

# Does Effort Still Count? More on What Makes the Grade

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## Abstract

Previous research has examined differences between students and faculty regarding the weight of effort in assigning grades. Here, students and faculty responded to questions regarding the relative weight of performance and effort on final grades and what letter grades faculty should assign across different types of courses. The authors asked these questions in 2 scenarios: (a) high effort, poor performance (students worked hard but performed poorly) and (b) low effort, high performance (students performed well but did not work hard). Results showed that, as in previous research, students and faculty differed in how they would assign grades, and students gave more weight to effort than faculty did. Students responded differently in low- and high-effort conditions, whereas faculty remained consistent in their assessments.

## Keywords

college students, grading, effort

In 2004, a southern college fired two professors for not following a university grading policy that called for 60% of a freshman's grade and 50% of a sophomore's grade to be based on effort (Smallwood, 2005). The firing of these professors resulted in the American Association of University Professors censuring that college's administration, emphasizing that grading policies should be protected by academic freedom. Would most students and instructors agree with this type of grading policy? Should we, as instructors, be measuring effort? And if so, how would we do that fairly?

Adams (2005) investigated student and faculty perceptions of whether faculty should include student effort when assigning final grades. Previous research indicated that although students tended to advocate including effort, faculty were apt to disagree. Although the faculty perspective has varied across different studies (e.g., Friedman & Manley, 1992), the consensus of measurement experts and official grading policies is that instructors should use quality of student performance to determine grades (e.g., Howley, Kusimo, & Parrott, 2001). For instance, a grading scale might define an A as indicating "outstanding achievement or performance." It is unlikely that many college and university grading schemes include criteria for how hard a student would need to work to earn that A.

Nonetheless, compared to faculty, students are more likely to say that effort should weigh heavily in the final course grade determinations. In fact, the disparity between faculty and students was quite large in Adams's (2005) study, with more than 70% of students saying they should earn at least a C in

a nonmajor course when they showed significant effort, regardless of low performance. Therefore, in cases where students believe they have shown substantial effort, but had less than stellar performance, there will likely be a discrepancy between what grade a professor assigns and the grade students believe they deserve. This discrepancy could have real consequences in terms of instructor evaluations as well as students' satisfaction with their courses.

We investigated whether this discrepancy would hold if students performed well in a class where they had to put forth little effort. Should effort only help a grade, or could it count negatively? Furthermore, would statements about the importance of effort match the grades participants assigned in different scenarios? We asked professors and students how much weight effort should receive in determining final grades across different conditions. Our study built on Adams's (2005) research in the following ways: (a) We examined the impact students and faculty believe effort should have on final grades when effort is low as well as when effort is high, (b) we addressed the issue of how an instructor would measure effort if he or she did include

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it in the final grade, and (c) we asked respondents to rate the accuracy of several common measures of effort.

## Method

### Participants

Students ( $n = 184$ ; 94 men) and faculty ( $n = 59$ ; 29 men) from a midsized, public institution in the Southeast participated in the study. Student respondents were primarily undergraduates (98 freshmen, 59 sophomores, 20 juniors, and 7 seniors), and faculty represented 41 different disciplines (the most frequent department cited was psychology, with 11 faculty). We recruited students via the psychology department's participant pool, where students could earn course credit for participating in research. To get a broad sample, we sent an e-mail to all full-time faculty at the university requesting their participation in the online survey. Although the faculty response rate was low, approximately 10%, we were able to obtain responses representing many different departments on campus.

### Survey Questions and Procedure

We built on Adams's (2005) original survey materials; however, instead of using a paper survey, we collected data via Websurveyor, an online survey and data collection tool (<http://websurveyor.com>, 2006). The first page of the survey was a cover letter explaining the study and the data collection procedures. Participants then completed a 19-item web survey.

Participants first reported the percentages (summing to 100) they believed effort and performance should weigh in final course grades, in general (effort baseline). Participants then read a scenario that stated,

A student takes a course and performs unsatisfactorily, failing to meet the minimum course requirements. At the same time, he or she puts a great deal of effort into the course. What grade would you recommend the student receive, if the course were a \_\_\_\_?

