
Faculty comments on plus/minus grading system

My opinion, and that of every student to whom I have spoken, is to bag the +/- system. It hurts good students, and using Florida's system of pluses but no minuses amounts to institutionalized grade inflation. 4-year averages come out the same anyway, so what's the point? Who really thinks they can a B from a B+ essay anyway? And now the students have three times the grade breaks to whine over.

G. Ultsch, Biology

I have always been a proponent of the +/- system and see no reason to change my opinion now. I believe that students who perform at higher-than-letter-grade level should be rewarded with a (+) and students who just scrape by deserve the (-). Despite the fact that no data has been presented to support the argument that the +/- system damages a student's competitiveness for professional school admission, I have stopped assigning grades of A- (just in case it might be true). I don't think that my position should be mandated, however.

Rona

I trust that some perhaps unsophisticated but very relevant considerations will be reviewed along with the gross GPA mathematical break-outs that indicate a slight lowering of overall GPA results for recent years (but with the +/- almost as many students gained stronger GPAs as found GPAs slightly lowered).

There are considerable positive advantages of the plus/minus grading system, which students and faculty may want to keep in mind. The entire change was introduced hardly to undercut students, but rather the opposite: to offer a more fair form of reporting academic performance in courses.

Sample: Tom, Dick, and Harry are close friends who often study together, and they are now taking the same course. Tom and Dick move through with their usual level of success, and they help Harry who has to push pretty hard to try to keep from falling too far behind them. End of term grades: Tom gets A, Dick and Harry both get B. Say what? They all know that Harry always has difficulty but that Tom and Dick do considerably better. Do those grades fairly reflect their respective abilities? With a plus/minus breakout, the semester's final grades might actually be: Tom gets A-, Dick gets B+ and Harry gets B-. Now their relative performance is much better reflected; Dick is closely behind Tom while Harry is two steps beyond Dick. These are far more representative of their abilities, or at least performance in the course. That seems more fair than just A/B grades.

There are many instances every semester in my courses with 100 students, as well as in courses with only 20, where the bare A/B/C hurts some individuals (granted that at times it also boosts others--artificially). It is distressing to have to give a student who plugged along to try to make a B but ended up a point or two short (78 or 79) and gets stuck with a C, the same as another who was only able to scrape along and do fair work at the end to pull a grade up to 70 or so to avoid

the D, and receive the same appraisal as the first person: a plain C. Once again, a C+ for the first, and a C- for the second would be fairer to both and to the rest of the class. Further, in the plus/minus system, the person who "missed the B" wouldn't lose 10 full points (dropping from B to C), but only a few points (dropping from a B- to a C+).

Again: a student figures two-thirds through the term that she may be in the low 80s. There is not much incentive to keep pushing because an A is out of reach in the older system. But the plus/minus system offers several intermediate steps to enhance her GPA, with the possibility of moving her estimated B- to a B or even to B+--each worth more points on her record.

Finally, similar to the above, someone figures he's also in the low 80s and can't possibly get an A no matter what in the final weeks, so eases off a bit. After the final exam and term papers, he discovers his grade slipped just below 80 for the semester, resulting in a big fat C. Is that really fair? Or is a C+ more fair, because he slipped just below the B-score?

These are the kinds of matters the original Curriculum Advisory Committee (on which I served) considered when attempting to make the entire grading process more representative of various levels of work, and therefore more fair to students. The fact that many highly respected colleges use +/-, some with slight variations, supported the original initiative. That committee's was not merely following suit "simply because others do it" but rather because it was a better system that did justice to actual performance levels of various students. The +/- also helps the student who might have an overall B record, but with B+ in most major courses while B- in electives or core courses. Clearly a graduate school would find that distinction important in appraising a candidate to a MA program in a major specialization.

