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# Recent Trends in College Readiness and Subsequent College Performance: With Faculty Perspectives on Student Readiness 

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#### Abstract

Utilizing course grade data from 22 four-year higher education institutions, this study highlights the trends in first-year grade point average (FYGPA) between the 2017-2018 and 2021-2022 academic years, the period immediately before and after the pandemic disrupted both K12 and higher education. Results showed that while FYGPAs generally increased at institutions with more selective admission standards, especially private, more selective institutions, FYGPAs remained relatively unchanged at the less selective institutions. Over these five years, high school grade point average (HSGPA) generally increased among incoming students at nearly every institution while SAT ${ }^{\circledR}$ scores generally decreased. The results of institution-level logistic regression analyses indicated that students with the same pre-college academic achievement levels as measured by SAT scores and HSGPA were more likely to earn a FYGPA of 3.0 or higher in later cohort years than were students in the 2017 cohort. Faculty survey results, based on more than 3,000 respondents from over 1,200 higher education institutions, complement the administrative data analyses in this study. The survey findings suggest college faculty believe that the characteristics of incoming students as well as their academic performance in college are weaker now than in the past. Implications for future higher education research and facilitating nuanced K12 and higher education conversations on more effectively preparing students for college are discussed.


## Introduction

The onset of covid in the spring of 2020 upset higher education in multiple ways. An early survey on the impact of covid on higher education operational practices revealed that many colleges and universities not only altered their instructional practices at the end of the 2019-2020 academic year but also altered their grading practices (American Association of Collegiate Registrars and Admission Officers, 2020). As instructional and grading practices evolved through the pandemic, researchers explored the effects of the pandemic on these areas. The current study focuses on the last of these topics, observed trends in college grades.

College grades are the only nuanced and universally available performance outcome to evaluate higher education learning in the U.S (Pascarella \& Terenzini, 2005), and first-year grade point average (FYGPA) has long served as a metric for our understanding of student performance in college (Zwick, 2017).
The first notable change in grading practices due to the pandemic was making many courses in the spring 2020 semester Pass/Fail (Arredondo, 2020; Retta, 2020; Svrluga, 2020), which altered the calculation of GPAs and made research using GPAs from the 2019-2020 academic year problematic. As data became available, researchers examined changes in grades during and after the pandemic. One research study in the United States found that changes in instructional methods during covid negatively affected the academic performance of students who had average or above average cumulative GPAs (Nazempour et al., 2022). However, other studies within the United States found that students earned higher grades during and immediately after the pandemic (Edwards et al, 2023; Supriya et al, 2021; Tillinghast, Mjelde, \& Yeritsyan, 2023) or that student perceptions of course difficulty had decreased (Cavenaugh, Jacquemin, \& Junker, 2023). Researchers in other countries have also found increases in grades during and after the pandemic (Al-Jarf, 2022; Binrayes et al., 2022; Karadag, 2021). Researchers have also sought out faculty members thoughts on the effects of the pandemic on incidences of student cheating and perceived easing of grading standards (Bilen \& Matros, 2020; Chan, 2023; Engelhardt, Johnson, \& Meder, 2021; Johnson et al., 2020; Pokhrel \& Chhetri, 2021).

## FACULTY PERSPECTIVES

## "Our faculty assign the same grades for less work in less-rigorous courses. Thus, we manage not [to] inflate the grade." <br> Chemistry professor, more selective, private institution

"If I retained standards, I would fail over half of my class. I am curving grades 20\% this semester just to get 10\% of the class into the $A$ range and 30\% into $B$ range."

Business professor, less selective, public institution
"The level of preparedness in my entering students has led me to change my own expectations and grade a little more generously than in the past -- attempting to meet them where they are."
English professor,
less selective, private institution

Though the pandemic affected higher education in multiple ways, the recent research on the effects of covid on college grading fits into a long line of research and commentary on the steady increase in college grades over the years (Achen \& Courant, 2009; Adelman, 2004; Allen, 2005; Bar et al., 2009; Brookhart, 2015; Chen et al., 2021; Denning et al., 2021; Edwards, 2000; Gordon \& Fey, 2010; Hu, 2005; Johnson, 2006; Kezim et al., 2005; Kostal et al., 2015; Kulick \& Wright, 2008; Lipnevich et al., 2020; Marini et al., 2018; Rojstaczer \& Healy, 2010, 2012; Rosovsky \& Hartley, 2002; Shaw \& Patterson, 2010; Sonner, 2000; Westrick et al., 2021; Willingham et al., 2002; Yeritsyan et al., 2022). ${ }^{1}$ Subtopics that many of these researchers have examined include differences in grading practices across instructors, with adjuncts and untenured faculty often found to award students higher grades. Research on grading practices across academic disciplines have generally found that grading practices tend to be stricter in science, technology, engineering, and math (STEM) fields than those in non-STEM fields. Researchers have also studied grading practices across institution types, with students at private institutions generally receiving higher grades than did students at public institutions. Unsurprisingly, researchers have also studied what exactly goes into course grades, which includes not just academic performance but also behavioral factors such as attendance, effort, participation, conformity, motivation, citizenship, and coping skills, as well as teacher bias.

Given the interest in changes in grading practices in higher education since the beginning of covid, we examined FYGPA over four academic years-two pre-pandemic (2017-2018 and 2018-2019) and two post-pandemic (2020-2021 and 2021-2022)—to determine whether and how college grading practices have changed. As past research has found grading practices differ across academic domains, we also examined changes in GPAs within academic disciplines. We conducted these analyses across all institutions and then by institution types.

We also examined changes in students' HSGPAs and SAT scores over the same period. If FYGPAs move in tandem with HSGPA and SAT scores, either up or down, it would indicate that student performance has changed uniformly. Changes in the same direction but of different magnitude-as well as changes in opposite directions-would suggest otherwise.

## College Readiness and College Performance Measures

## Data and Methods

Sample
To ensure that comparisons were consistent across years, we used data from 22 institutions that have shared course grade data for a national longitudinal database in each of the four academic

[^0]years of interest: 2017-2018 ( $n=58,606$ ), 2018-2019 ( $n=62,964$ ), 2020-2021 ( $n=62,269$ ), and 20212022 ( $n=67,003$ ). Given the disruptions to grading practices and data collection at institutions when the pandemic hit, we were not able to collect data for the 2019-2020 academic year. Table 1 includes the characteristics of the 22 four-year colleges and universities in the sample and shows that the institutional sample was diverse with regard to region of the U.S. and balanced regarding control (public/private) and admission selectivity. Half of the institutions were large, with 20,000 or more undergraduate students. To ensure that the results of our analyses were not distorted by fluctuations in the availability of student test score data across years (due to the increase in testoptional policies and the disruption to testing opportunities that briefly occurred over the study time period), we required that $80 \%$ or more of the students at institutions have SAT or PSAT/NMSQT ${ }^{\oplus}$ score data in each of the four cohort years.

Table 1: Institutional Characteristics

|  |  | $\begin{gathered} 2017 \\ k \\ \hline \end{gathered}$ | $\begin{gathered} 2018 \\ k \end{gathered}$ | $\begin{gathered} 2020 \\ k \end{gathered}$ | $\begin{gathered} 2021 \\ k \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Middle States | 5 | 5 | 5 | 5 |
|  | Midwest | 4 | 4 | 4 | 4 |
|  | New England | 2 | 2 | 2 | 2 |
|  | Southern | 5 | 5 | 5 | 5 |
|  | Southwestern | 2 | 2 | 2 | 2 |
|  | Western | 4 | 4 | 4 | 4 |
| Control | Public | 13 | 13 | 13 | 13 |
|  | Private | 9 | 9 | 9 | 9 |
| Average Admission Selectivity | More selective ( $\leq 50 \%$ admitted) | 11 | 11 | 11 | 11 |
|  | Less selective (>50\% admitted) | 11 | 11 | 11 | 11 |
| Size | 1,000-4,999 | 5 | 5 | 5 | 5 |
|  | 5,000-9,999 | 2 | 2 | 2 | 3 |
|  | 10,000-19,000 | 4 | 4 | 4 | 2 |
|  | 20,000 or more | 11 | 11 | 11 | 12 |

Note. $k=$ number of institutions.
Student characteristics are presented in Table 2. Inclusion required that students have a valid SAT score or a valid PSAT/NMSQT score, and individual college course grades. Self-reported HSGPA was available only for students with SAT scores. ${ }^{2}$ Institutions reported students' gender, but other demographic information was available only for students who had SAT score data.

## Measures

The high school measures of academic readiness include SAT scores-either actual SAT scores or PSAT/NMSQT scores plus the expected growth one year later on the common score scales of the SAT Suite of Assessments—and self-reported HSGPA. The SAT Suite of Assessments—which include the SAT and the PSAT/NMSQT-utilize score scales that are vertically aligned, which allows

[^1]users to monitor student growth over time. Research on student growth (Kim, Moses, \& Zhang, 2018) allowed us to estimate $12^{\text {th }}$ grade SAT scores for the students with PSAT/NMSQT EvidenceBased English and Writing (ERW) and Math section scores from the $11^{\text {th }}$ grade. For consistency in the current study, we refer to these adjusted PSAT/NMSQT scores as SAT scores. SAT ERW and Math section scores were reported on a 200-to-800-point scale, and SAT total scores were reported on a 400-to-1600-point scale. Students' self-reported HSGPA was obtained from the SAT Questionnaire when they registered for the SAT and is reported on a 12-point interval scale, ranging from 0.00 ( F ) to 4.33 (A+).

For college GPAs, we used course grade data to calculate FYGPA, STEM GPA, ${ }^{3}$ and 11 domainspecific GPAs to examine grading differences across domains: business and communications, computer science, English, engineering, foreign and classical languages, health sciences, history, humanities, mathematics, natural sciences, and social sciences. Grades were reported on a 0.0 to 4.0 scale. Descriptive statistics are presented in Table 3. In Figure 1, we condensed the general trends by showing the percentage of students in the 2017 and 2021 samples who met both College Board College and Career Readiness Benchmarks, SAT ERW (480) and SAT Math (530) ${ }^{4}$, earned an HSGPA of 3.5 or higher, and earned a FYGPA of 3.0 or higher.