Participants responded to this high effort/low performance condition for six different types of classes: (a) a general education requirement, (b) a general education elective, (c) a requirement for his or her major, (d) an elective class for his or her major, (e) a requirement for his or her minor, and (f) a class in medical school. These categories were similar to those used in Adams (2005); however, we added two categories (elective class for his or her major and requirement for his or her minor) and changed the wording to match that with which the sample population would be familiar (i.e., "liberal arts" to "general education"). In addition, participants indicated how much performance and effort should weigh in grading students in these types of situations (i.e., high effort/low performance). To ensure that all participants had the same frame of reference for assigning grades, we presented explanations of each grade letter on the same page (e.g., "A indicates outstanding/excellent achievement or performance; superior mastery of the course

material," "F indicates unsatisfactory performance/failure to meet minimum course requirements"). These grade definitions were the same as those Adams used.

For the second condition (low effort/high performance), we described a situation in which course material comes easily for a student. Participants responded to the following scenario:

A student takes a course and performs very well, meeting the highest level of evaluation for all course requirements. At the same time, he or she puts minimal effort into the course. What grade would you recommend the student receive, if the course were \_\_\_\_?

The course types were the same as in the first condition. We also presented grading criteria on this page. Again, participants also indicated how much performance and effort should contribute to a final grade in these types of situations (i.e., low effort/high performance).

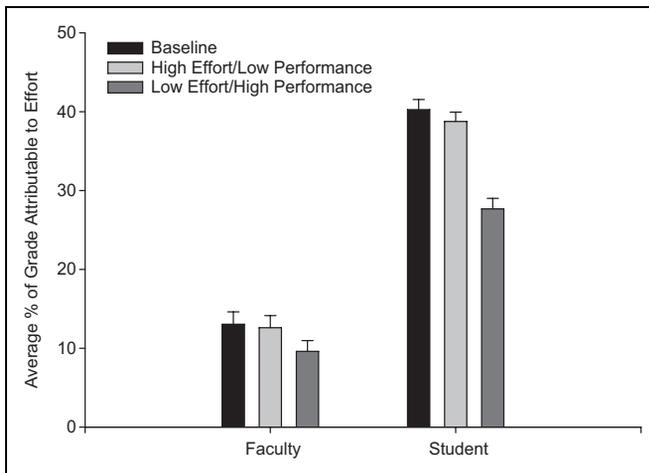
Finally, participants responded to questions regarding their perceptions of student effort and rated the accuracy of eight different methods of measuring student effort (e.g., class attendance, quantity of class participation, self-reported effort). Participants also answered questions pertaining to students' typical study habits as well as how many hours spent studying a week would indicate a superior effort on the part of the student. We collected demographic data as well, including gender, age, classification (e.g., freshman, faculty), and GPA, if applicable.

## Results

There were no significant differences across class rank (i.e., freshman, sophomore, etc.) in terms of how much weight effort should receive in the different scenarios, all  $ps > .20$ . Therefore, we classified participants as either students or faculty for the analyses.

### Performance Versus Effort

Using a mixed-factorial ANOVA, we found an interaction between the effort condition (baseline, high, and low) and participant classification (student vs. professor) on the percentage of the final grade attributed to effort,  $F(2, 480) = 12.35, p < .001, \eta^2 = .08$  (see Figure 1). Faculty remained consistent in their weighting of effort across the different conditions: The baseline effort ( $M = 13.03, SD = 12.01$ ), high effort/low performance ( $M = 12.60, SD = 11.73$ ), and low effort/high performance ( $M = 9.59, SD = 10.43$ ) conditions were not significantly different,  $t = ns$ . However, planned comparison  $t$  tests, adjusted to control for family-wise error rate, showed that although students weighted baseline effort ( $M = 40.25, SD = 17.47$ ) and high effort ( $M = 38.75, SD = 16.33$ ) conditions similarly,  $t(183) = 1.88, p = .06$ ; they weighted effort in both of these conditions higher than in the low effort ( $M = 27.66, SD = 18.25$ ) condition,  $t(183) = 9.91, p < .0001, \eta^2 = .35$ .



**Figure 1.** Average percentage of final grade (with SE bars) attributed to effort by faculty and students across three conditions (baseline, high effort/low performance, low effort/high performance)

### Assigned Grades

Replicating Adams's (2005) results, students in the high effort/low performance condition were more lenient in assigning grades than faculty (see Table 1). Chi-square tests for independence showed that across each of the six course types, students were more likely to assign higher grades than faculty, all  $\chi^2(4, N = 242) > 70.00, ps < .001$ .

