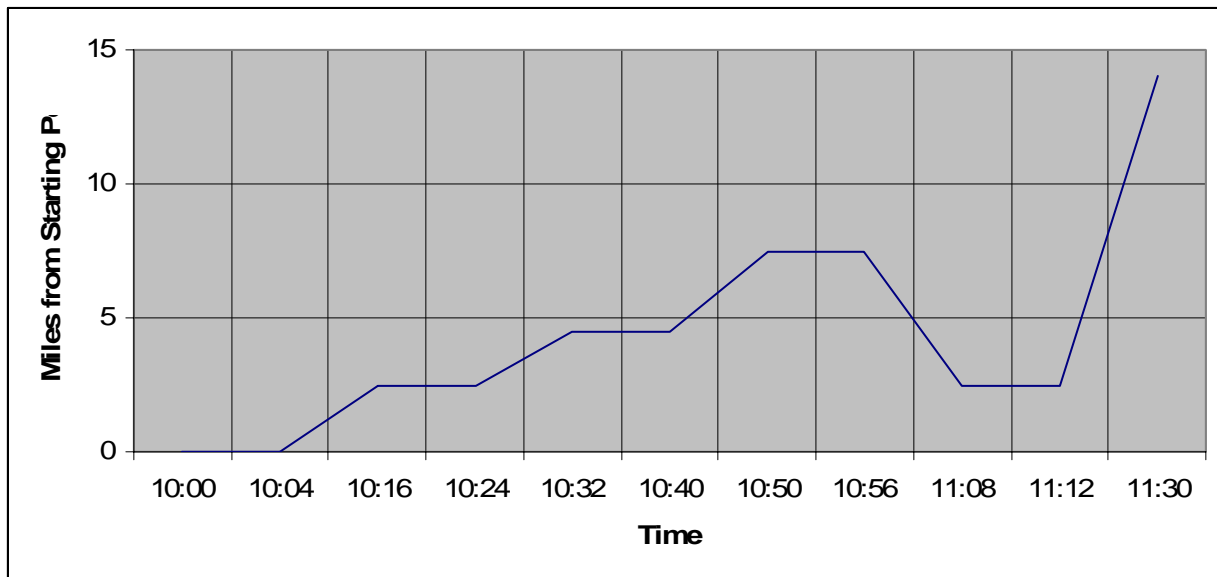


WEB APPENDIX

A1: Sample math test questions

1. Which of the following numbers is a quarter of a million?
 - a. 25,250
 - b. 10,000
 - c. 4,000,000
 - d. 250,000
 - e. 2,500,000
2. Which of the following is not necessarily true of a parallelogram?
 - a. The opposite sides are parallel
 - b. The diagonals are equal
 - c. The diagonals bisect each other
 - d. The opposite sides are equal
 - e. The opposite angles are equal

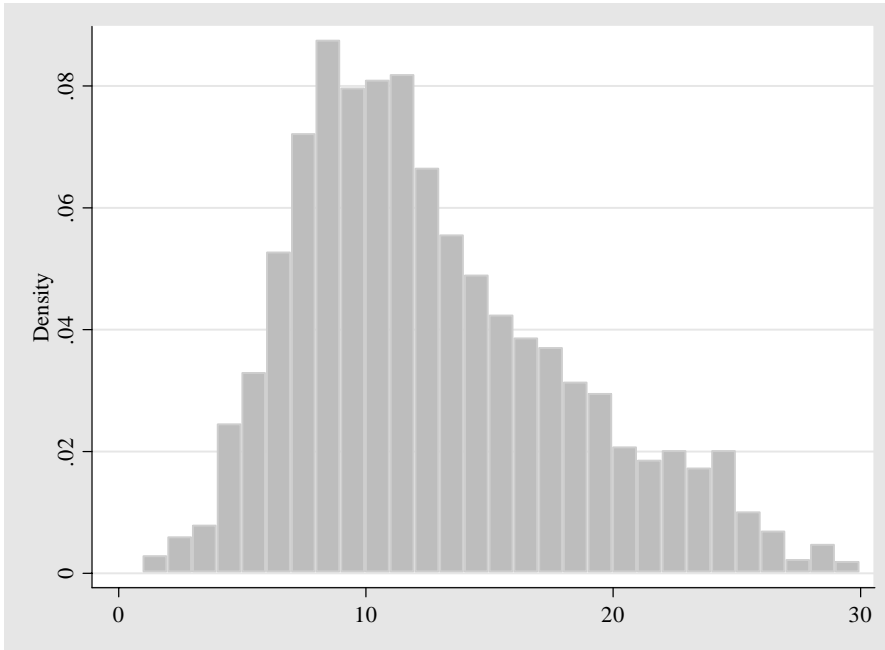
20. This graph represents a trip along the A6 made by a coach driver, collecting passengers to go on a journey, arriving at the first pick-up point at 10.00 a.m.