[^2]Table 2: Student Characteristics of the Study Sample

|  | Variable | 2017 Cohort $(n=58,606)$ | 2018 Cohort $(n=62,964)$ | 2020 Cohort $(n=62,269)$ | 2021 Cohort $(n=67,003)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Male | 25,931 (44\%) | 27,344 (43\%) | 26,663 (43\%) | 28,633 (43\%) |
|  | Female | 32,675 (56\%) | 35,620 (57\%) | 35,606 (57\%) | 38,370 (57\%) |
| Race/Ethnicity | American Indian or Alaska Native | 105 (<1\%) | 112 (<1\%) | 115 (<1\%) | 171 (<1\%) |
|  | Asian | 4,888 (8\%) | 7,604 (12\%) | 7,847 (13\%) | 7,684 (11\%) |
|  | Black or African American | 3,747 (6\%) | 4,294 (7\%) | 4,420 (7\%) | 3,739 (6\%) |
|  | Hispanic or Latino | 6,639 (11\%) | 7,177 (11\%) | 7,967 (13\%) | 6,673 (10\%) |
|  | Native Hawaiian or Other Pacific Islander | 52 (<1\%) | 65 (<1\%) | 43 (<1\%) | 44 (<1\%) |
|  | White | 28,429 (49\%) | 33,706 (54\%) | 32,124 (52\%) | 28,778 (43\%) |
|  | Two or More Races | 1,842 (3\%) | 2,314 (4\%) | 2,615 (4\%) | 2,267 (3\%) |
|  | Not Reported | 12,904 (22\%) | 7,692 (12\%) | 7,138 (11\%) | 17,647 (26\%) |
| Highest Parental <br> Education Level | No High School Diploma | 1,543 (3\%) | 1,649 (3\%) | 1,955 (3\%) | 1,566 (2\%) |
|  | High School Diploma | 8,580 (15\%) | 9,368 (15\%) | 8,886 (14\%) | 7,376 (11\%) |
|  | Associate Degree | 3,010 (5\%) | 3,459 (5\%) | 3,202 (5\%) | 2,414 (4\%) |
|  | Bachelor's Degree | 18,062 (31\%) | 21,655 (34\%) | 22,105 (36\%) | 19,568 (29\%) |
|  | Graduate Degree | 14,567 (25\%) | 19,233 (31\%) | 19,652 (32\%) | 18,500 (28\%) |
|  | Not Reported | 12,844 (22\%) | 7,600 (12\%) | 6,469 (10\%) | 17,579 (26\%) |

Table 3: Descriptive Statistics for the 2017, 2018, 2020, and 2021 Cohorts, Pre-college Measures, First-Year GPAs, Overall Sample

| Measure |  | 2017 |  |  | 2018 |  |  | 2020 |  |  | 2021 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $k$ | $N$ | Mean | SD | $N$ | Mean | SD | $N$ | Mean | $S D$ | $N$ | Mean | $S D$ |
| SAT ERW Section Score* | 22 | 58,606 | 616 | 73 | 62,964 | 619 | 75 | 62,269 | 613 | 80 | 67,003 | 600 | 84 |
| SAT Math Section Score* | 22 | 58,606 | 611 | 85 | 62,964 | 616 | 91 | 62,269 | 610 | 93 | 67,003 | 591 | 95 |
| SAT Total Score* | 22 | 58,606 | 1227 | 143 | 62,964 | 1235 | 152 | 62,269 | 1223 | 161 | 67,003 | 1191 | 167 |
| HSGPA** | 22 | 45,447 | 3.72 | 0.43 | 54,903 | 3.75 | 0.43 | 55,539 | 3.77 | 0.42 | 49,225 | 3.79 | 0.42 |
| FYGPA | 22 | 58,606 | 3.13 | 0.73 | 62,964 | 3.15 | 0.74 | 62,269 | 3.22 | 0.83 | 67,003 | 3.16 | 0.83 |
| STEM GPA | 22 | 53,427 | 2.90 | 0.92 | 57,198 | 2.92 | 0.93 | 55,936 | 3.04 | 0.95 | 59,718 | 2.94 | 0.99 |
| Business and Communications GPA | 22 | 23,140 | 3.20 | 0.82 | 24,943 | 3.23 | 0.82 | 24,902 | 3.35 | 0.84 | 28,387 | 3.30 | 0.85 |
| Computer Science GPA | 22 | 9,073 | 3.20 | 1.00 | 9,387 | 3.20 | 1.00 | 8,712 | 3.30 | 1.00 | 9,862 | 3.28 | 0.98 |
| English GPA | 22 | 43,242 | 3.33 | 0.81 | 46,059 | 3.35 | 0.83 | 43,538 | 3.35 | 0.96 | 47,161 | 3.35 | 0.96 |
| Engineering GPA | 16 | 5,388 | 3.33 | 0.81 | 5,818 | 3.29 | 0.87 | 5,479 | 3.33 | 0.88 | 5,565 | 3.25 | 0.93 |
| Foreign and Classic Language GPA | 22 | 16,565 | 3.37 | 0.81 | 17,461 | 3.41 | 0.79 | 15,921 | 3.44 | 0.85 | 16,334 | 3.42 | 0.83 |
| Health Science GPA | 18 | 10,093 | 3.42 | 0.84 | 9,182 | 3.46 | 0.80 | 9,749 | 3.56 | 0.80 | 11,905 | 3.51 | 0.82 |
| History GPA | 22 | 14,787 | 3.03 | 0.96 | 15,774 | 3.08 | 0.97 | 16,317 | 3.14 | 1.06 | 16,555 | 3.05 | 1.09 |
| Humanities GPA | 22 | 21,586 | 3.29 | 0.84 | 22,160 | 3.30 | 0.85 | 21,287 | 3.36 | 0.89 | 23,586 | 3.31 | 0.89 |
| Math GPA | 22 | 41,391 | 2.75 | 1.07 | 43,883 | 2.81 | 1.07 | 42,782 | 2.94 | 1.06 | 44,328 | 2.80 | 1.11 |
| Natural Science GPA | 22 | 39,390 | 2.91 | 0.93 | 42,140 | 2.92 | 0.95 | 40,477 | 3.07 | 0.95 | 42,596 | 2.94 | 1.01 |
| Social Science GPA | 22 | 46,541 | 3.17 | 0.86 | 49,716 | 3.18 | 0.87 | 48,918 | 3.31 | 0.89 | 52,897 | 3.22 | 0.92 |

Note. $k=$ number of institutions. * For students with PSAT/NMSQT scores but no SAT scores, their SAT scores equal their PSAT/NMSQT scores plus the expected point gains if they had taken the SAT later (Kim et al., 2018). **HSGPA is based on the self-reported HSGPAs of students who took the SAT.

Figure 1: Percentage of Students at Participating Institutions Meeting Selected Benchmarks in 2017 and 2021


## Analyses

From the descriptive statistics presented in Table 3, one can see that SAT scores declined between 2017 and 2021, but HSGPA, FYGPA, and all domain-specific first-year GPAs-aside from engineering GPA-increased over the same time frame.

We started our analyses by calculating students' mean GPAs by SAT total score bands across years. This allowed us to examine if there were any differences in grades earned at different score levels over time, both overall and by institutional subgroupings: admission selectivity by control (public/private). For admission selectivity, we averaged each institution's admission rate across the 2017, 2018, 2020, and 2021 cohorts. We categorized institutions that admitted up to 50 percent of applicants as more selective and institutions that admitted more than 50 percent of applicants as less selective.

To assess practical differences across cohorts regarding the observed differences in their GPAs and SAT scores, we calculated standardized mean differences, $d$ (Cohen, 1988), between the first (2017) and last (2021) cohorts analyzed in this study, within each institution. As the number of students within each cohort and the standard deviations for the measures varied across cohorts, we used the pooled standard deviations to calculate each $d$ value (Schmidt \& Hunter, 2015),

$$
d=\frac{M_{2}-M_{1}}{\sqrt{\frac{\left(N_{1}-1\right) \cdot S_{1}^{2}+\left(N_{2}-1\right) \cdot S_{2}^{2}}{N_{1}+N_{2}-2}}}
$$

where $M$ is the mean, $N$ is the number of students, and $S^{2}$ is the variance for each subgroup. We meta-analyzed the institution-level results overall, and then by institutional subgroupings.

Standardized mean differences can be either positive or negative. Based on Cohen's (1988) guidelines, standardized mean differences between $|0.20|$ and $|0.49|$ are considered small effect sizes; standardized mean differences between $|0.50|$ and $|0.79|$ are considered medium effect sizes; and standardized mean differences greater than $|0.80|$ are considered large effect sizes. Any effect size less than $|0.20|$ is not considered a difference of practical significance.

Next, we conducted logistic regression analyses at the institution level to estimate the average probability of earning a FYGPA of 3.0 or higher given their SAT scores and HSGPAs. Institutionlevel results were weighted by sample size, aggregated, and then averaged. We selected a FYGPA of 3.0 or higher as a reasonable threshold for indicating that a student is managing college-level work (Westrick, Marini, Young, Ng, \& Shaw, 2023). These analyses would allow us to determine if students with the same SAT scores and HSGPAs had the same probabilities of success over time. If students with the same SAT scores and HSGPAs had higher (or lower) probabilities of earning a FYGPA of 3.0 or higher in later years than did similarly prepared students in 2017, this would suggest that grading standards had changed.

## Results

## Mean FYGPAs by SAT Total Score Bands

Figure 2 shows the mean FYGPAs for students with SAT total score bands over the four cohort years. For the students in the 600-790 and 800-990 score bands, between 2017 and 2021, mean FYGPA declined from 2.37 to 1.99 and from 2.60 to 2.44 , respectively. However, in the 1000-1190, 1200-1390, and 1400-1600 score bands, mean FYGPAs trended upwards from 2.94 to 3.02 , from 3.25 to 3.39 , and from 3.49 to 3.62 , respectively. A limitation of the overall approach is that we know that students at less selective institutions tend to have lower test scores and that students at more selective institutions tend to have higher test scores. For this reason, we further disaggregated the results across the four institutional subgroupings, shown in Figures 3 through 6.

