DATE: June 28, 2017
FROM: Eric J. Barron
TO: Matthew Woessner

Thank you for the advisory and consultative report on Grade Distribution, passed by the University Faculty Senate on April 25, 2017.

Comprehensive assessment of the University’s academic programs is crucial in evaluating and improving the student experience, and longitudinal monitoring of the grade distribution by program is one of the applicable metrics. With leadership from the Office of Planning and Assessment and the Schreyer Institute for Teaching Excellence, tools and best practices can be developed to enable evaluation of grade distribution at the departmental and division level. The Office of Undergraduate Education will provide leadership for the examination of University policies and procedures related to the various ways that grades are used across the university. I am supportive of this initiative to develop and implement a plan for systematic and regular review.

cc: Blannie E. Bowen
    Daniel R. Hagen
    Nicholas P. Jones
    Robert N. Pangborn
May 17, 2017

Eric J. Barron, President
The Pennsylvania State University
201 Old Main
University Park, PA 16802

Dear President Barron:

The University Faculty Senate, at its April 25, 2017 meeting, passed the following Advisory and Consultative report:

**Report on Grade Distribution**

Attached to this letter are the report from the Senate Agenda and the comments from the Senate meeting. We forward these recommendations to you for your approval and implementation.

Sincerely,

James A. Strauss

Enclosures

c: Matthew C. Woessner
   Blannie Bowen
   Daniel R. Hagen
   Nicholas P. Jones
   Rob Pangborn
SENATE COMMITTEE ON UNDERGRADUATE EDUCATION

Report on Grade Distribution

(Advisory/Consultative)

Implementation: Upon Approval by the President and development of procedures when applicable

Introduction and Rationale

The question related to grade distribution that we should concern ourselves with should be focused on how well the grades that students earn in a given course reflect the learning that has taken place and how well the student has met the learning goals for the course. We also should concern ourselves with questions related to how our university policies and procedures impact student and faculty attitudes towards grades and learning.

According to many researchers and scholars, over the past several decades, students’ mean Grade Point Average (GPA) has been steadily increasing at universities and colleges across the country. According to Rojstaczer (2016) and others, prior to the Vietnam War, the most common grade on college campuses was a C. By the early seventies, the average GPA at a college campus rose to 2.9. Beginning in the early eighties, grades began to rise again but at a much smaller, almost indiscernible pace. By the mid-1990s, an A was the most common grade at an average four-year college campus. According to Rojstaczer’s (2016) review of grades from 400 schools, by 2015, the average college student had a 3.15 GPA. Review of the biannual grade distribution report published by Penn State’s Faculty Senate indicates that when looking at GPAs in the aggregate, average GPAs have risen from 3.07 in 2005 to 3.12 in 2015.

There is a debate in the literature about what factors are influencing this increase in the mean GPA. Some authors suggest that this steady increase reflects “grade inflation.” In other words, these scholars are asking whether students are receiving grades commensurate with their ability. Kuh and Hu (1999), for example, cite several factors that may influence mean GPA, including students enrolling in majors where average grades are higher, the consumer orientation of students and their families, university policies that allow students to avoid the negative impact of a low grades, and changing student demographics that may influence persistence.

Others, however, question whether “grade inflation” is the appropriate term for the average increase in the GPAs of college students. Pattison, Grodsy, and Muller (2013) assert that increases in the mean GPA do not necessarily reflect that grade inflation is at work. Pattison et al. build upon a chapter written in 2008 by Adelman’s (2008) that debates whether grade inflation is occurring and highlights the importance of examining the distribution of data and using representative, transcript-based data. Pattison and her colleagues establish that focusing on changes in measures of central tendency, such as a mean, is misleading. They argue that what is of most importance is the “signaling power” of GPA, that is, the ability of grades to provide
important information both to and about students. Their findings indicated that the signaling power of grades has not diminished. GPA was associated with educational plans, persistence to degree, occupational prestige, and long-term earnings.

Boretz (2004) argues that the average increase in GPA is a “harsh judgment on the quality of student learning in higher education” (p. 42). She cites such factors as high grade expectations, increases in faculty development programs, a mastery approach to learning, changes in grading policies, the lack of clarity about how teaching evaluations are used in personnel decisions, and an increase in a variety of student services as possible reasons for increases in average GPAs. Boretz strongly advocates for campus-specific approaches, rather than focusing on national trends.