How long did he spend at the third pick-up point?

- a. 3 minutes
- b. 4 minutes
- c. 5 minutes
- d. 6 minutes
- e. 7 minutes

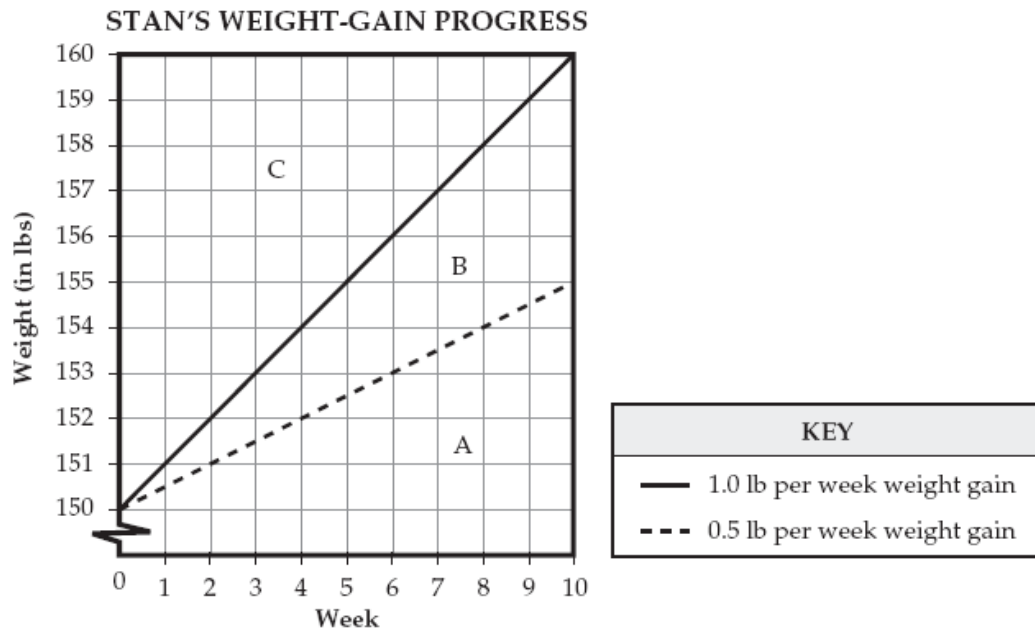
A2: Distribution of Math scores (# correct, maximum=30)



Notes: N=3191. Sample size larger than that reported in Table 1a because students with assignment test scores outside of the [90,140] interval included in this graph.

A3: Sample FCAT Math questions (grade 10, 2006)

- 2 Stan weighs 150 pounds (lbs) and would like to gain between 0.5 and 1.0 pound (lb) per week over the next 10 weeks. He plans to record his progress on the graph below. On the graph, the dotted line represents a weight-gain rate of exactly 0.5 pound per week, and the solid line represents a weight-gain rate of exactly 1.0 pound per week.



If Stan gains between 0.5 and 1.0 pound per week, which region on the graph will contain all possible points that could represent Stan's weight-gain progress?