My own practice over the years with final course grade sheets has always been to add + and -designations where appropriate next to the A/B/C/D/F listings, even though the computer in past years didn't add them. That way I have a far better (and again, fairer) comparative listing when a student came by to ask about their grade. And it can be encouraging to someone upset with their C when they learn they were not scraping along, but rather at the C+ level just short of a B-.

Even with the +/- system, each teacher obviously appraises student performances in the context of the course as taught. If a literature or writing teacher, for example, appraises essays and term papers with "A" or "B" etc. (quite appropriate where mini-scales or partial points are not apt) and open-ended exam questions, it does seem appropriate to enter just "A" or "B" or "C" on final grade sheets. Surely administrators do not propose adding merely artificial + or - designations on evaluating students in such a course. But other professors who wish do have the opportunity to add +/- as appropriate. That, too, seems more fair to the grading process than imposing gross A/B/C/D on all faculty members as well as students, with no variation possible.

-Jim Brown (College of Communication)

My view is that of an English prof. of 25 years who finds the crude grading mechanism A, B, C, etc. a hopelessly blunt instrument for accurately assessing students' classroom performance. Therefore, I strongly support the plus/minus system on the following grounds: it is intellectually dishonest--and unfair to students--for any faculty to assign academic grades WITHOUT the option of recording the inevitable qualitative nuances

encountered in a classroom. Ignoring such variations represents an abdication of our responsibility to faithfully judge and report student performance, i.e. to make sometimes difficult and subtle [but legitimate] distinctions in the academic work of the people we teach. Any scheme that ignores significant disparities now crammed into a single, unmediated letter grade does a disservice to the student, the public, and to future employers or graduate schools who rely on us to reflect as accurately as we reasonably can the comparative academic achievement of our students. Thanks for your work on this complicated problem.

George Wolfe

If we are to perceive ourselves as scholars, the data do not substantiate that there is a problem with the +/- system unfairly disadvantaging students; indeed, grade inflation has had a much more profound impact. Possibly, that should be the concern. Also, those who are concerned with our students being disadvantaged, although there are no data to support this claim and the GPA changes do not appear consequential, might consider those poor students at University of Virginia, the University of North Carolina at Chapel Hill, Duke, Emory, Vanderbilt & Tulane. By the way, it appears that some mid-level students may do even better with a +/- system, but again, not consequentially.

If this has reduced the number of students complaining about grade changes, it would support the system.

Finally, the fact that some faculty did not choose to participate in the initial voting is not a compelling argument for reconsideration. No one has argued that this was done without input from students and faculty, which did include meetings for reactions from students, senators, and other faculty. Shall we force new elections of politicians and faculty senators for using the same rationale? Everyone has a right to vote or not as s/he chooses.

According to the minutes, the Senate has already recommended a new vote. Is there really an option for a + only system, talk about grade inflation? It is most unfortunate that one of the few examples at UA that reflect faculty initiative and empowerment is being reconsidered on this campus by the Senate, when so many other policies that have been implemented without consulting faculty have not been addressed with this fervor.

Harry E. Price
Professor and Chair of Music Education

I initially was opposed to the system, and was disappointed when it was instituted. After using it for several years in my large section classes, though, my opinion has reversed. For me, the +/- system definitely offers advantages beyond its disadvantages.

The number of students that come to me and complain about changing grades declined by over 90% when the +/- system was instituted. The explanation is simple. Under the old system, the potential gain to students from complaining was high. Under the new system, the potential gain is low. The cost to the student of complaining have remained unchanged. Hence, a simple cost v. benefit argument seemingly causes fewer students to complain.

This startling and unexpected outcome bears repeating. Student requests for me to reconsider and change grades declined by more than 90% after institution of the +/- system.

I sure would hate to lose the system now...

Rob, do the following proportions include letter grades given to students who were exempt from the +/- system? I'm curious about whether faculty have a strong tendency to give straight letter grades, or whether this is just an artifact of including students who could receive only the straight letter grade.

