Grades, Academic Performance, and Labor Market Outcomes

A Non-Technical Summary*

Joaquín Paleo • November 2026

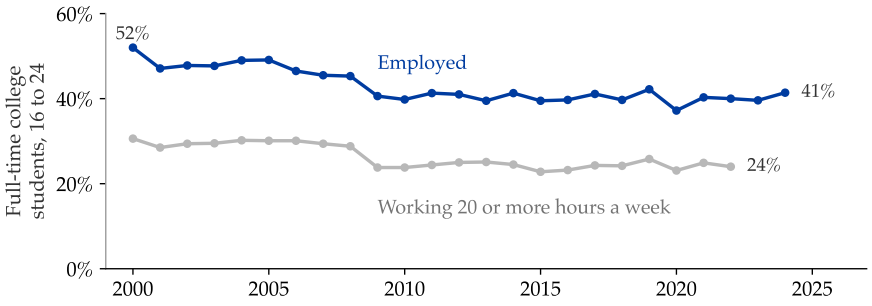
Why grades may matter beyond what they measure

Grades play a central role in students' lives, both while they are in college and when they start looking for work. Within higher education, grades can determine access to scholarships and financial aid, eligibility for majors, and admission to graduate programs. When students decide to enter the labor market, employers may use grades to screen and rank potential candidates. For example, in the United States, roughly four in ten employers report screening applicants by GPA.[1] In many countries, grades also enter formal hiring rules, particularly for public-sector jobs.

It is well known that students with higher grades tend to do better later on, both in school and in the labor market. However, grades are meant to reflect how much a student knows and how able they are. This makes it hard to tell whether better outcomes come from the skills that the grade is measuring, or perhaps from the grade itself. This distinction matters for the design of grading systems, since if the grade itself has consequences, then decisions such as where the cutoffs between grades fall, whether to grade on a curve or not, and what the transcript shows will affect students' academic and working lives.

At the same time, many college students work while they study. In the United States, about four in ten full-time college students hold a job in a given week (Figure 1). A large literature has looked at how working affects academic performance, but much less is known about how students' grades shape the jobs they take while enrolled in school. This report summarizes a paper that studies both questions.

Figure 1. Share of full-time college students in the United States who work



Source: October supplement of the Current Population Survey.

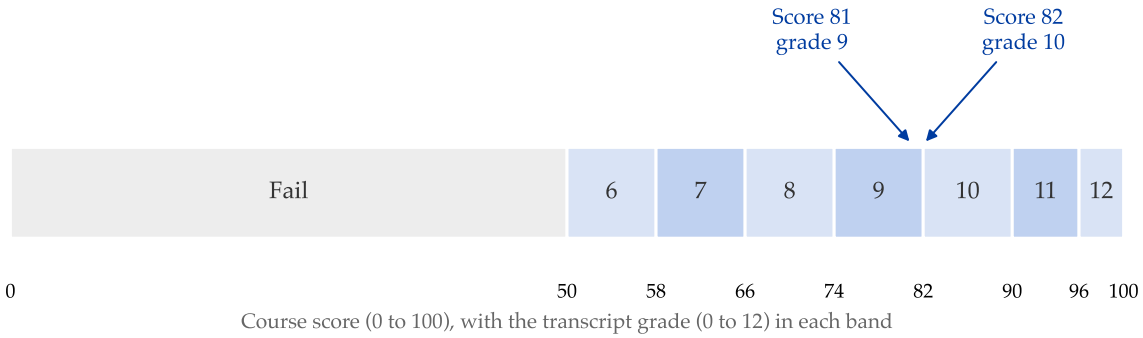
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[1] National Association of Colleges and Employers, Job Outlook 2026.

Comparing students with nearly identical performance but different grades

We study students at the Universidad de la República (UdelaR), the main higher education institution in Uruguay, which is tuition-free, has no entrance exam, and enrolls around 80 percent of all students entering a university degree in the country. At UdelaR, courses are scored on a 0 to 100 scale, and a fixed rule converts that score into a 0 to 12 transcript grade. For example, a student who obtains a score of 81 is given a grade of 9, while a student who obtains an 82 is given a 10, even though the two are presumably very similar in terms of what they learned in the course (Figure 2). Students see both the score and the grade, but only the grade is recorded on the transcript, which is what employers and the university itself use. This means that we can compare students with almost identical course performance, but who ended up with different grades on their transcripts only because they fell on different sides of these grade cutoffs. Any difference in their later outcomes can then be attributed to the grade itself rather than to differences in ability or effort. We focus on the four mandatory courses that every student takes in their first semester, which are the first grades students receive in college.