We recommend taking Boretz’s suggestion one step further. Given the breadth and scope of Penn State, this committee is in agreement that it is not useful to look at these data in the aggregate. Rather, we believe these data are far more useful at the department/division and college/campus levels. In particular, we suggest that units work closely with the Office of Planning and Assessment to determine appropriate means of assessing learning outcomes across the curriculum. In addition, it would be helpful to develop best practice guidelines for and for assisting performance reviews that include evaluations of teaching, including providing department heads with relevant data to aid such reviews. With respect to the role of grades in performance reviews, it is important to note that authors such as Millet (2016) caution against solely using grades as a metric to evaluate faculty members as this may have unintended consequences; for example, instructors may, in an attempt to improve their grading reliability scores, use GPAs to assign grades in a course. As Millet stresses, grading reliability is strongly influenced by variance in students’ GPA’s and such data should be incorporated into any interpretation of the influence of leniency on grading reliability.

In examining grade distributions at Penn State, another factor that this committee identified is the combination of institutional policies and student practices that contribute to a culture of GPA protection. We also strongly believe that there are steps Penn State can take to counter this culture of GPA protection, including reviewing “entrance to major” standards and other university policies and procedures. As students face increasingly high standard of entrance to major GPA thresholds, competition for internships, entrance to graduate and professional schools, and career placement, students may be selecting courses on perceived grade outcome as opposed to taking more challenging courses in which they are interested in order to protect their GPA. In addition, students have more opportunity to withdraw from courses in which they are doing poorly in order to protect their GPA.

Finally, as the university invests additional resources in areas related to student success, we should expect (and welcome) students receiving higher grades. This support ranges from faculty development in the area of pedagogy, to more clearly defining learning outcomes in courses, to changes in teaching methods to include models such as mastery, to the engagement of students in more project and group-based work in the classroom, to the expansion of student support services across both academic and student life areas. All of these efforts clearly support our university goals related to access and retention as we work to proactively advise and work with students who come from a range of backgrounds and preparation. This represents a significant
change in culture from seeing the university as a place to “weed out” under-performing students to one in which we believe that every student who is admitted to Penn State belongs here and has the potential to succeed.

Recommendations

1. Analysis and evaluation of grade distribution should take place at the departmental/division level. We recommend that dashboards be created that provide department/division heads data on grade distribution in courses in their unit. In addition, we recommend that best practice guidelines be developed to assist unit heads in both analyzing these data and in using these data to assist with pedagogical, curricular, and performance review discussions.

Department/division heads bring critical knowledge to an analysis of grade distribution patterns including an understanding of the pedagogy used in the course, the composition of the cohort of students who are earning a high grade in a course, the size of the course, etc. For example, in small seminar courses that are taught using a mastery model, we would expect to see a high percentage of students earning ‘A’ and ‘B’ grades, no matter the level of the course. Likewise, in courses that involve a lot of team work, we expect to see stronger students lifting the learning and hence the grades of weaker students in any given group. This is one of the purposes of group work (Yamarik, 2010). If a course is composed of students who are majoring in that discipline, we again might expect higher grades given the interest level of the students (Main & Ost, 2014). Unit heads also are in the best position to examine other patterns of grade distribution such as those that there might be across sections of a given course or whether or not grade distribution varies between major courses and general education courses.

Knowledge such as this and streamlined access to grade distribution data gives department/division heads the tools to have conversations about the learning that is occurring and how this learning relates to the goals of the course. This shifts the conversation from an examination of grades to one that indicates whether or not students have earned their grades by learning the materials and meeting the goals of the course. It is for these types of reasons that grade distribution is best understood at the local level.

Recommendation #2 removed by amendment on the Senate floor.

2. We recommend that the annual report produced by the Committee on Undergraduate Education on grade distribution be discontinued. As currently produced, the report is not particularly useful in gauging learning outcomes among our students.

Given what we believe is the necessity for the analysis and evaluation of grade distribution on the local level, the committee questions the utility and necessity for an annual grade distribution report for the whole university.
3. Examine university policies and procedures and external requirements that may lead to a culture of GPA protection.

