economics 101 grades were distributed as they are in English 101, the number of students taking one or more courses beyond the introductory course in Economics would increase by 11.9 percent. Conversely, if grades in English 101 were distributed as they are in Economics 101, the simulation indicated that the number of students taking one or more courses beyond the introductory course in English would decline by 14.4 percent. The results of applying this method to the Math department, which had the lowest mean grade and the highest dispersion of grades, are more striking. If the Math department adopted in its introductory course the English 101 grading distribution, our simulation indicated an 80.2 percent increase in the number of students taking at least one additional Math course! Alternatively, if the English department adopted the Math grade distribution, there would be a decline of 47 percent in the number of students taking one or more courses beyond the introductory course in English.

There are two reasons why exchanging Math and English grade policies produces greater impact than does the exchange of Economics department and English department grading policies. Grades in Math are substantially lower than grades in the introductory Economics course, hence the direct impact of a change to the English 101 grade distribution is greater in Math. Moreover, for reasons discussed below, Math students are more responsive to grades than are Economics students, which implies a greater increase in enrollments.

Although these results are striking, they probably underestimate the influence of grades in introductory courses on enrollments in advanced courses. First, our simulation method assumed that the probability of an A student taking another course was unaffected by the distribution of grades, while the probability for other students was allowed to vary with the grade distribution. That A students are unaffected is unlikely. If the Economics department adopted the grade distribution of English 101, the proportion of A students taking another Economics course would increase; making high grades easier to obtain increases the incentive to take courses in that department. Second, our simulations ignored the impact of grading distributions on the original decision to take the introductory course. This effect may well be substantial.

Policy Implications and Conclusion

The division of colleges and universities into high- and low-grading departments was not conscious policy but the result of uncoordinated decisions by individual departments and instructors. The consequent impact on the pattern of enrollments, which we have documented, is an unintended side effect of this unplanned division. There are conflicts between implicit grading policies and the explicit policies of these institutions. Since science departments are typically among the low-grading departments, the skew in enrollments resulting from divergent grading policies is in direct opposition to attempts to increase enrollments in the sciences. Moreover, most colleges and universities would not wish for students to be lured away from their areas of comparative advantage by arbitrary differences in departmental grading. The policy implication seems clear: such arbitrary differences in grading policies among departments should be eliminated (although planned differences in grading policies may be desirable).

The findings of the Williams study are not neutral, however, with respect to whether low-grading departments should raise their grades or high-grading departments should lower their grades. Students in high-grading departments are consistently less responsive to grades than students in low-grading departments. This appears to be a consequence of the more compressed distribution of grades in high grading departments; the compression results in grades that provide less accurate signals of comparative advantage and are more random.

Two additional facts support this conclusion. First, grades in high grading departments are less accurate predictors of subsequent performance. The average correlation between grades received in the first and second courses at Williams is .6147 and highly significant in three low-grading departments, but only .3681 and occasionally insignificant in five high-grading departments.

Second, various indicators of ability, prior level of skill, and motivation are poor predictors of grades in high-grading departments. Sabot and Wakeman-Linn (forthcoming) estimate production functions to determine what factors contribute to success in introductory courses at Williams. In low-grading Economics, math and verbal SAT's, parents' education, the student's need for achievement, performance in high school and sibling rank all have a significant influence on performance. Together, they explain between a third and a half of the variance in Economics 101 grades. By contrast, verbal SAT's are the only significant variable in predicting introductory English grades, and all the variables together can explain only between 5 and 10 percent of the grade variance.

Compressed grading distributions in high-grading departments convey cruder signals. One reason is that instructors with fewer grading categories must make cruder distinctions. In addition, if there is little difference in the grade received by the top, middle, and bottom students in the class, there is less incentive for the instructor, and less pressure from students, to make accurate distinctions among students.

If the aim of grading is to convey information to students about their relative strengths and weaknesses, then grade distributions with more dispersion and a lower average will be preferable. In addition, our results indicate that a uniform grading policy might be an effective response to Ernest Bloch's entreaty to "persuade more students to study science and engineering."

■ *We are grateful to Gordon Winston for his numerous contributions to the paper, to David Ross for econometric advice, and to the participants in the economics seminar at Williams College for useful comments. We would like to thank the President of Williams College for providing research funds for the study, the Registrar of Williams for legitimizing our requests to other institutions for detailed data on grades, and the Registrars at Amherst, Duke, Hamilton, Haverford, Pomona, and the Universities of Michigan, North Carolina and Wisconsin for the provision of that data. Finally, we would like to thank the editors for unusually helpful interventions.*

References

Becker, Gary S., "A Theory of the Allocation of Time," *Economic Journal*, 1965, *75*, 493–517.

Gough, Harrison G., "The Adjective Checklist." Palo Alto: Consulting Psychologists Press, 1952.

Milbank, Dana, "Shortage of Scientists Approaches a Crisis as More Students Drop Out of the Field," *The Wall Street Journal*, September 17, 1990, p. B1.

Ravo, Nick, "Yale Moves to Make Cum Laude Mean More," *New York Times*, May 22, 1988, p. 26.

Sabot, Richard, and John Wakeman-Linn, "Performance in Introductory Courses: A Production Function Analysis," *Journal of Economic Education*, forthcoming.

