

# SUPPLEMENTARY MATERIAL:

## College Access When Preparedness Matters: New Evidence from Large Advantages in College Admissions

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### G1 Additional Tables

Table G1: CORRELATIONS BETWEEN ACHIEVEMENT MEASURES

	$\rho$ (1)	$N$ (2)
Achievement score and PSU	0.494***	4,276
Achievement score and GPA (grade 12)	0.336***	6,086
PSU and GPA (grade 12)	0.369***	5,785

NOTE.—  $\rho$  is the unconditional coefficient of correlation. \*p < 0.10; \*\*p < 0.05; \*\*\*p < 0.01.

Table G2: AVERAGE TREATMENT EFFECT ON PRE-COLLEGE ACHIEVEMENT SCORE USING IRT

	Standardized Achievement Score (IRT)	
Treatment	−0.084** (0.040)	−0.081** (0.040)
Inverse Probability Weights	No	Yes
Observations	6,054	6,054
$R^2$	0.254	0.254

NOTE.— Coefficients are OLS estimates. Standard errors are clustered at the school level. Standard set of controls (see notes under Table 5) and with fieldworker fixed effects. *Treatment* is a dummy variable indicating whether a student is in a school that was randomly assigned to be in the PACE program. Scores are scaled using Item Response Theory models, and standardized to have mean zero and variance one. \*p < 0.10; \*\*p < 0.05; \*\*\*p < 0.01.

Table G3: ANALYSIS OF SCHOOL TRANSITIONS

	In-flow into treated schools	Out-flow from treated schools
SIMCE score in 10 <sup>th</sup> grade (std)	0.006 (0.012)	-0.007 (0.012)
Constant	0.088*** (0.017)	0.115*** (0.017)
Observations	3,925	4,073

NOTE.— Probability to transition into or out of a school which was randomly assigned to be treated in 2016, in the experimental cohort under study. Coefficients are OLS estimates. Standard errors (clustered at school level) are displayed in parentheses. In column (1) the sample consists of all students who were enrolled in a treated school in 2016, the dependent variable is a dummy equal to one if, in 2015, the student was not enrolled in a school that was randomized to be treated in 2016. In column (2) the sample consists of all students who, in 2015, were enrolled in a school which was randomized to be treated in 2016. The dependent variable is a dummy equal to one if the student was not enrolled in a treated school in 2016. Both samples exclude students who in 2015 or in 2016 were enrolled in schools which participated in the PACE program but not as part of the randomized experiment. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table G4: TEACHER GRADING

	12 <sup>th</sup> grade core GPA (standardized)	
	(1)	(2)
Achievement Score	0.335*** (0.025)	0.247*** (0.025)
Achievement Score $\times$ Treatment	-0.031 (0.035)	-0.052 (0.034)
Baseline SIMCE test score	No	Yes
Observations	6,046	6,046
$R^2$	0.216	0.262

NOTE.— Coefficients are OLS estimates. Standard errors are clustered at the school level. Standard set of controls except for baseline SIMCE test score (see notes under Table 5). Inverse Probability Weights used. *Core GPA* is the GPA in the core subjects, which are those tested on the PSU entrance exam. *Treatment* is a dummy variable indicating whether a student is in a school that was randomly assigned to be in the PACE program. \* $p < 0.10$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

Table G5: SURVEY OF SCHOOL PRINCIPALS: GRADING METHODS AND SUPPORT CLASSES

	(1)	(2)	(3)	(4)	(5)
	Teachers discuss	Teachers adjust	Support (general)	Support PSU	Frequency support
Treatment	-0.019 (0.069)	-0.020 (0.078)	-0.056 (0.089)	0.042 (0.082)	-0.113 (0.155)
Observations	127	127	127	127	64

NOTE.— Coefficients are OLS estimates. *Treatment* is a dummy variable indicating whether a student is in a school that was randomly assigned to be in the PACE program. \* $p < 0.10$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . Outcome variables: dummy variables indicating whether teachers meet at the end of the year to discuss the grades of each student (column 1), whether teachers adjust grades based on students' motivation, effort or other reason (column 2), whether the school offered support classes in any subject (column 3) and support classes for PSU entrance exam preparation (column 4) to the cohort of students under study. The outcome in the last column is the number of support classes per week.

Table G6: SURVEY OF SCHOOL PRINCIPALS: ASSIGNMENT OF STUDENTS TO CLASSROOMS

	(1)	(2)	(3)	(4)
	Assignment Fixed	Ability Tracking	Random Assignment	Alphabetical Assignment
Treatment	0.044 (0.071)	-0.049 (0.090)	-0.012 (0.078)	0.048 (0.046)
Observations	127	93	127	127

NOTE.— Coefficients are OLS estimates. *Treatment* is a dummy variable indicating whether a student is in a school that was randomly assigned to be in the PACE program. \* $p < 0.10$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ . The outcome variables are dummy variables indicating whether: a student must stay in the same class throughout high school (column (1)), the school allocate students to classrooms based on ability (column (2)), the school allocates students to classrooms at random (column (3)), the student allocates students to classrooms alphabetically (column (4)).