Thanks,
George

3. Under plus/minus (Fall of 1994 to Fall of 1997) the percentages of grades given in each category were as follows:

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|--------|------|------|---|------|------|-----|---|------|------|-----|---|-----|-----|-----|---|-----|---|-------|
| A+ | A | A- | / | B+ | B | B- | / | C+ | C | C- | / | D+ | D | D- | / | F | / | other |
| 4.8 | 18.2 | 8.9 | | 8.0 | 15.6 | 8.4 | | 6.1 | 11.1 | 5.1 | | 2.0 | 3.8 | 1.6 | | 5.3 | | .9 |
| totals | | 31.9 | | 32.0 | | | | 22.3 | | | | 7.4 | | | | 5.3 | | .9 |

REPLY:

No. Students who were exempt were not included in the calculations.

Note: Institutional Research reports that 75.1% of all sections used plus/minus, 24.9% of the sections did not.

--- Marvin Johnson

I don't understand item 5 on your list of results of the +/- system. What does "exactly 3.0" mean? If it means literally that, and "higher than 3.00" means 3.00001 or above, then the data has very little significance -- who cares whether a student got 3.00000 or 3.00001? I would think that very few students would have exactly 3.0, and most of these would be new students with one or two semesters. A much more relevant statistic would be what percentage of students were pushed past some eligibility cutoff (often 2.0) by the +/- system. Although even that doesn't seem very relevant, since it can be fixed easily by shifting the cutoff.

Pieter B Viisscher
University of Alabama <http://www.as.ua.edu/physics/viisscher.html>

REPLY:

The cutoff points at 2.00, 3.00, and 4.00 respectively have been identified by faculty and students as those causing particular concern.

This information is intended to be indictative, not conclusive; and has been collected in response to specific concerns expressed about plus/minus (ie. its affect on such things as eligibility for graduation by achieving a 2.00, competitive posture for job interviews associated with the maintenance of a 3.00, admission to professional and graduate schools associated with a 4.00, etc).

The last category is the real source of discontent as far as I can tell. The administration is afraid that certain students will elect to go to other colleges if they feel that they cannot maintain a 4.00 all the way through Alabama.

The 2.00, 3.00, and 4.00 respectively are cumulative GPAs for the Fall semester of 1997 (the first class to have gone through 7 semesters of plus/minus).

As far as I can tell, the production and processing of additional data will require much time. Perhaps you could formulate some questions for Institutional Research which would address your concerns. We deliberately tried to keep the information as focused as possible on the issues as they are perceived by faculty and students.

The new statement words the item you seem most concerned about to emphasize that the GPAS mentioned are cumulative.

thanks,

Marvin

Thanks for your reply. I may not have made my point very clear -- I wasn't objecting to using data related to cutoff points, but to giving statistics that would be relevant for discrete variables but are inappropriate for effectively continuous ones such as GPA's. Saying

> a) 125 students of the 396 who would have achieved a cumulative GPA
> of exactly 2.00 under the old system failed to achieve a cumulative GPA
> of 2.00 under the plus minus system;

i.e., giving the probability of a change in the GPA, would make sense if it were a discrete variable. But in the limit that it becomes a continuous variable, that probability approaches unity and conveys no information. The useful information in the case of a continuous variable is the average change, i.e., you should say something like "Among students with GPA's near 2.0 (between 1.75 and 2.25), the inclusion of pluses and minuses changed their GPA's by an average of 0.05" or whatever the number is. This gives a useful measure of how much harder the student would have to work to keep the 2.0 average (not very much, probably). This would be a more useful number for Institutional Research to compute.