The number of controlled entry majors at the university has increased over the last decade and the cumulative GPA requirement to enter many of the majors typically is in the 3.2-3.5 range. In addition, some majors have State requirements such as the 3.0 GPA needed in Education to be certified as a teacher. In addition, as discussed earlier in this report, students face increased competition for internships, entrance to graduate and professional schools, and career placement and therefore students may not be taking challenging courses in which they are interested in order to protect their GPA.

Given increased enrollments over the last ten years or so, conversations are starting to take place to examine better ways to find the right balance of students in various majors relative to the available departmental/college resources. While no definite changes are on the table at this point, discussions are emerging that recognize that our current Entrance to Major process, which relies on a student’s cumulative GPA, does not provide a good mechanism to accurately manage enrollments in departments with limited instructional capacity. To counter the culture of GPA protection, active steps to change institutional policies would be beneficial.

References


**SENATE COMMITTEE ON UNDERGRADUATE EDUCATION**

- Andrew J. Ahr
- Barbara A. Barr
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- Matthew Wilson, Chair
- Richard Young
Excerpt from Senate Record

Report on Grade Distribution

Chair Strauss: It appears as Appendix O on your agenda. Committee Chair from Undergraduate Education Matthew Wilson will respond to questions.

Matthew Wilson, Harrisburg: And Dave Smith will be joining me. He gave me so much help last time. This is the proposal. And I'd like to start-- scroll down to the second recommendation. We'll start with that one first. We recommend an annual report produced by the Committee on Undergraduate Education on Grade Distribution be discontinued. As currently produced, the report is not particularly useful in gauging learning outcomes among students.

And it's that second point that I want to emphasize. I probably would say it's not useful at all in gauging learning outcomes among students. And then could you scroll up to the first-- I won't read it, but one of the things that we thought was much more important was being able to drill down into the information that the University has about grade distribution so that you could find on, say-- a college, or that you could find on a department level, or even a major level, that you could look into issues of grade distribution. Currently we cannot do that.

I also wanted to remind you, since we had a debate about this in our committee meeting today, what that report actually looks like. So could you put that up for me, please? [INAUDIBLE]. Go down to the table, please.

The most useful information that this report gives us is Table 4, which gives you college information about GPA. And what we can do, if we look at that, it seems to me that pretty much everything with a couple of outliers at the high end and the low end sort of falls into much the same range. And so this information is not useful at all in determining and helping us assess the student outcomes. That has to be done at, as I said, in a much more local level.

And the committee felt unanimously that this information is not useful-- and this is just my opinion, that this is a waste of University's time and money, and that if we're serious about looking into grade distribution, it has to be done on the local level. And the University, as we say in the first recommendation, needs to develop an instrument that's going to allow us to do that. I mean, as Roger said at a meeting, an instrument that would allow us to look at grade distribution across one course, across the University. That would be extremely useful to the disciplinary communities. Dave, is there anything you want to add?

David Smith, Division of Undergraduate Studies: I was part of that subcommittee that worked on this. And I think the real intention, as Matthew has tried to explain, is to really find something that is more useful to understanding what's happening with grades and not to hide grades by any
means, but to really try to create a tool that would be more beneficial to departments, to department chairs, to improving instruction, and to improving learning outcomes. And so that's really the thought behind the work that went into this effort.

**Matthew Wilson:** And I think that we've been producing this for 20 years, and nobody has used it. I mean, what it does is simply confirm the news that we get nationally. Grades are going up.

**Chair Strauss:** Questions or comments for Matthew? Carey? Yes? Just make sure you get the microphone back.

**Carey Eckhardt, Liberal Arts:** Eckhardt, Liberal Arts. I am going to propose an amendment and Paula has this. This relates precisely to Recommendation 2. Thank you for your comments. And, Matthew and I have been emailing about this. Recommendation 2 of the Grade Distribution report would discontinue the annual University-wide report on grade distributions. The Liberal Arts Senators Caucus has discussed this recommendation and disagrees with it. Instead, we want to see the annual Grade Distribution Report continued, so we are proposing an amendment. Although a report on trends in grading is obviously not, in itself, a measure of student learning outcomes, the annual Grade Distribution report serves other important purposes.

Analyzing grading within academic departments and disciplines may be useful also, but does not take the place of the University-wide data. I think we need both.

For one thing, within small departments it may not be possible to provide much analysis without risking a loss of confidentiality.