Sabot, Richard, and John Wakeman-Linn, "Grade Inflation and Course Choice," Williams College Research Paper, November, 1988.

U.S Department of Education, "The Conditions of Education," Center for Educational Statistics, Washington, D.C., 1987, pp. 104–105.

Winston, Gordon C., *The Timing of Economic Activities: Firms, Households, and Markets in Time-Specific Analysis*. Cambridge: Cambridge University Press, 1982.

This article has been cited by:

1. Maura A. E. Pilotti, Khadija El Alaoui, Hanadi M. Abdelsalam, Omar J. El-Moussa. 2024. Understanding STEM and non-STEM female freshmen in the Middle East: a post-pandemic case study. *Cogent Education* **11**:1. . [Crossref]
2. Engin Karadag, Ibrahim Taylan Dortyol. 2024. Evidence of grade inflation in bachelor of business administration degrees in Turkey for the period from 2002 to 2022. *Humanities and Social Sciences Communications* **11**:1. . [Crossref]
3. Hongyan Li, Xing Xia. 2024. Grades as signals of comparative advantage: How letter grades affect major choices. *Journal of Economic Behavior & Organization* **227**, 106717. [Crossref]
4. Kristin Butcher, Patrick J. McEwan, Akila Weerapana. 2024. Making the (Letter) Grade: The Incentive Effects of Mandatory Pass/Fail Courses. *Education Finance and Policy* **19**:3, 385-408. [Crossref]
5. Philippe Jehiel, Mathieu V. Leduc. 2024. Can affirmative action policies be inefficiently persistent?. *European Economic Review* **166**, 104754. [Crossref]
6. Petar Stankov. 2024. The death of exams? Grade inflation and student satisfaction when coursework replaces exams. *International Review of Economics Education* **46**, 100289. [Crossref]
7. Wolfgang Stroebe. 2024. If Student Evaluations of Teaching Are Invalid, Why Are They Still Being Used? Comments on Uttl (2023). *Human Arenas* **7**:2, 438-445. [Crossref]
8. Kevin Ng, Evan Riehl. 2024. The Returns to STEM Programs for Less-Prepared Students. *American Economic Journal: Economic Policy* **16**:2, 37-77. [Abstract] [View PDF article] [PDF with links]
9. Руслан Абатов. 2024. The significance of elective courses in teaching foreign languages. *Актуальные вопросы лингвистики и преподавания иностранных языков: достижения и инновации* **1**:1, 171-174. [Crossref]
10. Jorge Villagrasa Guarch, Colin Donaldson, Ángel Soler. 2024. Grades for glory? The impact of grade appeasement on business school teacher evaluations. *Journal of Management and Business Education* **7**:2, 303-323. [Crossref]
11. Andrei Ternikov, Mikhail Blyakher. 2024. Grade inflation and grading process: does faculty workload matter?. *Journal of Applied Research in Higher Education* **23**. . [Crossref]
12. Tom Ahn, Peter Arcidiacono, Amy Hopson, James Thomas. 2024. Equilibrium Grading Policies With Implications for Female Interest in STEM Courses. *Econometrica* **92**:3, 849-880. [Crossref]
13. Raul Ramirez-Velarde, Laura Hervert-Escobar, Neil Hernandez-Gress. Analyzing Grade Inflation in Engineering Education 427-441. [Crossref]
14. Victoria S. Farrar, Bianca-Yesenia Cruz Aguayo, Natalia Caporale. 2023. Gendered Performance Gaps in an Upper-Division Biology Course: Academic, Demographic, Environmental, and Affective Factors. *CBE—Life Sciences Education* **22**:4. . [Crossref]
15. Daniel James Richardson, Neil Evan Jon Anthony Bowen. 2023. Grade variations across EFL, CLIL, and EMI platforms: A longitudinal case study in an English language teaching department. *System* **119**, 103163. [Crossref]
16. Nicholas T. Young, Rebecca L. Matz, Eric F. Bell, Caitlin Hayward. 2023. How researchers calculate students' grade point average in other courses has minimal impact. *PLOS ONE* **18**:8, e0290109. [Crossref]
17. Adam Chilton, Peter Joy, Kyle Rozema, James Thomas. 2023. Improving the signal quality of grades. *The Journal of Law, Economics, and Organization* **116**. . [Crossref]
18. Christopher Lalley, Lauren McInally. 2023. Secondary school grades and graduate returns to education in the UK. *Journal of Education and Work* **36**:3, 169-185. [Crossref]

19. César Ramírez. 2022. Legal education abroad: Colombian legal graduates and the social effects of LL.M. degrees. *Novum Jus* **16**:3, 339-381. [Crossref]

20. John W. Szura, Christian Fischer, Renée D. Link, Penelope Collins. 2022. Looking at the Laboratory Discussion: Course Modality Choice and Student Performance in Organic Chemistry. *Journal of Chemical Education* **99**:10, 3478-3487. [Crossref]