Figure 2. How course scores become transcript grades at UdelaR



The same rule applies to every course. Scores below 50 fail the course, and a failed course does not enter the GPA.

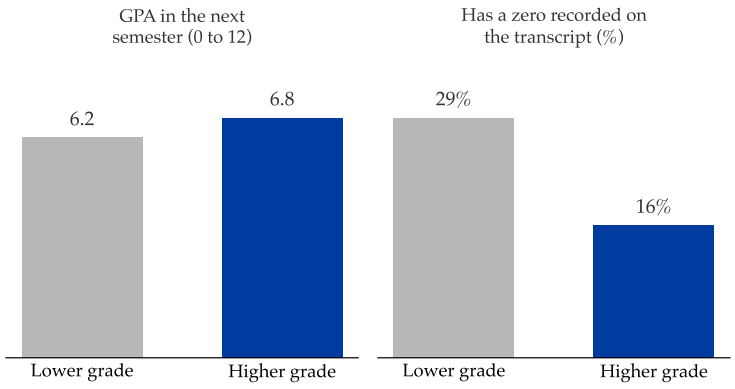
We follow students from enrollment into their first jobs and beyond by linking the complete academic records of the School of Economics and Administration at UdelaR, from 2014 to 2023, to social security records covering every job registered with social security in Uruguay. These records are similar to the unemployment insurance wage records that US states collect, with the difference that they report, for every worker and every month, the hours they work in addition to their earnings, along with the firm they work for and whether that firm is in the public or the private sector. Most data used to

measure the value of education, in the United States and elsewhere, only report earnings, and as we show below, having hours worked turns out to be important.

A higher grade raises later grades, largely by helping students avoid risky exams

We find that receiving a slightly higher grade in a first-semester course raises students' GPA in the following semester by about half a point on the 0 to 12 scale, against an average of about 6.2 among students just below the cutoff (Figure 3). The effect persists into later semesters and is concentrated among students near the bottom of the grade distribution. A large part of this effect seems to come from students choosing a less risky way of completing their courses, since a student who does not pass a course through regular coursework can instead take a single high-stakes final exam, which has the downside of recording a zero in the GPA if failed.In the first exam period after their first-semester grades come out, students who received the higher grade take about 30 percent fewer of these exams, and the share of them with a zero recorded on their transcript falls from about 29 percent to about 16 percent (Figure 3). Somewhat more than half of the GPA effect operates through avoiding these zeros, with the remainder likely reflecting better performance on the exams students do take. Importantly, we find no reduction in the number of course credits students attempt or obtain later on, so this more cautious behavior does not seem to slow down their progress toward a degree. Since students already know their exact score, the higher grade does not tell them anything new about their own ability, which suggests that students respond to the label on the transcript itself.

Figure 3. Academic outcomes of students just below and just above a grade cutoff

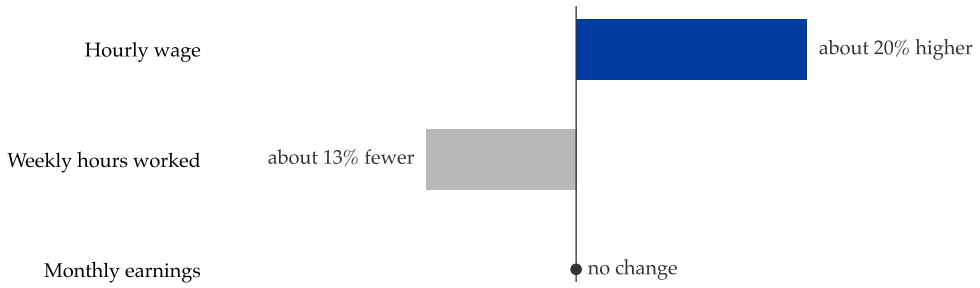


Students with nearly identical scores in a first-semester course, just below (lower grade) and just above (higher grade) one of the cutoffs at which the transcript grade increases. The zero refers to the first exam period after first-semester grades are posted.