Figure 2: Mean FYGPA by SAT Total Score Bands across Institutions, 2017, 2018, 2020, and 2021


Figure 3 shows the results for students at the private, less selective institutions. Inclusion criteria required at least 15 students within a score band, so only the 2021 cohort had a sufficient number of students in the 600-790 score band. Although there were some fluctuations over time, across the 800-990, 1000-1190, 1200-1390, and 1400-1600 score bands, mean FYGPAs rose from 2.66 to $2.74,3.09$ to $3.15,3.36$ to 3.45 , and 3.66 to 3.71 , respectively, between 2017 and 2021.

Figure 4 shows the results for students at the public, less selective institutions. Students at these institutions made up 86 percent of the students in the study who had SAT total scores in the 600-790 score band, and they made up $82 \%$ of the students who had SAT total scores in the 800-990 score band. Consequently, the trends seen for students in these score bands in Figure 4 are nearly identical to those shown in Figure 2 for the overall sample, though the mean FYGPAs for the students at the public, less selective institutions are lower than those shown in the overall results. For the students in the 600-790 and 800-990 score bands, between 2017 and 2021 the mean FYGPAs declined from 2.33 to 1.91 and from 2.57 to 2.36 , respectively. Across the remaining three score bands, mean FYGPAs dipped in 2018 but rose in the later years. In the 1000-1190, 1200-1390, and 1400-1600 score bands, between 2017 and 2021 the mean FYGPAs trended upwards from 2.85 to 2.90 , from 3.20 to 3.32 , and from 3.54 to 3.61 , respectively.

Figure 3: Mean FYGPA by SAT Total Score Bands at Private, Less Selective Institutions, 2017, 2018, 2020, and 2021


Note: Means are not shown for years when $n<15$.

Figure 4: Mean FYGPA by SAT Total Score Bands at Public, Less Selective Institutions, 2017, 2018, 2020, and 2021


Figure 5 shows the results for students at private, more selective institutions. Mean FYGPAs were up between 2017 and 2021, but the most noticeable pattern in the results for these
institutions is that FYGPAs rose sharply between 2018 and 2020 before dipping in 2021 in all but the 1400-1600 score band. Between 2017 and 2021, mean FYGPAs rose from 2.58 to 2.91, 2.99 to $3.21,3.26$ to 3.44 , and 3.48 to 3.64 in the 800-990, 1000-1190, 1200-1390, and 14001600 score bands, respectively.

Figure 5: Mean FYGPA by SAT Total Score Bands at Private, More Selective Institutions, 2017, 2018, 2020, and 2021


Note: Means are not shown for years when $n<15$.

Figure 6 shows the results for students at public, more selective institutions. Though the results were mixed, mean FYGPAs increased between 2017 and 2021 within the top three score bands. There were few students in the 600-790 score band, only in 2020 and 2021, with mean FYGPA rising from 2.44 to 2.66 . Within the 800-990 score band, FYGPAs peaked in 2020 at 2.88 before declining to 2.78 , just below the mean of 2.79 in 2017. In the 1000-1190 score band, mean FYGPA also peaked in 2020, but the general trend remained upward, rising from a low of 3.06 in 2017 to 3.14 in 2021. In the 1200-1390 and 1400-1600 score bands, mean FYGPAs steadily rose from 3.26 to 3.40 and 3.45 to 3.59 , respectively, between 2017 and 2021.

Figure 6: Mean FYGPA by SAT Total Score Bands at Public, More Selective Institutions, 2017, 2018, 2020, and 2021


Note: Means are not shown for years when $n<15$.

## Standardized Mean Differences (d)

Table 4 contains the results of the meta-analyses of standardized mean differences for SAT scores, HSGPA, and college GPAs. ${ }^{5}$ The benefit of the standardized mean differences is that they put the raw, observed differences for different measures on a common metric, allowing us to understand, for example, whether a change of 30 SAT total score points is more or less noteworthy than a change of 0.10 in a GPA. Looking at the overall results from the full sample of institutions, only the decreases in SAT scores-between -0.23 and -0.27 -were of practical significance, small effect sizes. However, when looking at the institutions broken out by admission selectivity and control, different patterns emerged. Though the mean $d$-values for SAT scores were uniformly negative in all four institutional subgroupings, only at the less selective -both public and private-were they below -0.20 for the ERW and Math section scores ( -0.26 to -0.36 ), and only at the public, more selective institutions was the mean $d$-value for SAT total score not of practical significance. The $d$-values for HSGPA were uniformly positive, 0.16 overall, but only at the public, more selective institutions did we find the mean $d$ value of practical significance, 0.21 . For FYGPA, the mean $d$-value was 0.07 overall, but at the private, more selective institutions the mean $d$-value was 0.30 , a small effect size and nearly twice that of the next highest value found at the public, more selective institutions (0.16). In

[^3]contrast, the $d$-value was negative, -0.06 , at the public, less selective institutions. The aggregated results suggest that SAT scores trended downward across all institution types. In contrast, HSGPA trended upward across all institution types, and college grades showed an upward trend at more selective institutions, especially at the private, more selective institutions.

Differences between the results for the STEM and domain-specific first-year GPAs results across institutional subgroupings were noticeable. At the more selective institutions, both public and private, all the $d$-values were positive. Moreover, at the private, more selective institutions, eight of the twelve $d$-values were of practical significance, ranging between 0.20 (STEM GPA) and 0.49 (English GPA), small effect sizes. At the public, more selective institutions, four of the twelve $d$-values were of practical significance, ranging between 0.23 (Health Science GPA) and 0.33 (History GPA). At the less selective institutions, the $d$-values were mixed, some positive and some negative, but there was only one mean $d$-value of practical significance at the private, less selective institutions, a 0.32 for Computer Science GPA, and one at the public, less selective institutions, a - 0.27 for Engineering GPA, which was the only decrease in a domain that was of practical significance across the four institutional subgroupings.

Table 4: Meta-Analyzed Standardized Mean Differences (d) between the 2021 and 2017 Cohorts for Pre-college Measures and FirstYear GPAs, Overall and across Institution Categories

| Measure | Overall $(k=22)$ | Private, Less Selective $(k=3)$ | Public, Less Selective $(k=8)$ | Private, More Selective $(k=6)$ | Public, More Selective $(k=5)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SAT ERW Section Score* | -0.23 | -0.26 | -0.33 | -0.19 | -0.10 |
| SAT Math Section Score* | -0.25 | -0.33 | -0.36 | -0.17 | -0.14 |
| SAT Total Score* | -0.27 | -0.33 | -0.38 | -0.20 | -0.13 |
| HSGPA** | 0.16 | 0.11 | 0.11 | 0.19 | 0.21 |
| FYGPA | 0.07 | 0.01 | -0.06 | 0.30 | 0.16 |
| STEM GPA | 0.07 | 0.04 | -0.04 | 0.20 | 0.16 |
| Business and Communications GPA | 0.13 | 0.05 | 0.03 | 0.23 | 0.25 |
| Computer Science GPA | 0.10 | 0.32 | 0.03 | 0.11 | 0.14 |
| English GPA | 0.09 | 0.03 | -0.05 | 0.49 | 0.08 |
| Engineering GPA*** | -0.07 | 0.10 | -0.27 | 0.06 | 0.00 |
| Foreign and Classic Language GPA | 0.04 | -0.05 | 0.01 | 0.10 | 0.06 |
| Health Science GPA**** | 0.05 | 0.17 | -0.09 | 0.31 | 0.23 |
| History GPA | 0.09 | 0.00 | -0.04 | 0.23 | 0.33 |
| Humanities GPA | 0.02 | 0.05 | -0.07 | 0.22 | 0.00 |
| Math GPA | 0.07 | -0.02 | 0.00 | 0.12 | 0.14 |
| Natural Science GPA | 0.05 | 0.02 | -0.05 | 0.21 | 0.11 |
| Social Science GPA | 0.11 | -0.07 | -0.01 | 0.21 | 0.25 |

Note. Bolded values represent findings of practical significance. $k=$ number of institutions. * For students with PSAT/NMSQT scores but no SAT scores, their SAT scores equal their PSAT/NMSQT scores plus the expected point gains if they had taken the SAT later (Kim et al., 2018). **HSGPA is based on the self-reported HSGPAs of students who took the SAT. ***At the private, less selective institutions, $k=1$; at the public, less selective institutions, $k=7$; and at the private, more selective institutions, $k=3$. ****At the private, more selective institutions, $k=3$, and at the public, more selective institutions, $k=4$.

Figure 7 illustrates the mean differences for SAT total score, HSGPA, and FYGPA across the four institution types. It highlights the general trends that SAT scores declined and HSGPA rose across all institution types, but the trends in FYGPA varied across institution types. It also shows that differences across institutions were associated with admission selectivity more than they were with control (public/private).

Figure 7: Average Standardized Mean Differences (d) in Academic Achievement Measures across Institution Types


When aggregating institution-level results to arrive at mean values, large institutions can have an outsized effect, so in Figure 8 we supplement the meta-analytic results presented in Table 4 and Figure 7 by presenting the interquartile ranges, medians, minimums, and maximums for the $d$-values across all institutions. Note that the results vary widely across institutions. The boxes represent the interquartile ranges, and the medians are represented by lines within the boxes. The endpoints, or whiskers, represent the minimums and maximums, though extreme outliers are represented by dots. For example, for SAT ERW section scores, the first measure in the figure, the median is -0.19 ; the $25^{\text {th }}$ percentile (the bottom of the box) is -0.29 ; the $75^{\text {th }}$ percentile (the top of the box) is -0.12 ; the minimum (the lower whisker) is -0.35 ; the maximum (the upper whisker) is 0.05 ; and an extreme outlier is represented by a dot at -0.64 .

Figure 8: Range of Standardized Mean Differences across Institutions, 2021 vs. 2017


Note. Extreme outliers are represented by dots.