21. Claire B. Tracy, Emily P. Driessen, Abby E. Beatty, Todd Lamb, Jenna E. Pruett, Jake D. Botello, Cara Brittain, Ísada Claudio Ford, Chloe C. Josefson, Randy L. Klabacka, Tyler Smith, Ariel Steele, Min Zhong, Scott Bowling, Lucinda Dixon, Cissy J. Ballen. 2022. Why Students Struggle in Undergraduate Biology: Sources and Solutions. *CBE—Life Sciences Education* **21**:3. . [Crossref]

22. Yang He, Joe F. Alexander, Atanas Nikolov, Rui Aray Chen. 2022. I WAS TOLD THERE WOULD BE NO MATH: MARKETING STUDENTS' MISCONCEPTIONS OF THE CAREER FIELD IMPEDE ENROLLMENT INTEREST IN QUANTITATIVE COURSES. *Marketing Education Review* **1387**, 1-12. [Crossref]

23. Stephen L. Baglione, Zachary Smith. 2022. Grade inflation: undergraduate students' perspective. *Quality Assurance in Education* **30**:2, 251-267. [Crossref]

24. Alessandro Castagnetti, Renke Schmacker. 2022. Protecting the ego: Motivated information selection and updating. *European Economic Review* **142**, 104007. [Crossref]

25. Thomas Gray, Jonas Bunte. 2022. The Effect of Grades on Student Performance: Evidence from a Quasi-Experiment. *College Teaching* **70**:1, 15-28. [Crossref]

26. Fernando Suárez, Juan Carlos Mosquera Feijóo, Isabel Chiyón, Marcos García Alberti. 2021. Flipped Learning in Engineering Modules Is More Than Watching Videos: The Development of Personal and Professional Skills. *Sustainability* **13**:21, 12290. [Crossref]

27. Marissa E. Thompson. 2021. Grade Expectations: The Role of First-Year Grades in Predicting the Pursuit of STEM Majors for First- and Continuing-Generation Students. *The Journal of Higher Education* **92**:6, 961-985. [Crossref]

28. Amanda L. Griffith, Veronica Sovero. 2021. Under pressure: How faculty gender and contract uncertainty impact students' grades. *Economics of Education Review* **83**, 102126. [Crossref]

29. Martin Gregor. 2021. Electives Shopping, Grading Policies and Grading Competition. *Economica* **88**:350, 364-398. [Crossref]

30. Frauke Korfmann, Sven Müller, Sebastian Ehlert, Knut Haase. 2021. Students' perceptions, academic departments' image, and major-choice in business administration studies—The example of Hamburg Business School. *Higher Education Quarterly* **75**:1, 51-76. [Crossref]

31. David Card, A. Abigail Payne. 2021. HIGH SCHOOL CHOICES AND THE GENDER GAP IN STEM. *Economic Inquiry* **59**:1, 9-28. [Crossref]

32. Philippe Jehiel, Matthew V. Leduc. 2021. On Why Affirmative Action May Never End and Why it Should. *SSRN Electronic Journal* **3**. . [Crossref]

33. Veronica Minaya. 2020. Do Differential Grading Standards Across Fields Matter for Major Choice? Evidence from a Policy Change in Florida. *Research in Higher Education* **61**:8, 943-965. [Crossref]

34. Ivo J.M. Arnold. 2020. Gender and major choice within economics: Evidence from Europe. *International Review of Economics Education* **35**, 100191. [Crossref]

35. Shao-Hsun Keng. 2020. Gender bias and statistical discrimination against female instructors in student evaluations of teaching. *Labour Economics* **66**, 101889. [Crossref]

36. Wolfgang Stroebe. 2020. Student Evaluations of Teaching Encourages Poor Teaching and Contributes to Grade Inflation: A Theoretical and Empirical Analysis. *Basic and Applied Social Psychology* **42**:4, 276-294. [Crossref]

37. Vipin K. Agrawal, Poonam Khanna, Vijay K. Agrawal, Larry W. Hughes. 2020. Change in Student Perceptions of Course and Instructor Following Curriculum Change. *Decision Sciences Journal of Innovative Education* **18**:3, 481-516. [Crossref]

38. Dirk Witteveen, Paul Attewell. 2020. The STEM grading penalty: An alternative to the "leaky pipeline" hypothesis. *Science Education* **104**:4, 714-735. [Crossref]

39. Paulette Vincent-Ruz, Tara Meyer, Sean G. Roe, Christian D. Schunn. 2020. Short-Term and Long-Term Effects of POGIL in a Large-Enrollment General Chemistry Course. *Journal of Chemical Education* **97**:5, 1228-1238. [Crossref]

40. Volker Müller-Benedict, Thomas Gaens. 2020. A new explanation for grade inflation: the long-term development of German university grades. *European Journal of Higher Education* **10**:2, 181-201. [Crossref]

41. Luis Armona, Mohammad Rasouli. 2020. Information Inequality in Online Education. *SSRN Electronic Journal* **110**. . [Crossref]

42. Martin Nordin, Gawain Heckley, Ulf Gerdtham. 2019. The impact of grade inflation on higher education enrolment and earnings. *Economics of Education Review* **73**, 101936. [Crossref]

43. Cédric Beaulac, Jeffrey S. Rosenthal. 2019. Predicting University Students' Academic Success and Major Using Random Forests. *Research in Higher Education* **60**:7, 1048-1064. [Crossref]