However, I guess I have to object to the assumption that you can determine the effect of the plus-minus system by comparing each grade record with the same record with the pluses and minuses erased. That assumes (incorrectly) that the instructor gives the same letter grade he would have under the old system, then adds a + or -. That assumption almost guarantees the conclusion that the plus-minus system lowers grades (because there is no A+). Your statistics show otherwise -- the percentage of A's has gone up significantly, indicating that instructors are giving A-'s to students who would previously have gotten B+'s. The overall GPA statistics suggest that this effect almost exactly cancels the "no A+" effect, leaving the GPA the same. Thus your item #4:

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>4. The following percentages represent letter grades (and their
> associated quality points) which were lowered, raised, or not
> changed respectively by the plus/minus grading system. Since no
> extra quality points are awarded for an A+, that
> category was included with grades not changed.
>         Lowered ----- 24.0%
>         Raised ----- 16.1%
>         Not Changed ----- 59.7%
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is actually not correct, if the 24% is the fraction of grades with -'s and the 16.1% is the fraction with +'s.

Pieter B Visscher
University of Alabama <http://www.as.ua.edu/physics/visscher.html>

REPLY:

I freely admit that I do assume just that; namely, that an A- is a low A and that a B+ is a high B and that an A- is a higher grade than a B+. I have graded exactly in that way and have championed the plus/minus system precisely because I was convinced that was what it meant. Variation in the grading practices of individual faculty will surely complicate the assessment of the effect of any grading system, not just plus/minus. I also admit that I assume, after some experience with the system, that the plus/minus system does lower grades (only slightly according to the record). It is my opinion that grades should be lowered and that the grade inflation registered in the statistics we published under item 1 begin in the eighties (long before the advent of plus/minus) and continues into the 90s. Were it not for plus/minus, I suspect, the increase in the number of As and the decrease in Bs and Cs would be more dramatic. In a word, I expect that grade inflation continues in spite of plus/minus, not because of it.

The minor fractional discrepancies are due (as we mentioned in our original memo) to rounding errors in computation. We decided not to compound the errors by additional rounding.

---Marvin Johnson

Observations about the information provided:

1. It would appear that under plus/minus there are more As and fewer Cs.
 2. How was the "would have been" computed? How did you handle the B- that would have been a C under the former system, etc.?
 3. One third A's, one third B's, one-fifth C's?
 4. Does lowered and raised mean minus and plus respectively? If so, same question as 2.
 5. Same question as two.
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Rob, I could not figure out if the last set of grades you gave were related to the second set. for example the first set shows A's to be about 29-30% of the grades in the last few years but the next item shows there to be about 32%. I copied them to an excel spread sheet so I could look at them. I have attached the sheet.

In reviewing your message and the data analysis following, I note that the latter was conducted under an erroneous assumption. That is, that minus grades implied that the student had their grade lowered from what it would have been in the absence of plus/minus. In my case, that is simply not true. An A- or B+ in my class would have been a B in the absence of plus/minus (and so on down the line). In my mind the plus/minus options are for distinguishing people who didn't really earn the next letter grade up, but were better than the average bear in the letter grade below. In some cases, that merits 1/3 bump and in others a 2/3 bump. This implies that the assumption that GPAs would have been higher in the absence of plus/minus is also suspect.

Jim Ligon

REPLY:

The author seems to have a point in identifying the discrepancies between the percentage of A's in table #1 of our memo: total grades from 1981 until 1998 ("29-30%" in 1998) and in table #3: percentage of As given between the Fall of 1994 and 1997 ("about 32%").

I believe the answer must be that the data in the first chart (item 1) refers to the percentages of letter grades awarded in each successive year from 1981 through 1998, while the second chart (item 3) lists the percentages of grades awarded in each letter grade category in the period from Fall of 1994 until the Fall of 1997 inclusively. (ie. the period, with the exception of the last two semesters, during which the plus/minus system has been in use).

I appreciate the interest in this issue and welcome additional comments. I hope that others will join the discussion.

Sincerely,

Marvin Johnson

Bob, I'm on sabbatical and I have been seeing all this come across my e-mail

in EuropeWithout looking at the data, my reaction to all this is; why can't the faculty make the tough decisions and stick with +/- . There is an enormous difference in performance between the - and the + and they shouldn't be lumped together. Surely, faculty can make the decision that all students are NOT the same. Trevor