In the low effort/high performance scenarios, chi-square tests for independence showed that the pattern of student and faculty grade distributions were significantly different for (a) a major requirement,  $\chi^2(4, N = 240) = 15.33, p < .01$ ; and (b) a medical course,  $\chi^2(4, N = 241) = 15.68, p < .01$  (see Table 2). The difference between the distributions was marginally significant for a minor requirement,  $\chi^2(4, N = 241) = 8.54, p = .07$ . In contrast to the high effort/low performance condition, students were more stringent than faculty with their grading in these courses. For the remaining courses, students and faculty did not differ in their grading,  $ps > .05$ .

Faculty responses were nearly identical across the different classes in the low effort/high performance condition, with more than 86% of respondents assigning As in all courses. Students assigned As 57% to 78% of the time across the different courses.

### Student Study Habits and Effort

Similar to Adams (2005), in response to the question, "For a 3-credit course, how many hours of studying per week would indicate outstanding effort?" students ( $M = 6.73, SD = 4.41$ ) reported fewer hours than faculty ( $M = 8.53, SD = 3.72$ ),  $t(232) = 2.73, p < .01, \eta^2 = .03$  (three outliers removed from the student group). We also asked participants to indicate the most typical study pattern of students—cramming before a test, mostly cramming, weekly study and exam review, and daily study. There was a significant difference between students and faculty on this question as well,  $\chi^2(3, N = 240) = 23.18,$

$p < .01$ . Sixty-eight percent of faculty and 53% of students believed the typical student "mostly crams for tests." There was also a significant difference between students ( $M = 14.1, SD = 9.55$ ) and faculty ( $M = 19.10, SD = 11.56$ ) on the estimated average number of hours students spend studying, with professors believing that students spend more time studying,  $t(232) = 3.23, p < .01, \eta^2 = .06$  (two outliers removed from the student group).

### Measuring Effort

We asked students and faculty, in both open-ended and closed formats, what methods would be good measures of effort.

**Open-ended responses.** Participants answered the question, "How should an instructor measure effort?" Responses of faculty and students were similar in many respects. First, the responses indicated that both groups acknowledged that this construct is difficult to measure. For example, one student stated, "This seems impossible to measure. Self reports may work but they are easily misrepresented." Along the same lines, one faculty member wrote, "There is no way for a professor to know how much effort a student put forth on studying for a test or writing a paper"; and another stated, "This would be a hard judgment call, considering professors don't know exactly how much effort is put into a single student's work."

Furthermore, although participants indicated that effort was difficult to measure, both students and faculty alluded to the idea that an instructor would recognize effort when he or she saw it. Representative student responses stated that faculty should base the effort score on "the appearance of how much work was done" or "the effort shown in class." Faculty members included similar responses, with one professor saying,

It is always obvious which students have put in effort into a class and which students are doing the minimum . . . Professors are also able to see this, and need to take into account how much effort is being put in by a student.

Both students and faculty indicated that effort should count more in the student's favor than against him or her and also that effort should count more in certain courses, like art or music, than in content courses of one's major. For instance, one instructor stated that "for some students course work is effortless and they understand the material quickly. I don't think that should have a negative effect on their grade. However, I do feel that effort should count for students who fail the class." One student said that "effort shouldn't affect you if you are doing excellent work; but if you are trying your best and not performing up to the standards of the class, the amount of effort put in should be taken into account."

Finally, many students and faculty reiterated that performance should count more than effort, with even a few students acknowledging that they were inconsistent in how they weighted effort in the different scenarios. One student summed it up this way:

**Table 1.** Percentages of Faculty and Students Assigning Grades Across Course Types (High Effort, Low Performance Condition)

Grade	General Education Requirement		General Education Elective		Major Requirement		Major Elective	
	Faculty	Student	Faculty	Student	Faculty	Student	Faculty	Student
A	0.0	3.8	0.0	7.1	0.0	2.7	0.0	1.6
B	0.0	27.7	0.0	23.9	0.0	8.7	0.0	15.2
C	8.6	44.6	8.6	37.5	3.4	31.0	5.2	46.2
D	25.9	19.0	29.3	23.4	10.3	33.2	24.1	27.7
F	65.5	4.9	62.1	8.2	86.6	24.5	70.7	9.2
	<i>n</i> = 58	<i>n</i> = 184	<i>n</i> = 58	<i>n</i> = 184	<i>n</i> = 58	<i>n</i> = 184	<i>n</i> = 58	<i>n</i> = 184
Grade	Minor Requirement		Medical Course					
	Faculty	Student	Faculty	Student				
A	0.0	2.7	0.0	3.8				
B	0.0	14.2	0.0	6.0				
C	5.2	29.5	3.4	12.5				
D	13.8	35.5	5.2	32.1				
F	81.0	18.0	91.4	45.7				
	<i>n</i> = 58	<i>n</i> = 183	<i>n</i> = 58	<i>n</i> = 184				