44. Dario Sansone. 2019. Teacher Characteristics, Student Beliefs, and the Gender Gap in STEM Fields. *Educational Evaluation and Policy Analysis* **41**:2, 127-144. [Crossref]

45. Daniel L. Bennett, Elyssa Edwards, Courtney Ngai. 2019. Homeschool background, time use and academic performance at a private religious college. *Educational Studies* **45**:3, 305-325. [Crossref]

46. Richard Cohen, Angela M. Kelly. 2019. Community College Chemistry Coursetaking and STEM Academic Persistence. *Journal of Chemical Education* **96**:1, 3-11. [Crossref]

47. Laura J. Ahlstrom, Carlos J. Asarta. Navigating the Economics Major: The Effect of Gender on Students' Degree Pathways 115-136. [Crossref]

48. James Thomas. 2019. What Do Course Offerings Imply About University Preferences?. *SSRN Electronic Journal* **36**. . [Crossref]

49. Shao-Hsun Keng. 2018. Tenure system and its impact on grading leniency, teaching effectiveness and student effort. *Empirical Economics* **55**:3, 1207-1227. [Crossref]

50. Ido Millet. 2018. The relationship between grading leniency and grading reliability. *Studies in Higher Education* **43**:9, 1524-1535. [Crossref]

51. Yang Song. 2018. Intended and unintended effects of student performance measurement reform in China. *China Economic Review* **50**, 133-152. [Crossref]

52. Marcus D. Casey, Jeffrey Cline, Ben Ost, Javaeria A. Qureshi. 2018. ACADEMIC PROBATION, STUDENT PERFORMANCE, AND STRATEGIC COURSE-TAKING. *Economic Inquiry* **56**:3, 1646-1677. [Crossref]

53. Michael Beenstock, Dan Feldman. 2018. Decomposing university grades: a longitudinal study of students and their instructors. *Studies in Higher Education* **43**:1, 114-133. [Crossref]

54. Horacio Matos-Díaz. 2018. Estimating the effects of partial withdrawals on GPA through time: Evidence from the University of Puerto Rico. *EconomiA* **19**:1, 90-104. [Crossref]

55. Martin Gregor. 2018. Electives Shopping, Grading Competition, and Grading Norms. *SSRN Electronic Journal* . [Crossref]

56. Ray Bachan. 2017. Grade inflation in UK higher education. *Studies in Higher Education* **42**:8, 1580-1600. [Crossref]

57. Michael C Herron, Zachary D Markovich. 2017. Student sorting and implications for grade inflation. *Rationality and Society* **29**:3, 355-386. [Crossref]
58. Andrew De Donato, James Thomas. 2017. The effects of Greek affiliation on academic performance. *Economics of Education Review* **57**, 41-51. [Crossref]
59. Thomas Gaens, Volker Müller-Benedict. Die langfristige Entwicklung des Notenniveaus und ihre Erklärung 17-78. [Crossref]
60. Geraint Johnes, Kwok Tong Soo. 2017. Grades across Universities over Time. *The Manchester School* **85**:1, 106-131. [Crossref]
61. Rey Hernández-Julián, Adam Looney. 2016. Measuring inflation in grades: An application of price indexing to undergraduate grades. *Economics of Education Review* **55**, 220-232. [Crossref]
62. Wolfgang Stroebe. 2016. Why Good Teaching Evaluations May Reward Bad Teaching. *Perspectives on Psychological Science* **11**:6, 800-816. [Crossref]
63. Barbara King. 2016. Does Postsecondary Persistence in STEM Vary by Gender?. *AERA Open* **2**:4. . [Crossref]
64. Michael A. Bailey, Jeffrey S. Rosenthal, Albert H. Yoon. 2016. Grades and incentives: assessing competing grade point average measures and postgraduate outcomes. *Studies in Higher Education* **41**:9, 1548-1562. [Crossref]
65. Dafna Gelbgiser, Sigal Alon. 2016. Math-oriented fields of study and the race gap in graduation likelihoods at elite colleges. *Social Science Research* **58**, 150-164. [Crossref]
66. Shao-Hsun Keng. 2016. The Effect of a Stricter Academic Dismissal Policy on Course Selection, Student Effort, and Grading Leniency. *Education Finance and Policy* **11**:2, 203-224. [Crossref]
67. Brandon Lehr. 2016. Information and Inflation: An Analysis of Grading Behavior. *The B.E. Journal of Economic Analysis & Policy* **16**:2, 755-783. [Crossref]
68. Peter Arcidiacono, Michael Lovenheim. 2016. Affirmative Action and the Quality–Fit Trade-off. *Journal of Economic Literature* **54**:1, 3-51. [Abstract] [View PDF article] [PDF with links]
69. Jack W. Kostal, Nathan R. Kuncel, Paul R. Sackett. 2016. Grade Inflation Marches On: Grade Increases from the 1990s to 2000s. *Educational Measurement: Issues and Practice* **35**:1, 11-20. [Crossref]
70. J.G. Altonji, P. Arcidiacono, A. Maurel. The Analysis of Field Choice in College and Graduate School 305-396. [Crossref]
71. Kamila Danilowicz-GGsele. 2016. 'A' is the Aim?. *SSRN Electronic Journal* **93**. . [Crossref]
72. Doris Zahner, Zachary Kornhauser, Roger W. Benjamin, Raffaela Wolf, Jeffrey T. Steedle. Using the Collegiate Learning Assessment to Address the College-to-Career Space 230-260. [Crossref]
73. Alpaslan Sahin, Ozcan Gulacar, Carol Stuessy. 2015. High School Students' Perceptions of the Effects of International Science Olympiad on Their STEM Career Aspirations and Twenty-First Century Skill Development. *Research in Science Education* **45**:6, 785-805. [Crossref]
74. Kelly R. Schutz, Brent M. Drake, Janet Lessner, Gail F. Hughes. 2015. A Comparison of Community College Full-Time and Adjunct Faculties' Perceptions of Factors Associated With Grade Inflation. *The Journal of Continuing Higher Education* **63**:3, 180-192. [Crossref]
75. Robertas Zubrickas. 2015. OPTIMAL GRADING. *International Economic Review* **56**:3, 751-776. [Crossref]
76. Peter Arcidiacono, Michael Lovenheim, Maria Zhu. 2015. Affirmative Action in Undergraduate Education. *Annual Review of Economics* **7**:1, 487-518. [Crossref]
77. Namik Top, Alpaslan Sahin, Kadir Almus. 2015. A Stimulating Experience. *Sage Open* **5**:3. . [Crossref]