Further, the Grade Distribution Report, with one of its several charts reaching all the way back to 1975, is a resource that permits various kinds of inquiry at a glance. For example, instructors who may hear from students that grading is too hard -- which we do sometimes hear, especially in General Education courses -- may benefit from being able to point to the data on grading trends in lower-level courses at UP, at World Campus, and elsewhere. In the other direction, instructors who may hear from their supervisors that their own grading is too easy -- which we also sometimes hear -- may benefit from being able to point to the University-wide or WC or UP or campus data now available. For reasons such as these, for many years my own home department, Comparative Literature, has included two summary tables from the current Grade Distribution Report in its departmental Handbook for Instructors; we discuss the pedagogical implications as well as looking at the numbers themselves. It's not correct that nobody is using the Grade Distribution Report.

Also, there is a key question of transparency. As the report from Undergraduate Education points out, at Penn State (as elsewhere), average grades have been gradually moving up. Now we can all see this in the currently available Grade Distribution Report. To suddenly discontinue that report would suggest that we have something to hide. Whether we are glad to see higher average grades, because they may represent an improvement in student learning, or whether we are concerned about higher average grades, because they may represent an erosion of academic standards -- these are interpretations we should study and debate, not make impossible by hiding
the data. Also, some of us are interested in knowing whether the recent change to allow unlimited Late Drops will correlate with a further increase in GPA — or not. To even start to address that question, we need to continue to have the type of transparent access to the University-wide data that we have had before. Administrative offices at various levels will continue, and rightly, to have access to grading trends on a broad scale. We as faculty have had that access up until now. In the interests of transparency we see no reason why faculty should not continue to have that access too.

For all these reasons, the Liberal Arts Caucus would like to see the Grade Distribution Report continue, and thus we have moved to amend the report by deleting Recommendation 2. Deleting that Recommendation will allow the current Grade Distribution Report to continue, while leaving the door open to possible improvements to the report. For example, Angela Linse, director of the Schreyer Institute for Teaching Excellence, who is here as a resource-person, has said that she thinks the point about not decreasing transparency is important, and that rather than doing away with the grade distribution report, it might be better to see the distributions reported in ways that are more meaningful and useful, without assuming that higher grades mean grades that are not deserved. If we work together to improve the University-level Grade Distribution Report, that would be a real gain. But eliminating it would not move us forward. Therefore the LA caucus recommends the amendment on the screen. Supporting the amendment would mean allowing the Grade Distribution Report to continue. Thank you.

Chair Strauss: The motion has been seconded. Discussions on the motion?

Joyce Furfaro, Liberal Arts: I feel like I'm kind of in the middle of this, because I'm on the LA Caucus, and I'm on Undergraduate Education. I agree that it doesn't do what you're saying that it should do. But as I said during our meeting, that's not a good enough reason to just get rid of it because of that. I agree and want to fully support what Carey said, so thank you. Oh, sorry. Nevermind.

Roger A. Egolf, Lehigh Valley: Egolf, Lehigh Valley. I totally support this amendment. I applaud the first recommendation. I think, as Matthew has mentioned, I have spoken in favor of a lot of what the first recommendation speaks about. But I do not agree with taking away the annual distribution. And I think there's a lot more things that are useful in that report than just Table 4. I like to look at that table every year, and I see a lot of very interesting data throughout that report. And I'd like to see it continued.

Chair Strauss: Any further comments on the motion? Seeing none, we are ready to vote. We've been doing everything via clickers. We're not going to change. We're voting on the amendment. So yeah, I'm running the meeting. I will explain this.

So if you wish to support Carey's motion, which would remove Recommendation 2 from the report, then you press A. If you wish Recommendation 2 to remain in the report, then you may press B. Vote early and often.

Anna Butler: On Poll Everywhere, I have nine accept and one reject.
Chair Strauss: So the motion carries. So Recommendation 2 will be removed from the legislation. The remainder of the legislation moves forward for your consideration at this point in time. Discussion on the remainder portions of the legislation? Seeing none, I believe we are ready to vote. If you accept the legislation, press A. If you do not accept the legislation, press B.

Anna Butler: On Poll Everywhere, I have seven accept and two reject.

Chair Strauss: The motion carries. The legislation passed. Thank you very much, Matthew, for the work in your committee.