## Probability of Earning a FYGPA of 3.0 or Higher: Logistic Regression Analyses

Based on the weighted mean logistic regression results across the 22 institutions, Table 5 shows students' chances of earning a FYGPA of 3.0 or higher at selected SAT total scores and HSGPAs between 2017 and 2021. Within each year, students' chances of earning a FYGPA of 3.0 or higher increases as their SAT scores and HSGPAs increase. However, over the years we see that students' chances have trended upwards at each score and HSGPA point, most often peaking in 2020 and declining slightly in 2021, but in all cases higher than in 2017. For example, students in the 2017 cohort with an SAT Total score of 1000 had a 42\% chance of earning a FYGPA of 3.0 or higher, but this rose to a $59 \%$ chance for students in the 2020 cohort before declining slightly to a $52 \%$ chance for students in the 2021 cohort, which was still ten percentage points higher than it was for students in the 2017 cohort. The results across the four institution types, presented in the Appendix (Tables A and B), showed the same general pattern. Figures 9 and 10 graphically show students' chances of earning a FYGPA of 3.0 or higher across the SAT total score and HSGPA scales, respectively, and the changes over time.

Table 5: Chance of Earning a FYGPA of 3.0 or Higher given SAT Total Score or HSGPA, by Cohort Year

| Measure | Level | 2017 | 2018 | 2020 | 2021 | Percentage <br> Point Change, <br> 2017 to 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 800 | $21 \%$ | $23 \%$ | $38 \%$ | $28 \%$ | 7 |
|  | 1000 | $42 \%$ | $44 \%$ | $59 \%$ | $52 \%$ | 10 |
|  | 1200 | $66 \%$ | $68 \%$ | $77 \%$ | $75 \%$ | 9 |
|  | 1400 | $84 \%$ | $85 \%$ | $89 \%$ | $89 \%$ | 5 |
|  | 1600 | $93 \%$ | $94 \%$ | $95 \%$ | $96 \%$ | 3 |
| HSGPA | 2.50 | $22 \%$ | $22 \%$ | $31 \%$ | $25 \%$ | 3 |
|  | 3.00 | $40 \%$ | $41 \%$ | $50 \%$ | $44 \%$ | 4 |
|  | 3.50 | $60 \%$ | $62 \%$ | $70 \%$ | $65 \%$ | 5 |
|  | 4.00 | $77 \%$ | $80 \%$ | $84 \%$ | $82 \%$ | 5 |
|  | 4.33 | $85 \%$ | $87 \%$ | $90 \%$ | $89 \%$ | 4 |

Figure 9: Probability of Earning a FYGPA of 3.0 or Higher given SAT Total Score, by Cohort Year


Figure 10: Probability of Earning a FYGPA of 3.0 or Higher given HSGPA, by Cohort Year


## Discussion

While the overall sample results suggest that first-year grades increased between 2017 and 2021, after disaggregating the results by admission selectivity our analyses indicate that grades increased at the more selective institutions, especially the private, more selective institutions, but they held steady or decreased at the less selective institutions. To put these changes in perspective, we meta-analyzed the standardized mean differences between the FYGPAs and academic domain GPAs from the 2017 and 2021 cohorts, and we found that most of the changes that were of practical significance were found at the private, more selective institutions. However, we must keep in mind that the current study was limited to four cohort years. Given the findings of other research studies that examined the upward trend in college grades, the differences in grades earned by students a decade ago and students today would most likely be of practical significance at most institutions.

Our analyses of average FYGPA by SAT score bands indicated that first-year grades did not change uniformly across the SAT score scale. Mean FYGPAs went up for students in the upper SAT score bands, but mean FYGPAs decreased for students in the lower score bands. However, the results varied by institution type. The vast majority of students with SAT total scores below 1000 were enrolled at public, less selective institutions, and their mean FYGPAs trended lower. The logistic regression analyses provided another look at students' academic performance over time, and the results indicated that students with the same levels of precollege academic preparation-as measured by SAT scores and HSGPA—had different chances of earning a FYGPA of 3.0 or higher depending on the year they enrolled in college. Chances of success rose from 2017 to 2020 before dipping somewhat in 2021, but the chances of success were still higher than they had been in 2017. Combining this finding with the downward trend in FYGPA at the public, less selective institutions suggests that the decrease in college readiness of the students attending these institutions more than offset changes in grading standards on campuses.

Though we focused on college grading trends in this study, we also wanted to examine the trends in SAT scores and HSGPA. Previous research has found that ACT scores have declined in recent years (ACT, 2023) as have National Assessment of Educational Progress (NAEP) scores since the pandemic (National Center for Education Statistics, 2024). Conversely, HSGPA has trended upwards (Goldhaber \& Goodman Young, 2023; Sanchez \& Moore, 2022), even despite downward trends in attendance (EdNavigator, Learning Heroes, \& TNTP, 2023). The results of this study revealed similar trends across nearly every participating institution. We found that the unstandardized or more flexibly assigned measures in this study, HSGPA and often FYGPA, had trended in the opposite direction of our standardized measures, the SAT and PSAT/NMSQT. This somewhat puzzling phenomenon led us to survey faculty members to better understand how student readiness for college has changed (or not) in recent years.

## Faculty Survey

## Data and Methods

To more deeply understand and contextualize the results presented above, we surveyed faculty members across the country to ask about the college readiness exhibited by current first-year students compared to pre-pandemic students. We conducted the survey toward the end of the fall semester of 2023. Survey questions addressed incoming student preparedness, first-year students' academic success, their institutions' level of rigor across admissions, course content, grading, and grading practices. Of the approximately 70,000 faculty members contacted via email, there were 3,094 respondents ( $14 \%$ at more selective, $63 \%$ at less selective, and $23 \%$ at open admission institutions) from 1,272 two-year and four-year higher education institutions across the United States ( $11 \%$ were more selective, $58 \%$ were less selective, and $30 \%$ were open admission institutions). Of the 3,094 respondents, 2,687 completed the full survey. The overwhelming majority of respondents ( $89 \%$ ) have worked more than ten years in higher education, and $80 \%$ of the respondents identified their primary role as being a faculty member, and another $20 \%$ reported that they primarily served as department chairs, deans, or in other administrative roles. More than 75 percent of the faculty members who responded also took the time to write about their experiences in the open-ended fields provided, with an average character count of 411. By comparison, this level of responsiveness on a survey is an outlier; correlative questions in our last five surveys conducted with Higher Education professionals had average response rates of $60 \%$ and character counts of 131. Table 6 displays the characteristics of the faculty survey respondents. A more comprehensive report on the faculty survey and subsequent faculty interviews is forthcoming (Angehr, Westrick, Shaw, \& Jacklin, 2024), but here we share some key results that relate to the results presented in the first half of this report.

Table 6: Characteristics of the Faculty Survey Respondents

| Background Question | Response | Percent |
| :---: | :---: | :---: |
| How long have you worked in higher education? $(n=3,371)$ | Less than 10 years | 10\% |
|  | 10-15 years | 18\% |
|  | Over 15 years | 71\% |
| What is your current primary role?$(n=3,417)$ | Faculty - Professor | 67\% |
|  | Faculty - Lecturer | 13\% |
|  | Other (e.g., Department Chair, Dean, Provost, Admission Officer) | 20\% |
| Do you currently teach first-year college students? ( $n=2,734$ ) | Yes | 71\% |
|  | No, but I have in the past 4+ years | 10\% |
|  | No, but I have in the past 1-3 years | 11\% |
|  | No, and I have never taught first-year students | 7\% |
| In which of these subject areas does your department fall? (Please select all that apply.) ( $n=3,222$ ) | English | 27\% |
|  | Mathematics | 18\% |
|  | Humanities (Philosophy, Law, Criminal Justice, Religion, Ethics, other) | 16\% |
|  | Arts and Music | 14\% |
|  | Business and Communications | 12\% |
|  | Foreign and Classical Languages | 11\% |
|  | Natural Sciences | 8\% |
|  | Other (please describe) | 8\% |
|  | Computer Sciences | 6\% |
|  | Social Sciences | 6\% |
|  | Health Sciences (Nursing, Pharmacy, Nutrition, Health Studies, other) | 5\% |
|  | History | 5\% |
|  | Engineering | 2\% |
| Which gender do you identify with?$(n=2,726)$ | Female | 54\% |
|  | Male | 43\% |
|  | Another, not listed | 2\% |
| Choose one or more races that you consider yourself to be. Please select all that apply. ( $n=2,719$ ) | American Indian or Alaska Native | 2\% |
|  | Asian (including Indian subcontinent and Philippines origin) | 7\% |
|  | Black or African American (including African and Afro-Caribbean origin) | 5\% |
|  | Spanish, Hispanic or Latino origin | 8\% |
|  | Native Hawaiian or other Pacific Islander | 0\% |
|  | White (including Middle Eastern origin) | 79\% |
|  | Another race not listed (please specify) | 3\% |
|  | Prefer not to answer | 7\% |

## Results

Regarding incoming students' skills in eight relevant areas, Figure 11 shows that the majority of faculty respondents found incoming students to be less prepared when compared to the students in their classes prior to covid. For example, $76 \%$ of respondents thought that their students were much less (42\%) or slightly less (34\%) prepared with regard to critical thinking skills and analysis.

Figure 11: Incoming Student Preparedness
Compared to students who were in your classes prior to the Covid-19 pandemic, did your current first-year students come to class more or less prepared to be successful in your course(s) on the following skills?


> Faculty Perspectives
> "There's been such a huge shift in the type of students we now have vs. just 3-4 years ago. The incoming students we now have overwhelmingly struggle with taking responsibility of their own education-the majority of them are telling us they NEVER had homework in high school. Our university has waived the test score requirements to combat dropping enrollment, and the writing skills of these current students are very poor. I had freshmen this semester writing at a 3rd-grade level."
> -Graphics design professor at a less selective, public institution

In addition to faculty members reporting that their incoming students were less prepared than earlier student cohorts, they also reported that current students were not catching up in these areas within the first year of college. Concerning current first-year students' levels of academic success, Figure 12 shows that the majority of respondents found that current students were less successful than were students prior to covid in seven of eight areas.

Figure 12: Students' Levels of Academic Success
Please rate the level of academic success that you have seen in current first-year students as compared to pre-Covid-19 first-year students when it comes to the following.