78. Jashim Uddin Ahmed, Md. Humayun Kabir Chowdhury, Sheehan Rahman, AKM Mominul Haque Talukder. 2015. Academic Probation: An Empirical Study of Private University Students. *SSRN Electronic Journal* . [Crossref]
79. Fatin Samara. 2015. Factors Influencing Students' Choice of Elective Science Courses: A Case Study from the American University of Sharjah. *Open Journal of Social Sciences* **03**:08, 93-99. [Crossref]
80. Jabril Johnson, Fatimah Jackson. 2015. Use of Multiple Intelligence Modalities to Convey Genetic and Genomic Concepts in African American College Biology Students. *Natural Science* **07**:06, 299-308. [Crossref]
81. Horacio Matos-Díaz. 2014. Measuring grade inflation and grade divergence accounting for student quality. *Cogent Economics & Finance* **2**:1, 915756. [Crossref]
82. Kim C. O'Halloran, Michael E. Gordon. 2014. A synergistic approach to turning the tide of grade inflation. *Higher Education* **68**:6, 1005-1023. [Crossref]
83. Jashim Uddin Ahmed, Md. Humayun Kabir Chowdhury, Sheehan Rahman, A K M Mominul Haque Talukder. 2014. Academic Probation: An Empirical Study of Private University Students. *Research in Education* **92**:1, 1-17. [Crossref]
84. Kristin F. Butcher, Patrick J. McEwan, Akila Weerapana. 2014. The Effects of an Anti-Grade Inflation Policy at Wellesley College. *Journal of Economic Perspectives* **28**:3, 189-204. [Abstract] [View PDF article] [PDF with links]
85. Mary R. Hedges, Don J. Webber. 2014. Using student evaluations to improve individual and department teaching qualities. *Research in Post-Compulsory Education* **19**:3, 323-339. [Crossref]
86. Ross A. Perkins, Patrick R. Lowenthal. 2014. Establishing an Equitable and Fair Admissions System for an Online Doctoral Program. *TechTrends* **58**:4, 27-35. [Crossref]
87. Joyce B. Main, Ben Ost. 2014. The Impact of Letter Grades on Student Effort, Course Selection, and Major Choice: A Regression-Discontinuity Analysis. *The Journal of Economic Education* **45**:1, 1-10. [Crossref]
88. R. Stinebrickner, T. R. Stinebrickner. 2014. A Major in Science? Initial Beliefs and Final Outcomes for College Major and Dropout. *The Review of Economic Studies* **81**:1, 426-472. [Crossref]
89. R. Todd Jewell, Michael A. McPherson, Margie A. Tieslau. 2013. Whose fault is it? Assigning blame for grade inflation in higher education. *Applied Economics* **45**:9, 1185-1200. [Crossref]
90. Jonathan Marx, David Meeler. 2013. Strike four! Do-over policies institutionalize GPA distortion. *Quality Assurance in Education* **21**:1, 39-53. [Crossref]
91. Wayne A. Grove, Tim Wasserman, Andrew Grodner. 2013. Choosing a Proxy for Academic Aptitude. *SSRN Electronic Journal* **25**. . [Crossref]
92. Peter Arcidiacono, Esteban M Aucejo, Ken Spenner. 2012. What happens after enrollment? An analysis of the time path of racial differences in GPA and major choice. *IZA Journal of Labor Economics* **1**:1. . [Crossref]
93. Maria De Paola, Francesca Gioia. 2012. RISK AVERSION AND FIELD OF STUDY CHOICE: THE ROLE OF INDIVIDUAL ABILITY. *Bulletin of Economic Research* **64**:s1. . [Crossref]
94. Philip H. Brown, Nicholas Van Niel. 2012. Alternative class ranks using z -scores. *Assessment & Evaluation in Higher Education* **37**:7, 889-905. [Crossref]
95. Joyce B. Main, Matthew W. Ohland, Kevin J. Mumford. Work in progress: Understanding migration patterns of engineering undergraduates: The impact of course grades on student major choice 1-3. [Crossref]
96. Rebecca Summary, William L. Weber. 2012. Grade inflation or productivity growth? An analysis of changing grade distributions at a regional university. *Journal of Productivity Analysis* **38**:1, 95-107. [Crossref]