Students with higher grades get first jobs that pay more per hour and take fewer hours

On the labor market side, a higher grade does not change whether or when students start working, and it does not change monthly earnings at their first job. Looking only at monthly earnings, as most studies are forced to do, one would conclude that grades have no effect on the first job. However, students who received a higher grade are paid about 20 percent more per hour and work about two and a half fewer hours per week, roughly 13 percent less than the average, with the higher wage and the fewer hours offsetting each other in monthly earnings (Figure 4). They are also about 7 percentage points more likely to start in a public-sector job, against a base of about 15 percent, which is an increase of almost half. Given the institutional context, this last result is not surprising, since GPA enters explicitly in public-sector hiring in Uruguay.[2] Employers never see the underlying course score, only the grade, so a slightly higher grade can move a hiring decision even when the students' performance in the course was the same.

Figure 4. Monthly earnings hide a higher hourly wage and fewer hours



Difference at the first job between students just above and just below a grade cutoff in a first-semester course.

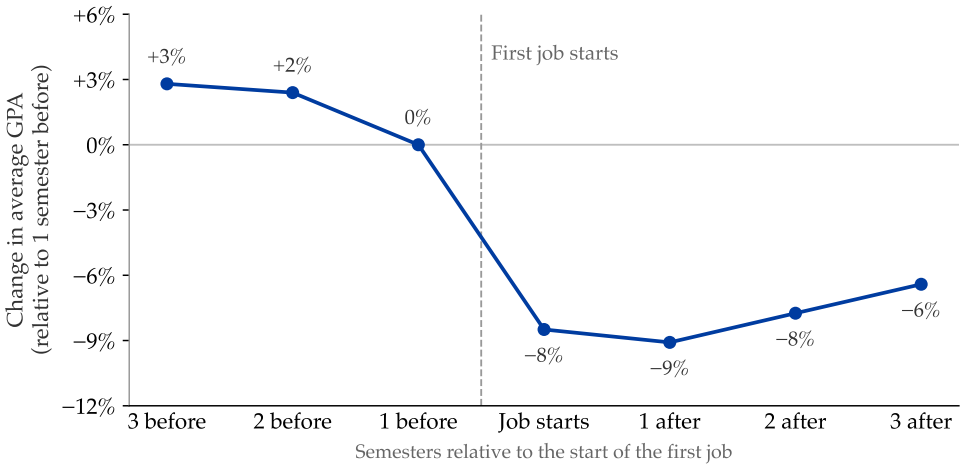
Students with higher grades see their GPA fall by less once they start working

For a student who is still enrolled, hours spent at work are hours not available for study. We start by documenting that grades typically fall once students start working (Figure 5). Among students just below a grade cutoff, GPA falls by about 0.8 points from the semester before their first job to the semester after it. For students who received the higher grade, this fall is about 0.5 points smaller, or roughly two thirds of it, and the drop in the number of courses they take is also smaller. This is consistent with the fewer hours they work being used, at least partially, for studying. One implication is that, for college students, work and school affect each other, so that grades shape the jobs students take, and those

[2]Hiring in the Uruguayan public sector goes through a formal competitive process, in which GPA is used either as an eligibility requirement or as a scored item when ranking candidates.

jobs in turn seem to shape their later grades. This paints a more nuanced picture for future analysis on the relationship between grades and later outcomes.

Figure 5. Change in average GPA around the start of the first job



Percent change in average semester GPA relative to the semester before the first job starts. Students whose first job registered with social security starts after their first-semester grades are posted. Each point uses the students with graded courses in that semester.

Implications for grading, hiring, and measuring the value of education

These findings suggest that grades have consequences of their own beyond the skills they are designed to measure. For institutions, this means that grading rules are not neutral. Policy choices such as how coarse the grading scale is, where its cutoffs are, and what the transcript reports can change students' academic paths and early careers. For employers and policymakers, the results suggest that GPA requirements in hiring can amplify small differences between candidates that reflect little about their actual performance.

Finally, our results speak to how the value of education is measured. Federal and state accountability rules in the United States increasingly judge programs by the earnings of their students, and the wage records behind these measures usually contain earnings but not hours worked. In our setting, a measure based on monthly earnings would find no effect of a higher grade on the first job, even though the hourly wage and the hours worked both change. This suggests that adding hours worked to wage records, as several proposals to improve state data systems have recommended, would allow policymakers to distinguish higher wages from longer hours, which is particularly important for the many students who combine work and study.