■ Much less successful ■Slightly less sucessful ■About the same ■ Slightly more successful $\begin{aligned} & \text { Much more successful } \square \text { Unsure/Does not apply }\end{aligned}$

## Faculty Perspectives

"I have taught at the college-level (community college, 4-year undergraduates, and graduate professional programs) since 1988. I have seen many changes to the educational process over that time. The world and students have changed over that time. But, I have never seen quite the effect of any event on student performance as the pandemic. Even my undergraduate advisees (at a small college) who were top students prior to the shutdown have struggled since returning to in-person classes. The students do not appear to be less intelligent, they seem a bit lost and unprepared for the expectations professors have (which, I should note, aren't really any higher than before the pandemic). I have discussed this issue with other professors and we are all at a loss to figure out what to do."
-Natural science professor at a less selective private institution

Figure 13 presents the results of faculty members' thoughts on their institutions' level of rigor regarding admissions, course content, and grading. Admission rigor was generally referring to how selective an admitted class of applicants may be, course content rigor was generally referring to how academically demanding a course may be, and grading rigor was generally referring to how stringently graded (or not) a course may be. "About the same" was the most common response. However, those who thought their institutions' current levels of rigor had decreased since covid generally outnumbered those who thought their institutions' current levels had increased since covid by ten to one.

Figure 13: Levels of Rigor at Institution
Please consider your institution's level of rigor on the following dimensions. Would you say that each of the following is more rigorous, less rigorous, or about the same as it was before the Covid-19 pandemic?


## Faculty Perspectives

"Because of changes to policies relating to when students can drop/add a class (now allowed later), designate a course pass/fail from letter-graded (now allowed later or even after receiving a letter grade), much more forgiving attendance policies (due to illness), the level of rigor has dropped. It is now difficult to reverse these policies due to student push-back."

- Mathematics professor at a more selective, private institution

Figure 14 displays faculty members' thoughts on grading practices within and outside of their subject area. Most respondents were unsure of grading practices outside their subject area ( $51 \%$ ). Within their subject area, slightly more faculty members reported that professors were awarding higher grades (22\%) than were professors awarding lower grades (17\%) than they did before the pandemic, but nearly half ( $44 \%$ ) reported that professors were assigning about the same grades as before the pandemic.

Figure 14: Grading Standards within and outside of Subject Area


However, open-ended responses indicated that a response of "about the same grades they did before the pandemic" in Figure 13 does not imply similar course and grading rigor. In fact, most comments suggest that faculty are maintaining the same grades as in prior cohorts by reducing content covered, simplifying exams, and grading more generously.

## Faculty Perspectives

"Faculty are seeing declines in student performance across-the-board. There are two ways to deal with this. One is to use pre-pandemic grade assignments and give the same $\%$ of As, Bs, etc. as before. The other extreme is to stick to the same pre-pandemic standards and simply fail more students. Overall, though, I and many of my colleagues are simply giving slightly easier exams with fewer questions, and removing course content that is now considered to be more difficult (aka watering down the material)."

- Department chair of a natural sciences department at a less selective, public institution

Results on the subject of grades varied across types of institutions, as seen in Figure 15. When reporting on their own subject area, respondents from more selective schools were more likely to report that faculty members in their subject area were assigning higher grades (31\%) than did faculty members at less selective ( $21 \%$ ) and open admission institutions (17\%). However, one must ask whether the grades awarded are changing or the requirements to earn a particular grade are changing, and one must consider the effects of policies beyond any instructor's control.

Figure 15: Grading Standards within Subject Area by Institution Type
At your institution, (in your subject area) would you say professors typically assign...?


## Faculty Perspectives

"It's not so much the grades per se, but rather how we arrive at the grades. There is a lot of pressure to provide much more flexibility. This may ultimately result in a slightly higher grade.
For instance, prior to COVID, a professor may not accept a late assignment, resulting in a zero, but now they likely would."

- Business professor at a more selective, private institution

Finally, we asked faculty members if they were under pressure to assign higher grades and to identify the sources of pressure. Seventy-three percent of professors reported that they faced at least one type of pressure. Students across all college grade levels were the leading source of pressure ( $40 \%$ ), followed by institution administration (31\%). Full results are shown below in Figure 16.

Figure 16: Sources of Pressure to Assign Higher Grades


Faculty Perspectives
"If we were to keep the same evaluation criteria with the same level of rigor as before the pandemic, many students would have lower grades. There is tremendous pressure from the university administration to "accommodate" and "relativize" students' grades."

- Foreign and classical languages lecturer at a more selective, private institution


## Discussion

The majority of respondents in the faculty survey reported that their incoming students were less prepared than the students they had taught in recent past (see Appendix C for additional faculty quotes), which complemented the downward trend in SAT scores that we observed in this study. Though respondents reported multiple sources of pressure to change their grading standards, nearly half of the respondents thought that their course and grading rigor had decreased.

The open-ended survey responses provided additional useful insights. These will be shared more comprehensively in a forthcoming report (Angehr, Westrick, Shaw, \& Jacklin, 2024), and we have included some of their comments in the appendix. Professors noted that current students are indeed less prepared, have greater attendance issues, more frequently turn in work late, and have more mental health struggles. Professors reported that they are not able to cover as much course and reading or exam material as in the past. However, many professors are not changing the grades that they give. In other words, they now give the same grade that
had required a higher level of student performance in the past. Their reasons, based on the open-ended responses, include pressure from the institution to keep up enrollment numbers, empathy for what students have experienced over recent years, a practical inability to remediate student readiness, and the acceptance of this as the new normal.

By no means do we argue that these changes are universal. Grading standards vary across institutions, within academic domains, and across instructors within academic departments, making it impossible to identify a precise explanation for the trends we observed in this study. However, the survey results do tell us that many faculty members recognize that incoming students differ from those in the past, and the faculty members have changed their courses and grading practices in response.

## Conclusion

We initiated this study to gain a deeper understanding of the recent trends we and others have observed in measures of college readiness and college performance. Whereas much of the research to date has been based on data from single institutions, this multi-institutional study makes a key contribution to the literature. Results from this study showed that while first year college grades generally increased at more selective institutions over the past few years, college grades remained relatively unchanged at the less selective institutions. There were decreases in admission test scores across all institutions over the past few years, but the decreases were more pronounced at the less selective institutions. Faculty survey results suggest that the characteristics of incoming students have changed across institutions, as well as their academic performance in the first year of college, both described as weaker now than in the past. Ideally, the findings of this study lead to proactive conversations on improving student readiness for college, especially after the disruptions of the pandemic. In sum, these findings inform the post-covid college readiness and success literature and highlight the sometimes murky value of human-assigned grades in deeply understanding performance trends and the clear identification of performance weaknesses needed to support student success.

## References

Achen, A. C., \& Courant, P. N. (2009). What are grades made of? Journal of Economic Perspectives, 23(3), 77-92.

ACT, Inc. (2023). The ACT Profile Report - National, Graduating Class 2023. Iowa City, IA: ACT, Inc.

Adelman, C. (2004). Principal indicators of student academic histories in postsecondary education, 1972-2000. Washington, DC: U.S. Department of Education, Institute of Education Sciences.

Al-Jarf, R. (2022). Grade inflation at Saudi universities before, during and after the pandemic: A comparative study. Journal of Humanities and Social Sciences Studies, 4(4), 111-125. DOI: 10.32996/jhsss

American Association of Collegiate Registrars and Admissions Officers (2020). Impact of COVID-19 on Grading, Transcript and Commencement Practices: Results of the AACRAO COVID-19 Snapshot Impact Survey \#1. Washington, DC: American Association of Collegiate Registrars and Admissions Officers.

Angehr, E., Westrick, P. A., Shaw, E. J., \& Jacklin, A. (2024). College Faculty Perspectives on Post-Pandemic College Readiness. New York: College Board.

Arredondo, V. (2020, May 6). A's for all? Universities debate how to grade during a pandemic. Cal Matters. Retrieved August 24, 2023, from https://calmatters.org/education/highereducation/2020/03/california-coronavirus-college-students-grading-pandemic/.

Avakian, A. N. (1995). Conflicting demands for adjunct faculty. Community College Journal, 65(6), 34-36.

Bar, T., Kadiyali, V., \& Zussman, A. (2009). Grade information and grade inflation: The Cornell experiment. Journal of Economic Perspectives, 23(3), 93-108.

Bejar, I. I., \& Blew, E. O. (1981). Grade inflation and the validity of the Scholastic Aptitude Test. American Educational Research Journal, 18(2), 143-156.

Bilen, E., \& Matros, A. (2020). Online cheating amid COVID-19. Journal of Economic Behavior \& Organization, 182, 196-211. https://doi.org/10.1016/j.jebo.2020.12.004

Binrayes, A., Almahdy, A., Habib, S. R., Aljutaili, A., Alotaibi Y., Aldoihi S., \& Alkhathran, A. Dental students' academic performance before and after the Covid-19 pandemic: A retrospective analysis. Saudi Dental Journal. 34(8),751-756. https://doi.org/10.1016/j.sdentj.2022.11.008.

Brookhart, S. M. (1993). Teachers' grading practices: Meaning and values. Journal of Educational Measurement, 30(2), 123-142.

Brookhart, S. M. (2015). Graded achievement, tested achievement, and validity. Educational Assessment, 20(4), 268-296. doi.org/10.1080/10627197.2015.1093928

Cavanaugh, J., Jacquemin, S., \& Junker, C. (2023). A look at student performance during the COVID-19 pandemic. Quality Assurance in Education, 31(1), 33-43.

Chan, C. K. Y. (2023). A review of the changes in higher education assessment and grading policy during COVID-19. Assessment \& Evaluation in Higher Education, 48, 874-887.

Chen, K., Hansen, Z., \& Lowe, S. (2021). Why do we inflate grades?: The effect of adjunct faculty employment on instructor grading standards. Journal of Human Resources, 56(3), 878-921.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.) Hillsdale, NJ: Erlbaum.

College Board (2022). The Digital SAT ${ }^{\circledR}$ Suite of Assessments Specifications Overview. New York: College Board.

Denning, J. T., Eide, E. R., Mumford, K., Patterson, R. W., \& Warnick, M. (2021). Why have college completion rates increased? An analysis of rising grades (No. w28710). National Bureau of Economic Research.

EdNavigator, Learning Heroes, \& TNTP. (2023). False signals: How pandemic-era grades mislead families and threaten student learning. Retrieved from https://tntp.org/wp-content/uploads/2023/10/False-Signals.pdf

Edwards, A., Goyer, P., Howell, J., Hurwitz, M., Imlay, S., \& Perfetto, G. (2023). College Outcomes Following Pandemic-Induced Changes in College Admission Policies: Focus on 2021-22 First-Year Outcomes. New York: College Board.