97. Horacio Matos-Díaz. 2012. Student Evaluation of Teaching, Formulation of Grade Expectations, and Instructor Choice: Explorations with Random-Effects Ordered Probability Models. *Eastern Economic Journal* **38**:3, 296-309. [Crossref]
98. R. Todd Jewell, Michael A. McPherson. 2012. Instructor-Specific Grade Inflation: Incentives, Gender, and Ethnicity*. *Social Science Quarterly* **93**:1, 95-109. [Crossref]
99. Andrew M. Ewing. 2012. Estimating the impact of relative expected grade on student evaluations of teachers. *Economics of Education Review* **31**:1, 141-154. [Crossref]
100. Talia Bar,, Asaf Zussman. 2012. Partisan Grading. *American Economic Journal: Applied Economics* **4**:1, 30-48. [Abstract] [View PDF article] [PDF with links]
101. Shouping Hu, Matthew Trengove, Liang Zhang. Toward a Greater Understanding of the Effects of State Merit Aid Programs: Examining Existing Evidence and Exploring Future Research Direction 291-334. [Crossref]
102. Robertas Zubrickas. 2012. Optimal Grading. *SSRN Electronic Journal* **121**. . [Crossref]
103. Sigal Alon, Dafna Gelbgiser. 2011. The female advantage in college academic achievements and horizontal sex segregation. *Social Science Research* **40**:1, 107-119. [Crossref]
104. Phil Brown, Nicholas Van Niel. 2011. Alternative Class Ranks Using Z-Scores. *SSRN Electronic Journal* . [Crossref]
105. Thomas K. Bauer, Barbara S. Grave. 2011. Performance-Related Funding of Universities – Does More Competition Lead to Grade Inflation?. *SSRN Electronic Journal* . [Crossref]
106. Kevin Rask. 2010. Attrition in STEM fields at a liberal arts college: The importance of grades and pre-collegiate preferences. *Economics of Education Review* **29**:6, 892-900. [Crossref]
107. Patrick Walsh. 2010. Does Competition Among Schools Encourage Grade Inflation?. *Journal of School Choice* **4**:2, 149-173. [Crossref]
108. Wan-Ju Iris Franz. 2010. Grade inflation under the threat of students' nuisance: Theory and evidence. *Economics of Education Review* **29**:3, 411-422. [Crossref]
109. David A Love, Matthew J Kotchen. 2010. Grades, Course Evaluations, and Academic Incentives. *Eastern Economic Journal* **36**:2, 151-163. [Crossref]
110. Jan Tucker, Bari Courts. 2010. Grade inflation in the college classroom. *Foresight* **12**:1, 45-53. [Crossref]
111. Tisha L.N. Emerson, Beck A. Taylor. 2010. Do Classroom Experiments Affect the Number of Economics Enrolments and Majors? A Study of Students in the United States. *International Review of Economics Education* **9**:2, 43-58. [Crossref]
112. Rey Hernández-Julián. 2010. Merit-Based Scholarships and Student Effort. *Education Finance and Policy* **5**:1, 14-35. [Crossref]
113. Barick Chung. 2010. The Banning of Grade Inflation Can Distort Information. *SSRN Electronic Journal* . [Crossref]
114. Winai Wongsurawat. 2009. Does grade inflation affect the credibility of grades? Evidence from US law school admissions. *Education Economics* **17**:4, 523-534. [Crossref]
115. Bound John, Hershbein Brad, Long Bridget Terry. 2009. Playing the Admissions Game: Student Reactions to Increasing College Competition. *Journal of Economic Perspectives* **23**:4, 119-146. [Abstract] [View PDF article] [PDF with links]
116. Jean-Michel Plassard, Nhu Tran Thi Thanh. 2009. L'analyse de la suréducation ou du déclassement : l'escroquerie scolaire enfin démasquée ou beaucoup de bruits pour rien ? Celui qui augmente sa connaissance augmente sa douleur (Ecclésiaste 18) Il en sait bien trop pour ce qu'il a à faire (Prover. *Revue d'économie politique* **Vol. 119**:5, 751-793. [Crossref]