**Table 2.** Percentages of Faculty and Students Assigning Grades Across Course Types (Low Effort, High Performance Condition)

Grade	General Education Requirement		General Education Elective		Major Requirement		Major Elective	
	Faculty	Student	Faculty	Student	Faculty	Student	Faculty	Student
A	87.9	78.7	87.9	76.9	86.2	58.2	86.2	69.9
B	10.3	15.3	10.3	17.6	12.1	35.2	12.1	23.5
C	1.7	3.8	1.7	3.8	1.7	4.4	1.7	4.4
D	0.0	2.2	0.0	1.1	0.0	2.2	0.0	1.6
F	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5
	<i>n</i> = 58	<i>n</i> = 183	<i>n</i> = 58	<i>n</i> = 182	<i>n</i> = 58	<i>n</i> = 182	<i>n</i> = 58	<i>n</i> = 183
Grade	Minor Requirement		Medical Course					
	Faculty	Student	Faculty	Student				
A	86.2	66.7	86.2	57.9				
B	12.1	27.3	12.1	33.3				
C	1.7	3.8	1.7	6.6				
D	0.0	1.6	0.0	2.2				
F	0.0	0.5	0.0	0.0				
	<i>n</i> = 58	<i>n</i> = 183	<i>n</i> = 58	<i>n</i> = 183				

I gave inconsistent answers because I hadn't considered if a student put in little effort and did well. Effort should be a small part of the grade, and performance should be much more important. However this can vary greatly with different subjects. I would certainly not want my doctor to [earn an] F, but [be an] A effort student. It would be like "I'm sorry, we have some bad news, we just replaced your heart with a baked potato, and you have about 5 seconds to live."

**Accuracy of effort measures.** For the closed-ended responses, students and faculty differed in how accurately they thought different methods could measure student effort. Mann-Whitney U analyses showed that, for six of the eight methods,

students' ratings of the accuracy of the measures were higher than faculty's: (a) class attendance,  $U = 4,231$ ,  $p = .015$ ; (b) attending professor office hours,  $U = 4,412$ ,  $p = .04$ ; (c) completing extra credit assignments,  $U = 3,059$ ,  $p < .001$ ; (d) quality of required assignments,  $U = 4,556$ ,  $p = .05$ ; (e) self-reported effort  $U = 3,850$ ,  $p = .001$ ; and (f) self-reported study time,  $U = 3,712$ ,  $p < .001$ .

Nonetheless, the rank order of which measures were most accurate was similar for the two groups. Both faculty ( $M = 4.34$ ) and students ( $M = 4.55$ ) considered quality of assignments to be the most accurate measure of effort (scores could range from 1 to 5, with 5 being *very accurate*), followed by class attendance ( $M = 4.11$  and  $4.34$  for faculty and students,

respectively). The two groups also deemed self-reported study time as the least accurate measure of effort, ( $M = 2.53$  and  $3.58$  for faculty and students, respectively).

## Discussion

Results of our study were similar to those of Adams (2005), who found that in a situation describing high effort and low performance faculty ascribed approximately 17% of the grade to effort, whereas students designated a much higher 38% to effort. In our study, faculty reported that effort should count for approximately 13% of the grade compared to students' suggestions of around 39%. Also as in Adams (2005), the grade distributions for the high effort/low performance condition changed depending on the course type. Students were more lenient with assigning grades, giving a modal grade of C for three course types—a general education requirement, a general education elective, and a major elective—but a modal grade of D in the remaining courses—a major requirement, a minor requirement, and a medical course. For faculty, the modal response was a grade of F for all six conditions. These results mirror student and faculty views of how much effort should contribute to the final grade in the high effort/low performance situations.