Edwards, C. H. (2000). Grade inflation: The effects on educational quality and personal wellbeing. Education, 120(3), 538.

Elliott, R., \& Strenta, A. C. (1988). Effects of improving the reliability of the GPA on prediction generally and on comparative predictions for gender and race particularly. Journal of Educational Measurement, 25(4), 333-347.

Engelhardt, B., Johnson, M., \& Meder, M. E. (2021). Learning in the time of covid-19: Some preliminary findings. International Review of Economics Education, 37, 100215. doi: 10.1016/j.iree.2021.100215

Goldhaber, D., \& Goodman Young, M. (2023). Course Grades as a Signal of Student Achievement: Evidence on Grade Inflation Before and After COVID-19 (CALDER Research Brief No. 35). Arlington, VA: Center for Analysis of Longitudinal Data in Education Research, American Institutes for Research.

Goldman, R. D., Schmidt, D. E., Hewitt, B. N., \& Fisher, R. (1974). Grading practices in different
major fields. American Educational Research Journal, 11(4), 343-357.
Gordon, M. E., \& Fay, C. H. (2010). The effects of grading and teaching practices on students' perceptions of grading fairness. College Teaching, 58(3), 93-98.

Hu, S. (2005). Beyond grade inflation: Grading problems in higher education. San Francisco, CA: Jossey-Bass.

Johnson, V. E. (2006). Grade inflation: A crisis in college education. New York: Springer Science \& Business Media.

Johnson, N., Veletsianos, G., \& Seaman, J. (2020). US Faculty and Administrators' Experiences and Approaches in the Early Weeks of the COVID-19 Pandemic. Online Learning, 24(2), 6-21.

Juola, A. E. (1976). Grade inflation in higher education: What can or should we do? Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA. Retrieved from https://eric.ed.gov/?id=ED129917 (ED129917).

Juola, A. E. (1980). Grade inflation in higher education-1979. Is it over? Retrieved from https://eric.ed.gov/?id=ED189129.

Jussim, L. (1991). Grades may reflect more than performance: Comment on Wentzel (1989). Journal of Educational Psychology, 83(1), 153-155.

Lipnevich, A. A., Guskey, T. R., Murano, D. M., \& Smith, J. K. (2020). What do grades mean? Variation in grading criteria in American college and university courses. Assessment in Education: Principles, Policy \& Practice, 27(5), 480-500.

Karadag, E. (2021). Effect of COVID-19 pandemic on grade inflation in higher education in Turkey. PLoS ONE 16(8), e0256688. https://doi.org/10.1371/journal.pone.0256688.

Kezim, B., Pariseau, S. E., \& Quinn, F. (2005). Is grade inflation related to faculty status? Journal of Education for Business, 80, 358-364.

Kostal, J. W., Kuncel, N. R., \& Sackett, P. R. (2015). Grade inflation marches on: Grade increases from the 1990s to 2000s. Educational Measurement: Issues and Practice, 35(1), 11-20.

Kuh, G. D., \& Hu, S. (1999). Unraveling the complexity of the increase in college grades from the mid-1980s to the mid-1990s. Educational Evaluation \& Policy Analysis, 21(3), 297320.

Kulick, G., \& Wright, R. (2008). The Impact of Grading on the Curve: A Simulation Analysis. International Journal for the Scholarship of Teaching and Learning, 2(2), 1-25.

Marini, J. P., Young, L. \& Shaw, E. J. (2021). Re-examining the Accuracy of Self-Reported High School Grade Point Average (HSGPA). New York: College Board.

Marini, J., Shaw, E., Young, L., \& Ewing, M. (2018). Getting to Know Your Criterion: Examining College Course Grades and GPAs over Time. New York: College Board.

National Center for Education Statistics (2024). NAEP Long-Term Trend Assessment Results: Reading and Mathematics. Retrieved from https://www.nationsreportcard.gov/ltt April 2, 2024.

Nazempour, R., Darabi, H., \& Nelson, P. C. (2022). Impacts on students' academic performance due to emergency transition to remote teaching during the COVID-19 pandemic: A financial engineering course case study. Education Sciences, 12(3), 221-234.

Norcross, J. C., Dooley, H. S., \& Stevenson, J. F. (1993). Faculty use and justification of extra credit: No middle ground? Teaching of Psychology, 20(4), 240-242.

Pascarella, E. T., \& Terenzini, P. T. (2005). How College Affects Students: A Third Decade of Research. Volume 2. San Francisco, CA: Jossey-Bass.

Pokhrel, S., \& Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. Higher Education for the Future, 8(1), 133-141. DOI: 10.1177/2347631120983481

Ramist, L., Lewis, C., \& McCamley, L. (1990). Implications of using freshman GPA as the criterion for the predictive validity of the SAT. In W. W. Willingham. C. Lewis, R. Morgan, \& L. Ramist (Eds.), Predicting college grades: An analysis of institutional trends over two decades (pp. 253-288). Princeton, NJ: Educational Testing Service.

Retta, M. (2020, April 10). How colleges are grading students during coronavirus. Retrieved August 24, 2023, from https://www.npr.org/2020/04/10/830622398/how-colleges-are-grading-studentsduring-coronavirus.

Rojstaczer, S., \& Healy, C. (2010). Grading in American colleges and universities. Teachers College Record, ID Number: 15928.

Rojstaczer, S., \& Healy, C. (2012). Where A is ordinary: The evolution of American college and university grading, 1940-2009. Teachers College Record, 114(7), 1-23.

Rosovsky, H., \& Hartley, M. (2002). Evaluation and the academy: Are we doing the right thing. Cambridge, MA: American Academy of Arts and Sciences.

Sabot, R., \& Wakeman-Linn, J. (1991). Grade inflation and course choice. Journal of Economic Perspectives, 5(1), 159-70.

Sanchez, E. I., \& Moore, R. (2022). Grade Inflation Continues to Grow in the Past Decade. (ACT Research Report). Iowa City, IA: ACT, Inc.

Schmidt, F. L., \& Hunter, J. E. (2015). Methods of meta-analysis: Correcting for error and bias in research findings. Los Angeles, CA: Sage.

Shaw, E. J., \& Patterson, B. F. (2010). What Should Students Be Ready for in College? A Look at First-Year Course Work in Four-Year Postsecondary Institutions in the U.S. (College Board Research Report 2010-1). New York: The College Board.

Sonner, B. S. (2000). A Is for "Adjunct": Examining grade Inflation in higher education. Journal of Education for Business, 76(1), 5-9.

Stumpf, S. A., \& Freedman, R. D. (1979). Expected grade covariation with student ratings of instruction: Individual versus class effects. Journal of Educational Psychology, 71, 293302.

Supriya, K., Mead, C., Anbar, A. D., Caulkins, J. L., Collins, J. P., Cooper, K. M., LePore, P. C., Lewis, T., Pate, A., Scott, R. A., \& Brownell, S. E. (2021). Undergraduate biology students received higher grades during COVID-19 but perceived negative effects on learning. Frontiers in Education, 6(1), 1-19. https://doi.org/10.3389/feduc.2021.759624

Suslow, S. (1976). A report on an interinstitutional survey of undergraduate scholastic grading: 1960s to 1970s. Retrieved from https://files.eric.ed.gov/fulltext/ED129187.pdf.

Svrluga, S. (2020, April 6). Colleges are ditching letter grades this spring, but not all students are on board with 'ungrading.' Washington Post. Retrieved August 24, 2023, from https://www.washingtonpost.com/education/2020/04/06/college-grading-coronavirus/.

Tillinghast, J. A., Mjelde, D. J. W., \& Yeritsyan, A. (2023). COVID-19 and Grade Inflation: Analysis of Undergraduate GPAs During the Pandemic. SAGE Open, 13(4), 1-12. DOI: 10.1177/21582440231209110.

Westrick, P. A., Marini, J. P., \& Shaw, E. J. (2021). Using SAT® Scores to Inform Academic Major-Related Decisions and Planning on Campus. New York: College Board.

Westrick, P. A., Marini, J. P., Young, L., Ng, H., \& Shaw, E. J. (2023). The Consequences of a Low First-Year Grade Point Average on Later College Outcomes. New York: College Board.

Willingham, W. W., Lewis, C., Morgan, R., \& Ramist, L. (1990). Predicting college grades: An analysis of institutional trends over two decades. Princeton, NJ: Educational Testing Service.

Willingham, W. W., Pollack, J. M., \& Lewis, C. (2002). Grades and test scores: Accounting for observed differences. Journal of Educational Measurement, 39(1), 1-37.

Yeritsyan, A., Mjelde, J. W., \& Litzenberg, K. K. (2022). Grade inflation or grade increase. Journal of Agricultural and Applied Economics, 54(2), 375-393.

Zwick, R. (2017). Who gets in? Strategies for fair and effective college admissions. Cambridge, MA: Harvard University Press.