117. Alexandra C. Achen,, Paul N. Courant,. 2009. What Are Grades Made Of?. *Journal of Economic Perspectives* **23**:3, 77-92. [Abstract] [View PDF article] [PDF with links]
118. Talia Bar,, Vrinda Kadiyali,, Asaf Zussman,. 2009. Grade Information and Grade Inflation: The Cornell Experiment. *Journal of Economic Perspectives* **23**:3, 93-108. [Abstract] [View PDF article] [PDF with links]
119. Matthew Lancellotti, Sunil Thomas. 2009. To Take or Not to Take: Effects of Motivation, Self-Efficacy, and Class-Related Factors on Course Attitudes. *Marketing Education Review* **19**:2, 35-47. [Crossref]
120. William L. Kuechler, Alexander McLeod, Mark G. Simkin. 2009. Why Don't More Students Major in IS?. *Decision Sciences Journal of Innovative Education* **7**:2, 463-488. [Crossref]
121. William R. Johnson,, Sarah Turner,. 2009. Faculty without Students: Resource Allocation in Higher Education. *Journal of Economic Perspectives* **23**:2, 169-189. [Abstract] [View PDF article] [PDF with links]
122. Anton Oleinik. 2009. Does education corrupt? Theories of grade inflation. *Educational Research Review* **4**:2, 156-164. [Crossref]
123. Kevin Rask, Jill Tiefenthaler. 2008. The role of grade sensitivity in explaining the gender imbalance in undergraduate economics. *Economics of Education Review* **27**:6, 676-687. [Crossref]
124. Marian Krajc, Andreas Ortmann. 2008. Are the unskilled really that unaware? An alternative explanation. *Journal of Economic Psychology* **29**:5, 724-738. [Crossref]
125. Laura Langbein. 2008. Management by results: Student evaluation of faculty teaching and the mis-measurement of performance. *Economics of Education Review* **27**:4, 417-428. [Crossref]
126. Winai Wongsurawat. 2008. Grade inflation and law school admissions. *Quality Assurance in Education* **16**:3, 224-235. [Crossref]
127. B. Curtis Eaton, Mukesh Eswaran. 2008. Differential Grading Standards and Student Incentives. *Canadian Public Policy* **34**:2, 215-236. [Crossref]
128. M. Bagues, M. S. Labini, N. Zinovyeva. 2008. Differential Grading Standards and University Funding: Evidence from Italy. *CESifo Economic Studies* **54**:2, 149-176. [Crossref]
129. Ann L. Owen, Elizabeth J. Jensen. 2008. Social Learning and Course Choice. *International Review of Economics Education* **7**:1, 9-35. [Crossref]
130. Talia R. Bar, Vrinda Kadiyali, Asaf Zussman. 2008. Quest for Knowledge and Pursuit of Grades: Information, Course Selection, and Grade Inflation. *SSRN Electronic Journal* . [Crossref]
131. Manuel F. Bagues, Mauro Sylos Labini, Natalia Zinovyeva. 2008. Differential Grading Standards and University Funding: Evidence from Italy. *SSRN Electronic Journal* . [Crossref]
132. Mohammad Ashraf. 2008. The Perilous Effects of Student Evaluations on Pedagogy. *SSRN Electronic Journal* **30**. . [Crossref]
133. William Chan, Li Hao, Wing Suen. 2007. A SIGNALING THEORY OF GRADE INFLATION*. *International Economic Review* **48**:3, 1065-1090. [Crossref]
134. Betty V. DeBoer, Donna M. Anderson, Abdulaziz M. Elfessi. 2007. Grading Styles and Instructor Attitudes. *College Teaching* **55**:2, 57-64. [Crossref]
135. Marian Krajc, Andreas Ortmann. 2007. Are the Unskilled Really that Unaware? An Alternative Explanation. *SSRN Electronic Journal* . [Crossref]
136. Kim R. Sawyer, Jackie Johnson, Mark Holub. 2007. Decline in Academe. *SSRN Electronic Journal* . [Crossref]
137. Lindsay Noble Calkins, Andrew Welki. 2006. Factors that influence choice of major: why some students never consider economics. *International Journal of Social Economics* **33**:8, 547-564. [Crossref]