## G2 Additional Figures

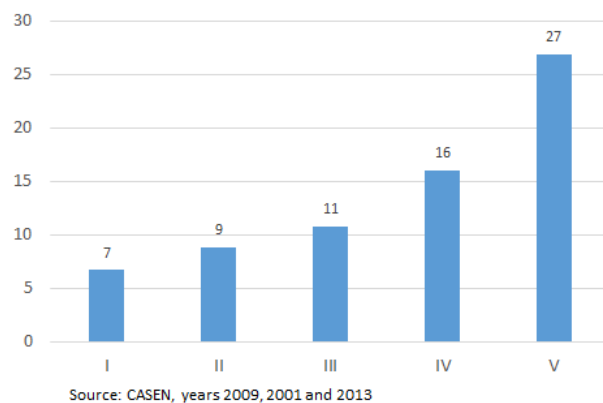


Figure G1: Percentage of 18-19 year-old who are enrolled in college in Chile by family income quintile.

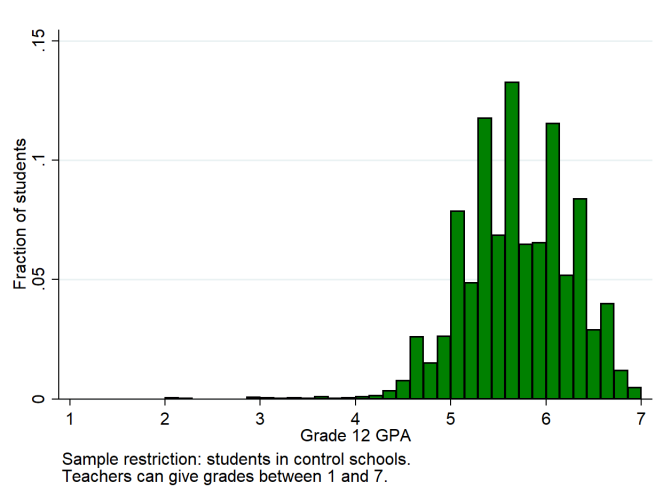


Figure G2: Evidence of grade compression: Histogram of 12<sup>th</sup> grade GPA.

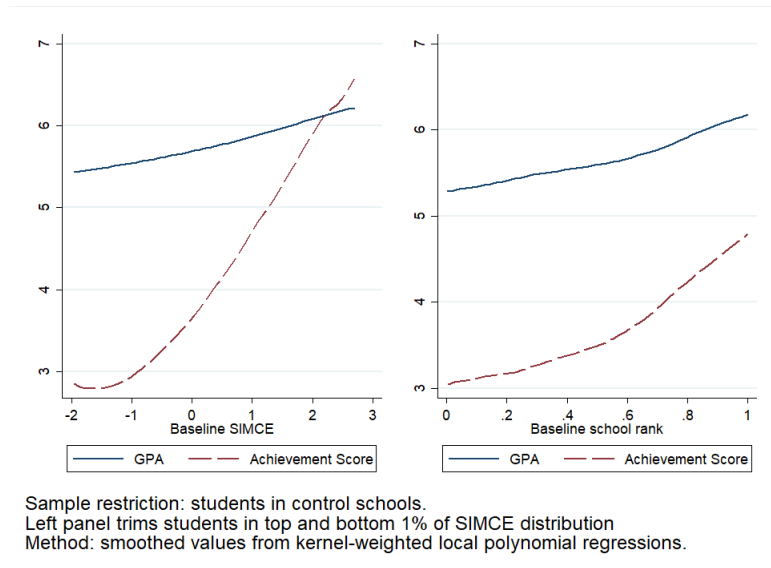


Figure G3: Evidence of grade compression: GPA does not discriminate between students as well as the achievement score does.

## G3 PISA score re-scaling

Figure 1 plots the histogram of tenth grade SIMCE test scores, and draws a line corresponding to the OECD mean for reference (at 0.49). Since the SIMCE tests are administered only nationally, we draw on data from PISA in Chile and in OECD countries to predict the SIMCE mean in OECD countries. This is the reasoning and procedure we follow:

- In 2015 the mean PISA scores of Chile were 447 in Science, 459 in Reading, 423 in Math.
- In 2015 the mean PISA scores of OECD were 493 in Science, 493 in Reading, 490 in Math.
- There is theoretically no minimum or maximum score in PISA; rather, the results are scaled to fit approximately normal distributions, with means around 500 score points and standard deviations around 100 score points.
- Therefore, OECD countries had a:
  - mean Science score of  $\frac{493-447}{100} = 0.46$  standard deviations above the Chilean one;
  - mean Reading score of  $\frac{493-459}{100} = 0.34$  standard deviations above the Chilean one;
  - mean Mathematics score of  $\frac{490-423}{100} = 0.67$  standard deviations above the Chilean one;
- On average, OECD countries had mean PISA scores that were higher than the Chilean mean PISA score by  $(0.46 + 0.34 + 0.67)/3 = 0.49$  standard deviations.
- Sources: [Link 1](#), [Link 2](#)