## Appendices:

Appendix Table A: Chance of Earning a FYGPA of 3.0 given SAT Total Score, by Institution Type and Cohort Year

| Institution Type | 2017 | 2018 | 2020 | 2021 | Percentage Point Change, 2017 to 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SAT Total Score $=800$ |  |  |  |  |
| Private, Less Selective | 25\% | 25\% | 35\% | 31\% | 6 |
| Public, Less Selective | 21\% | 20\% | 29\% | 23\% | 2 |
| Private, More Selective | 17\% | 21\% | 49\% | 31\% | 14 |
| Public, More Selective | 23\% | 28\% | 47\% | 36\% | 13 |
|  | SAT Total Score $=1000$ |  |  |  |  |
| Private, Less Selective | 49\% | 49\% | 58\% | 57\% | 8 |
| Public, Less Selective | 41\% | 40\% | 51\% | 46\% | 5 |
| Private, More Selective | 38\% | 43\% | 70\% | 57\% | 19 |
| Public, More Selective | 44\% | 50\% | 65\% | 57\% | 13 |
|  | SAT Total Score $=1200$ |  |  |  |  |
| Private, Less Selective | 74\% | 73\% | 77\% | 79\% | 5 |
| Public, Less Selective | 65\% | 64\% | 72\% | 71\% | 6 |
| Private, More Selective | 64\% | 68\% | 85\% | 80\% | 16 |
| Public, More Selective | 67\% | 71\% | 79\% | 76\% | 9 |
|  | SAT Total Score $=1400$ |  |  |  |  |
| Private, Less Selective | 89\% | 89\% | 90\% | 92\% | 3 |
| Public, Less Selective | 83\% | 82\% | 86\% | 88\% | 5 |
| Private, More Selective | 84\% | 86\% | 93\% | 92\% | 8 |
| Public, More Selective | 84\% | 86\% | 88\% | 89\% | 5 |
|  | SAT Total Score $=1600$ |  |  |  |  |
| Private, Less Selective | 96\% | 96\% | 96\% | 97\% | 1 |
| Public, Less Selective | 93\% | 93\% | 94\% | 95\% | 3 |
| Private, More Selective | 94\% | 94\% | 97\% | 97\% | 3 |
| Public, More Selective | 93\% | 94\% | 94\% | 95\% | 2 |

Appendix Table B: Chance of Earning a FYGPA of 3.0 given HSGPA, by Institution Type and Cohort Year

| Institution Type | 2017 | 2018 | 2020 | 2021 | Percentage Point Change, 2017 to 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HSGPA $=2.50$ |  |  |  |  |
| Private, Less Selective | 25\% | 24\% | 30\% | 22\% | -2 |
| Public, Less Selective | 18\% | 15\% | 22\% | 17\% | -1 |
| Private, More Selective | 27\% | 31\% | 54\% | 38\% | 11 |
| Public, More Selective | 28\% | 31\% | 35\% | 33\% | 5 |
|  | HSGPA $=3.00$ |  |  |  |  |
| Private, Less Selective | 43\% | 45\% | 49\% | 43\% | 0 |
| Public, Less Selective | 34\% | 32\% | 40\% | 34\% | 0 |
| Private, More Selective | 46\% | 51\% | 72\% | 58\% | 13 |
| Public, More Selective | 44\% | 48\% | 54\% | 52\% | 8 |
|  | HSGPA $=3.50$ |  |  |  |  |
| Private, Less Selective | 63\% | 67\% | 69\% | 66\% | 2 |
| Public, Less Selective | 56\% | 55\% | 62\% | 57\% | 1 |
| Private, More Selective | 65\% | 71\% | 84\% | 76\% | 11 |
| Public, More Selective | 61\% | 66\% | 72\% | 70\% | 9 |
|  | HSGPA $=4.00$ |  |  |  |  |
| Private, Less Selective | 80\% | 84\% | 84\% | 83\% | 3 |
| Public, Less Selective | 76\% | 76\% | 79\% | 77\% | 1 |
| Private, More Selective | 81\% | 85\% | 92\% | 88\% | 7 |
| Public, More Selective | 80\% | 84\% | 84\% | 83\% | 3 |
|  | HSGPA $=4.33$ |  |  |  |  |
| Private, Less Selective | 87\% | 90\% | 90\% | 90\% | 3 |
| Public, Less Selective | 85\% | 86\% | 87\% | 86\% | 1 |
| Private, More Selective | 88\% | 91\% | 95\% | 93\% | 5 |
| Public, More Selective | 83\% | 87\% | 91\% | 89\% | 6 |

## More selective, private institutions

"I will say I'm teaching at the same level of rigor, but less content because I have to do so much catch up."

- Social science professor
"One factor that may confound the pre- and post-pandemic comparison is the recent arrival of some new faculty members who have embraced self-grading policies, in which students decide on their own grades."
- Biology professor
"Broadly speaking, I think this current generation of students is suffering from being the victims of the soft prejudice of low expectations. They often seem unable, or are perhaps unwilling, to do the work required of them. In some cases because they simply haven't been trained to do it or, to put matters differently, they simply have not had to work at anything near the level that is required of them here. I had a student who could not understand how he got the grade he received last Fall (a C+) because, to paraphrase him, 'he worked really hard' (somehow his having missed two full weeks of class did not factor into his selfassessment in any way)."
- English professor
"Our faculty assign the same grades for less work in less-rigorous courses. Thus, we manage not inflate the grade."
- Chemistry professor
"Students are less resilient and want accommodations for the smallest issues. Our department has always upheld the highest rigor and we communicate that clearly to our students... We will not hand out participation trophies."
- Finance professor
"Our grading standards have returned to pre covid levels. The best students are performing the same way. But the low end of the grade distribution is now lower and more populated than before. More students are having difficulty meeting our and their performance goals."
- Business professor
"I have tried to respond at the same level of rigor as before the pandemic, although this means the grades are lower across the board."
- English professor
"We are under pressure from administration to improve the DFW rate. Both in Fall 2022 and 2021, I slightly expanded my C range since the students just seemed so unprepared for calculus. My university has done away with requiring SAT or ACT scores since the pandemic and has no way of knowing whether they've accepted a student who is way in over their heads mathematically. We offer no remedial math courses, so these students flounder in calculus. There are definitely more students who are in no way ready for calculus than there were before."
- Mathematics professor
"Faculty freely admit they have floated grades up for no reason other than "aww, these poor kids." There is no concern for institutional or departmental integrity or pride in learning."
- History professor
"(Institution name) should have an external reputation of grade-inflating. Sixtyfive percent of grades in the humanities are A-and higher. Over the past three years, $40 \%$ of the students graduate with 3.8 GPAs or higher. The grading system here is not credible. Part of it stems from untenured faculty who are afraid of negative evaluations, part of it stems from Covid-19, and part of it stems from faculty narcissism."
- Biology professor
"I think professors are seeing lower grades on assessments and starting to think they are the problem. If their failure rate is higher than usual, accommodations are being made to level out those grading curves."
- Mathematics lecturer
"There was definitely grade inflation during the pandemic, and it's hard to scale that back."
- English professor
"The institution continues to pay lip service to keeping grade inflation down, but at the same time is having a hard time maintaining the kinds of standards we had before the pandemic."
- English professor
"We've stuck to our standards."
- Foreign and classical languages adjunct
"Grades inflate every year, I think. It's been especially noticeable since Covid."
- English professor
"The institution does so indirectly by putting a lot of emphasis on student evaluations. One easy way to increase evaluations is to give high grades. In addition some "anti-racist" strategies have become popular and some of these lead to massive grade inflation (think of "self-grading", aka "ungrading" or flipped classroom with huge participation bonuses)."
- Biology professor
"We have roughly the same acceptance rates, but the students are much weaker; so while I said "about the same" for several, what I mean is the decision process is similar but the results are worse, if that makes sense. I've been giving much lower grades."
- Computer sciences lecturer
"Grade inflation was a problem before. Now it is catastrophic in that students see themselves as much more capable than they are and break down or lash out emotionally when they encounter a challenge. Rather than mobilizing the many resources available to them for learning (and not just academic accommodations), they miss these opportunities to develop strategies and resilience."
- Foreign and classical languages professor
"Colleges of our type cater to grades. Anything below an A- is unacceptable—no matter what the quality of work."
- Computer science department chair
"We offer the best grades money can buy!"
- English professor


## More selective, public institutions

"A colleague did a quantitative study of grades and saw dramatic grade inflation during COVID, but the trend began many years before. Grades have become almost meaningless. Kids expect A's and easy classes and experience significant stress if either expectation is unmet."

- Computer sciences professor
"During the quarantine, it became obvious that it was impossible to grade like we formerly did. Everyone got A's unless they really, absolutely, failed. I was not alone in this. I came to have a student this year whose GPA at community college was 3.97. She was not able to write understandable sentences. That is anecdotal, of course. Some of my students are fine, and some are better than before. But, those who are doing poorly are worse than I have ever seen. A question you did not ask is about participation. I am astonished at the level of absenteeism I have encountered this year and last."
- English professor
"Student preparedness and quality have dropped sharply for $50 \%$ of students. They expect high grades for no accomplishment. They are unbelievably incompetent: 4th year college students lacking High School skill. I emphasize this is the bottom 50\%; the top $50 \%$ are great."
- Computer sciences professor
"COVID just accelerated long-term trends of easier classes, less work, and higher grades. It was going this way anyway, due to aligned interests of students and faculty. Younger faculty tend to be the worst offenders."
- Computer sciences professor
"Students increasingly regard themselves as customers entitled to good grades and professors as service providers. This shift had begun to happen before the pandemic, but COVID and increasing tuition costs have confirmed this viewpoint among many students (and their parents)."
- English professor
"During the pandemic and after, I have seen more discussion on Pass/fail and Credit/no Credit. In general, calculation of grades have (sic) become a bit more "generous" than pre-pandemic."
- Foreign and classical languages department chair
"They changed the previous NC/D/CR grading ('university system' requirement, not a 'institution name' requirement but we are required to follow it) to P/NC,
where Pass included the D grade. The math dept opted out of allowing our students to use this P/NC grading (except for terminal math 100 level courses). In one sense, the grading became more rigorous but allowing students to withdraw thru the last day of classes makes things less rigorous."
- Mathematics professor
"I consider my institution as slightly less rigorous than it was pre-pandemic, and this is clear from the level of grade inflation that we are seeing due to grading policies that let students elect P/F grading for courses AFTER they have already received a course grade. Personally, I have tried to maintain my grading standards, though I have become much more lenient about giving students extensions and accommodations than I used to be."
- English professor
"Administration actually has been pressuring professors to give higher grades; going after those who failed more students than before."
- Arts and design professor


## Less selective, private institutions

"This is my 34th year teaching undergraduate biology. Since the pandemic I find myself doing things that decrease the rigor of my courses, decrease the rigor of my grading, and inflate GPAs (simply to passing, not to superlative). Instead of giving three exams, I find myself giving 4-5 exams that each contain less information. Instead of covering 12 chapters I am covering 9. Instead of counting all quiz and exam grades I am dropping 2-3 of the lowest quizzes and an exam. I am now offering "exam corrections" to earn points back for the first time in my career. The frequency with which I think "Close enough" and deduct zero points is getting embarrassing. The frequency with which I accept late work without penalty is increasing. And I am doing all of this in an effort to get half of my class to pass."