Extending Adams's (2005) study, we found that faculty were consistent in how they weighted effort in the low- and high-performance conditions. In the low effort/high performance condition, faculty and students reported that effort should count for approximately 11% and 28% of the course grade, respectively. These results show that students, but not faculty, counted effort more in students' favor than against them. However, students still counted effort as much more of the grade than did faculty, a result shown also in the grade distributions for the low effort/high performance scenarios. As we stated earlier, 86% of faculty assigned As in each of the low effort/high performance scenarios. Students were more stringent in their grading, assigning fewer As across the different classes. Thus, students did not completely disregard their claims that effort should count as part of the grade in the low-effort condition, as they were more willing than faculty to penalize students for low effort.

## Student Study Habits and Effort

Respondents in the current sample, both faculty and students, reported approximately the same amount of study time was necessary for "outstanding effort" as in Adams (2005). Also, students again believed that "outstanding effort" requires less time than faculty did. Furthermore, students reported studying less than faculty think they do, and more than half the students reported that "mostly cramming" was the typical student's modus operandi. Thus, results suggest that students would likely rate their effort as greater than faculty would, due to the fact that students and faculty will have different criteria for what counts as "outstanding effort." If students are studying less than faculty believe they are, and if students believe that less studying would count as outstanding effort, there are likely

going to be different interpretations of how hard students are working. Students might believe that they are performing closer to an "outstanding" level than faculty believe they are. Other research has noted that students, especially freshmen, who composed a large proportion of our sample, are likely to underestimate the effort required in college courses (Woehr & Cavell, 1993). Furthermore, Foushee and Sleight (2004) identified "poor awareness of teacher expectations" (p. 305) as one of the leading reasons why students have poor performance in a course. By explicitly addressing the discrepancy between their expectations and those of students, faculty could alleviate some student problems, including students' beliefs that they should have earned a higher grade, thus helping them in their college courses.

## Measuring Effort

To some extent, both faculty and students reported that effort should count when assigning grades in both high effort/low performance and low effort/high performance conditions; differences were in degree. However, how to measure effort, if at all, is a difficult question for many instructors, a sentiment that was echoed by both faculty and student open-ended responses. Upon examination of the open-ended responses, it appears as though some of the remarks contradicted the quantitative results. For example, students and faculty responded that effort should count more in a student's favor than against him or her. Nonetheless, we do not believe this sentiment is necessarily at odds with the quantitative results. Although students did respond that effort should count against students in the low effort/high performance condition, students also reported that effort should weigh less in the low effort/high performance conditions than in the high effort/low performance conditions.

Of course, performance and effort measures are not orthogonal. Typically, class attendance is associated with better performance (e.g., Buckalew, Daly, & Coffield, 1986), as is time on task (Astin, 1993). Class attendance also seems to have other peripheral benefits (Sleight & Ritzer, 2004) beyond course grades. Therefore, by encouraging these types of "effort" from students, faculty can show students the link between effort and performance. Sleight and Ritzer (2004) discussed some ways to improve class attendance, which emphasized linking the effort of coming to class with overall course performance (e.g., activities in class that help students learn the material). In addition, several alternative teaching methods attempt to link time on task outside of class with later exam performance (e.g., Benedict & Anderton, 2004; Saville, Zinn, Neef, Van Norma, & Ferreri, 2006). By emphasizing the links between effort and learning, faculty can show students how they measure student effort more indirectly.

## Conclusions

These data will not come as a surprise to many instructors—we all have examples of students who say they really tried in the

class and, therefore, believe they deserve a higher grade. However, these results suggest that students and faculty may benefit from communication about grading procedures and policies, as well as a frank discussion regarding what faculty consider to be “outstanding effort” in a class. Students likely do not know what workload is appropriate for college-level courses and may often struggle because they do not know how to direct their effort (i.e., they have poor study habits; Foushee & Sleigh, 2004; Woehr & Cavell, 1993). By attempting to eliminate the differences in faculty and student criteria for and perceptions of effort, faculty can help students succeed and possibly reduce the belief that a professor is unfair—both worthy goals.

Although not explicitly examined in the current study, students likely believe that effort should weigh more heavily when there is a tenuous link between their effort and their class performance. Helping students see the links between their work and their performance should attenuate feelings of learned helplessness and the need students feel to have their effort graded. Instructors can explain the reasons behind their assignments as well as identify struggling students to help them direct their efforts appropriately (see Foushee & Sleigh [2004] and Svinicki [2006] for ideas on how to help struggling students). This way faculty will not have to measure student effort; effort will be a component of students’ performance.

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