138. Wayne A. Grove, Tim Wasserman, Andrew Grodner. 2006. Choosing a Proxy for Academic Aptitude. *The Journal of Economic Education* **37**:2, 131-147. [Crossref]
139. Rey Hernandez-Julian. 2006. Merit-Based Scholarships and Grade Inflation in Higher Education. *SSRN Electronic Journal* . [Crossref]
140. Kris N. Kirby, Gordon C. Winston, Mariana Santiesteban. 2005. Impatience and grades: Delay-discount rates correlate negatively with college GPA. *Learning and Individual Differences* **15**:3, 213-222. [Crossref]
141. Christina Wikström. 2005. Grade stability in a criterion-referenced grading system: the Swedish example. *Assessment in Education: Principles, Policy & Practice* **12**:2, 125-144. [Crossref]
142. 2005. Table of Contents. *ASHE Higher Education Report* **30**:6, 1-99. [Crossref]
143. Wayne A. Grove, Tim Wasserman. 2004. The Life-Cycle Pattern of Collegiate GPA: Longitudinal Cohort Analysis and Grade Inflation. *The Journal of Economic Education* **35**:2, 162-174. [Crossref]
144. Aysegul Sahin. 2004. The Incentive Effects of Higher Education Subsidies on Student Effort. *SSRN Electronic Journal* . [Crossref]
145. Kevin N. Rask, Jill Tiefenthaler. 2004. Too Few Women? - Or Too Many Men? The Gender Imbalance in Undergraduate Economics. *SSRN Electronic Journal* . [Crossref]
146. Ray Bachan. 2004. Curriculum Choice at A-level: Why is Business Studies more Popular than Economics?. *SSRN Electronic Journal* . [Crossref]
147. 2003. Economics: The Sexy Social Science?. *Southern Economic Journal* **70**:1, 195-225. [Crossref]
148. William M. Chan, Hao NMI1 Li, Wing C. Suen. 2003. Grade Inflation. *SSRN Electronic Journal* . [Crossref]
149. Kiridaran Kanagaretnam, Robert Mathieu, Alex Thevaranjan. 2003. An economic analysis of the use of student evaluations: implications for universities. *Managerial and Decision Economics* **24**:1, 1-13. [Crossref]
150. James Bearden, Raymond N. Wolfe. 2001. Reaction to Compton and Metheny (2000): "Assessment of Grade Inflation in Higher Education". *Perceptual and Motor Skills* **92**:1, 263-264. [Crossref]
151. John J. Siegfried, David K. Round. 2001. International Trends in Economics Degrees During the 1990s. *The Journal of Economic Education* **32**:3, 203-218. [Crossref]
152. John Ashworth, J. Lynne Evans. 2001. Modeling Student Subject Choice at Secondary and Tertiary Level: A Cross-Section Study. *The Journal of Economic Education* **32**:4, 311-320. [Crossref]
153. John Ashworth, Lynne Evans. 2000. Economists are Grading Students Away from the Subject. *Educational Studies* **26**:4, 475-487. [Crossref]
154. Kenneth I. Maton, Freeman A. Hrabowski, Carol L. Schmitt. 2000. African American college students excelling in the sciences: College and postcollege outcomes in the Meyerhoff Scholars Program. *Journal of Research in Science Teaching* **37**:7, 629-654. [Crossref]
155. Gary M. Fournier, Tim R. Sass. 2000. Take My Course, Please : The Effects of the Principles Experience on Student Curriculum Choice. *The Journal of Economic Education* **31**:4, 323-339. [Crossref]
156. Perry A. Zirkel. 1999. Grade Inflation: A Leadership Opportunity for Schools of Education?. *Teachers College Record: The Voice of Scholarship in Education* **101**:2, 247-260. [Crossref]
157. Perry A. Zirkel. 1999. Grade Inflation: A Leadership Opportunity for Schools of Education?. *Teachers College Record: The Voice of Scholarship in Education* **101**:2, 247-260. [Crossref]
158. George D. Kuh, Shouping Hu. 1999. Unraveling the Complexity of the Increase in College Grades From the Mid-1980s to the Mid-1990s. *Educational Evaluation and Policy Analysis* **21**:3, 297-320. [Crossref]

159. Donald G. Freeman. 1999. Grade Divergence as a Market Outcome. *The Journal of Economic Education* **30**:4, 344-351. [Crossref]

160. Manfred Gartner. 1998. The Making of Applied Economists: Challenges for Undergraduate Curriculums. *SSRN Electronic Journal* . [Crossref]

161. Karen E. Dynan, Cecilia Elena Rouse. 1997. The Underrepresentation of Women in Economics: A Study of Undergraduate Economics Students. *The Journal of Economic Education* **28**:4, 350-368. [Crossref]

162. Stanley L. Brue. 1996. Controversy and Change in the American Economics Curriculum. *The American Economist* **40**:2, 44-51. [Crossref]

163. Raymond N. Wolfe, Scott D. Johnson. 1995. Personality as a Predictor of College Performance. *Educational and Psychological Measurement* **55**:2, 177-185. [Crossref]

164. A. Christopher Strenta, Rogers Elliott, Russell Adair, Michael Matier, Jannah Scott. 1994. Choosing and leaving science in highly selective institutions. *Research in Higher Education* **35**:5, 513-547. [Crossref]

165. Ruth B. Ekstrom, Ana MarÍa Villegas, Barbara A. Bruschi, Frederick A. Cline. 1994. COLLEGE GRADES: AN EXPLORATORY STUDY OF POLICIES AND PRACTICES. *ETS Research Report Series* **1994**:1. . [Crossref]

166. Leonard Ramist, Charles Lewis, Laura McCamley-JENKINS. 1994. STUDENT GROUP DIFFERENCES IN PREDICTING COLLEGE GRADES: SEX, LANGUAGE, AND ETHNIC GROUPS. *ETS Research Report Series* **1994**:1. . [Crossref]

167. Richard W. Stratton, Steven C. Myers, Randall H. King. 1994. Faculty Behavior, Grades, and Student Evaluations. *The Journal of Economic Education* **25**:1, 5-15. [Crossref]

168. Robert M. Costrell. 1993. An Economic Analysis of College Admission Standards. *Education Economics* **1**:3, 227-242. [Crossref]

169. Lawrence J. Stricker, Donald A. Rock, Nancy W. Burton, Eiji Muraki, Thomas J. Jirele. 1992. ADJUSTING COLLEGE GRADE-POINT AVERAGE FOR VARIATIONS IN GRADING STANDARDS. *ETS Research Report Series* **1992**:2. . [Crossref]

170. DAVID HEMENWAY, SARA J. SOLNICK. 1990. "You Better Shop Around": The Market for Motor Vehicle Inspection. *Law & Policy* **12**:4, 317-329. [Crossref]