- Biology professor
"I should clarify, it isn't that grades are higher on average, it is that the grading is more lenient -- on average students are less prepared and less capable, but grade distributions are roughly the same. There is no direct guidance from administration to assign higher grades, but there is examination of W/F/D counts, and faculty are aware that if too many students do not complete a course successfully this will be viewed negatively."
- Business professor
"During Covid, we gave out As like Mardi Gras beads. Now, any grade inflation seems to be undercut by students who do not turn in work, period. Even now, we are being encouraged to use flexible deadlines in classes asking students to produce fewer assignments. Mere timely completion seems to be a rewardable criterion now--and one that many students do not meet."
- English professor
"We are admitting more students here because, like so many small liberal arts colleges, we are suffering financially. Despite the fact that I have adopted grading policies that are much more lenient (lots of ungraded/A-if-you-do-it kinds of assignments, for example), I'm seeing this strange trend whereby students either make A's of F's in my class."
- English professor
"While I think student performance has dropped off, and while I am assigning less work, I am also seeing grades slide. Many more students are earning Bs, Cs, Ds and Fs than pre-pandemic. However, they also seem to be unperturbed by poor grades."
- Foreign and classical languages professor
"We have had to lower standards to ensure that students are able to be successful. I'm not sure how much of this is COVID-specific. When I began teaching at this institution eight years ago, I was told that (institution name) was proud of its minimal grade inflation, and if our course averages were too high in comparison to those same students' grades in other courses (our end-ofsemester metrics had a way of measuring this) we would be encouraged to consider if we had made the course too easy. That metric and that conversation have completely disappeared, as our focus is exclusively on retention. I think we have tried to maintain course rigor as much as possible, but we have had to adapt and look for new strategies so that students can be successful."
- Foreign and classical languages professor
"There is significant pressure to not lose the students we have, yet the prevailing sentiment among faculty is that students will not have the skills they need to be successful in the career paths they aspire to follow."
- Biological sciences professor
"As our university struggles to retain ill prepared students - faculty are discouraged from rigor. Our university also struggles with providing the student support necessary to address these issues."
- History professor
"I definitely have lowered my expectations regarding how much to cover in a course, and lowered my grading standards. Mostly to avoid pressure from above."
- Mathematics professor
"Pressure is on professors to inflate grades and not give any grade less than a B."
- Humanities professor
"Faculty tries to meet [students] where they are, so grading needs to be less rigorous than pre-pandemic. The course content has been modified. And tough topics have been removed."
- Chemistry professor
"I think we've intentionally tried to maintain our standards of course and grading rigor, despite the pandemic. There was one semester (the lock-down times) when we liberally issued P/F grades, but we quickly returned to our former scheme."
- Associate professor of English and humanities
"I think across the board professors are engaging in much harder grading practices."
- English professor
"The level of preparedness in my entering students has led me to change my own expectations and grade a little more generously than in the past -attempting to meet them where they are."
- English professor
"I believe our university has mostly reverted to its previous standards in terms of admissions, and my colleagues likewise in terms of course rigor. I think grading rigor may have slid some. The university stopped the Pass/Fail option after about 18 months."
- Computer sciences professor
"I think post-COVID we have been encouraged to be more understanding of students' personal situations, especially when considering our attendance or late assignment policies. Generally speaking I think we include the same content in our courses but grade more leniently when it comes to late work."
- English professor
"The reading I give them is nowhere near what I used to give pre-pandemic, but even that is nowhere near what I gave students 15-20 years ago. Literacy, basic reading, is a real problem that has been worsening for decades, along with writing proficiency and critical analysis."
- English professor
"Students think they are all A students, and the parents agree."
- Foreign and classical languages professor


## Less selective, public institutions

"If I retained standards, I would fail over half of my class. I am curving grades $20 \%$ this semester just to get $10 \%$ of the class into the $A$ range and $30 \%$ into $B$ range."

- Business professor
"I think the grades have remained close to the same, but the standards for achieving those grades have shifted."
- English department chair
"Academic standards have undergone a significant reduction. Students falling within the "D or F" grade range are now entitled to multiple opportunities to pass, and we are mandated to assign incompletes until they achieve a grade of $C$ or higher."
- Business management department chair
"I have been directly pressured by our Provost and Dean of another College to grade inflate, decrease rigor, and my favorite "meet students where they are"."
- Biology professor
"It was (and is) an ongoing source of conversation in how to run classes and grade fairly under the circumstances. This academic year I hoped to increase grading rigor with first-year communication students, and I did a bit, but as I said I have more students failing than before -- not because of more rigorous grading but because they don't turn work in. Work that does get turned in sees grading rigor that's dialed up a bit, but not to pre-pandemic levels. I also do more throwaway assignments -- easy As -- to help boost course grades, but it makes little difference if work isn't turned in or turned in too late to be of value."
- Communications professor
"Officially, our policies are the same. In practice, our enrollment has dropped so much that there's a lot of pressure to give students whatever they want, and I think non-tenured faculty in particular tend to feel like they have to grade with less rigor."
- English professor
"Grade inflation has been an issue since I began teaching 17 years ago but due to the number of mental health issues that students are facing, the growing number of ADA accommodations for these mental health issues, concerns about preparedness, my colleagues—and even at times myself—have really become much more relaxed in their grading to avoid any conflicts with students. As for
admissions, there has been talk and action about doing away with ACT scores altogether for selective admittance. Colleges and their administrators are much more concerned about remedying sinking enrollment numbers than the overall preparedness for academic success in higher education."
- Arts and music professor
"We (at least in my department) are doing our best to maintain the rigor, but it does mean our students are doing poorly."
- Mathematics professor
"I notice that I grade more leniently because otherwise students would not be successful gradewise."
- English professor
"Fewer than 50\% would have earned a passing grade if they had matriculated before 2018; I have $30 \%$ with a grade of D or lower."
- English professor
"Administration runs various programs designed to ensure student success. They claim it's not about sacrificing rigor but figuring out what more professors can do. In reality, there is no rigor to sacrifice to begin with. Any actually rigorous course would have such extremely high fail rates that departments and administration would step in. The pressure to inflate grades is subtle but pervasive coming from administration and departments."
- Philosophy professor
"The pressure from administration is not direct, but there is a strong emphasis now on changing our content and grading to "meet students where they are," and there are new items in faculty evaluation methodology that put a huge emphasis on achieving "student success" in the classroom, which is largely evaliated (sic) by course grades and student surveys regarding instructors/courses."
- Arts and music lecturer
"The pressure doesn't show up toward higher grades as much as it's pressure to expect less for the grades assigned."
- Biology professor
"Using DFW rates as measure of Faculty success leads to reduced rigor in courses."
- Biology professor
"I think we (my colleagues) all felt during the pandemic that retaining the same grading standards would be unfair, since online education is so disadvantageous. I know that I relaxed my grading standards. And that has continued since I now teach students who lost close to a year of education - using the same prepandemic grading standards feels like punishing them for a traumatic event that wasn't remotely their fault."
- English professor
"The students themselves seem to be almost hysterical about grades. The problem of grade-inflation has been growing steadily for 30-35 years. I'm sure you have the data; if not, look it up. Here's a concrete example: Several years ago, I taught several senior-level math courses. Picking a typical class from this group, (real analysis), I looked up all the previous mathematics grades of the 25 students coming into my analysis course. Of the roughly 200 grades these students earned in their previous math classes, $97 \%$ of them were either $A$-, A or A+. I'm trying to hold the fort --- I have always assigned grades in a way that their histogram resembles a bell curve (with a mean of 80-82) --- but I fear I'm that last man standing sometimes."
- Mathematics professor
"We are desperate for students, and there is pressure to do everything possible to retain students, in spite of the fact that a lot of them should never have been here and are very unlikely to succeed."
- Foreign and classical languages professor
"My institution has lightened GPA requirements for some programs and have also been forcing some lecturers to change grades for students to passing grades where they should not be passing."
- Mathematics graduate lecturer
"In my previous two responses, I indicated that we are assigning the same grades overall. This is true, but the quality of work that is necessary to earn said grade has declined."
- Mathematics lecturer
"During Covid we were encouraged to be sympathetic to students to a degree that excused all absences and, I believe, resulted in significant grade inflation. I don't think this has served our students well in terms of learning resilience and accountability."
- Arts and music professor
"We have slowed down the pace in all of our courses and also assign less work outside of class. There is also an unspoken feeling that we are supposed to do everything possible to help students pass classes, i.e. to grade generously."
- Foreign and classical languages professor
"The university is far more concerned with making money than ensuring that the students are learning the material that they are studying. This has all become a business. If an instructor (or full-tenured professor) gave the students the grades that they actually earned, the educator would come under scrutiny."
- English professor
"Huge pressure to do RPG - retention, progression, graduation - inflates grades unless you are tenured and can resist the admin. pressure."
- Economics professor
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[^0]:    ${ }^{1}$ Some older studies of note include Avakian, 1995; Bejar and Blew, 1981; Brookhart, 1993; Elliott and Strenta, 1988; Goldman et al., 1974; Juola, 1976, 1980; Jussim, 1991; Kuh and Hu, 1999; Norcross et al., 1993; Ramist et al, 1990; Sabot and Wakeman-Linn, 1991; Stumpf and Freedman, 1979; Suslow, 1976; Willingham et al., 1990; and Wilson, 1999.

[^1]:    ${ }^{2}$ More than half of the institutions reported actual HSGPAs for their students, but the reporting was on multiple scales (0-4, 0-4.33, 0-5, and 0-100) not only across institutions but within institutions. Self-reported HSGPA was on the same scale in each year and was usable at each institution. Past research has found a strong, positive correlation between self-reported HSGPA and actual HSGPA (Marini, Young, \& Shaw, 2021).

[^2]:    ${ }^{3}$ Science, technology, engineering, and mathematics (STEM) courses included any courses that fell under computer sciences, engineering, mathematics, natural sciences, and health sciences.
    ${ }^{4}$ Note that during the years covered in this study, there were no changes made to the content or format of the SAT.

[^3]:    ${ }^{5}$ It is important to note that the standardized mean differences were first calculated at the institution level and weighted by sample size. The weighted $d$-values were then aggregated and divided by the total sample size to get each average. Calculating standardized mean differences using the descriptive statistics provided in Table 3 (and Tables B and C in the appendix) will result in slightly different $d$-values than those reported in Table 4.