- F. region A
- G. region B
- H. region C
- I. regions A and B combined

B1: Sample reading test questions

A. The human eye is a registering optical instrument, like the camera. In fact, it is a camera, the sensitive plate being the retina, which differs from the photographic plate in recovering after each exposure so as to be ready for the next. Near the front of the eye, where light is admitted, is the coloured iris, with the hole in the centre that we call the pupil of the eye. The iris has little muscle fibres in it, which regulate the size of the pupil; it corresponds to the adjustable diaphragm of the camera. At the front of the eye is the curved, transparent cornea, which is a powerful lens. Just behind the pupil is another lens, adjustable in curvature by the action of the little ciliary muscle.

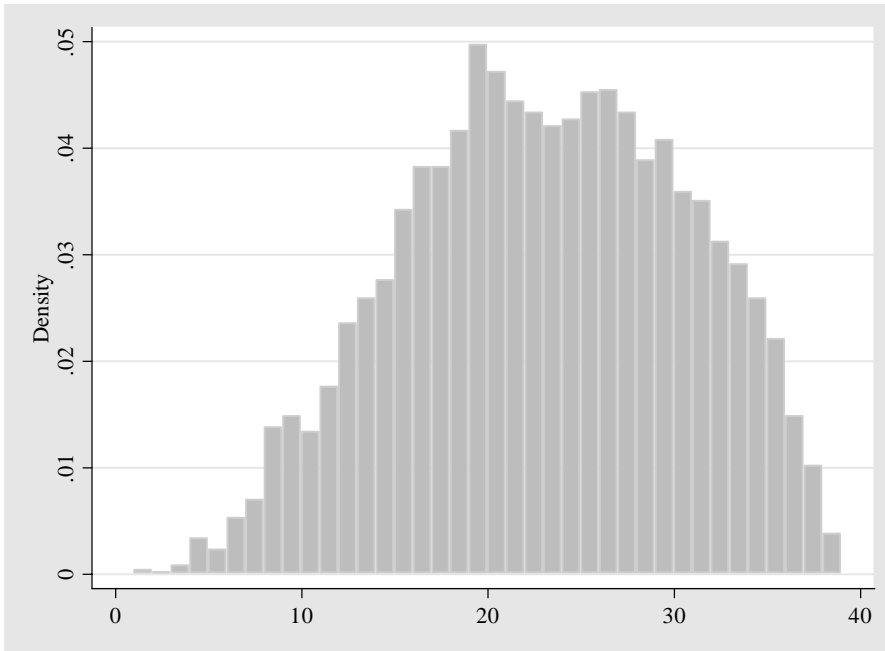
1. What part of the eye corresponds to the plate of a camera?
 - a. pupil
 - b. iris
 - c. retina
 - d. ciliary muscle

2. In which respect does the human eye differ from a camera?
 - a. the amount of light entering can be regulated
 - b. it recovers automatically after exposure
 - c. it is sensitive to light
 - d. it is an optical instrument

3. Which of the following statements is not true?
 - a. the iris is adjustable in curvature
 - b. the iris contains muscle fibres
 - c. the iris surrounds the pupil
 - d. the iris can be blue or brown

4. To what does the cornea correspond?
 - a. diaphragm
 - b. aperture
 - c. camera
 - d. lens

B2: Distribution of Reading scores (# correct, max=40)



Note: N=4707. Sample larger than that for math scores because reading scores available for three cohorts of students.

Woman with Flower

I wouldn't coax the plant if I were you.
Such watchful nurturing may do it harm.
Let the soil rest from so much digging
And wait until it's dry before you water it.
The leaf's inclined to find its own direction;
Give it a chance to seek the sunlight for itself.

Much growth is stunted by too careful prodding,
Too eager tenderness.
The things we love we have to learn to leave alone.

- 1** Read these lines from the poem "Woman with Flower."

**I wouldn't coax the plant if I were you.
Such watchful nurturing may do it harm.
Let the soil rest from so much digging**

What is the meaning of the word *nurturing* as it is used in these lines?

- A. conceit
- B. corrupting
- C. fostering
- D. gallantry

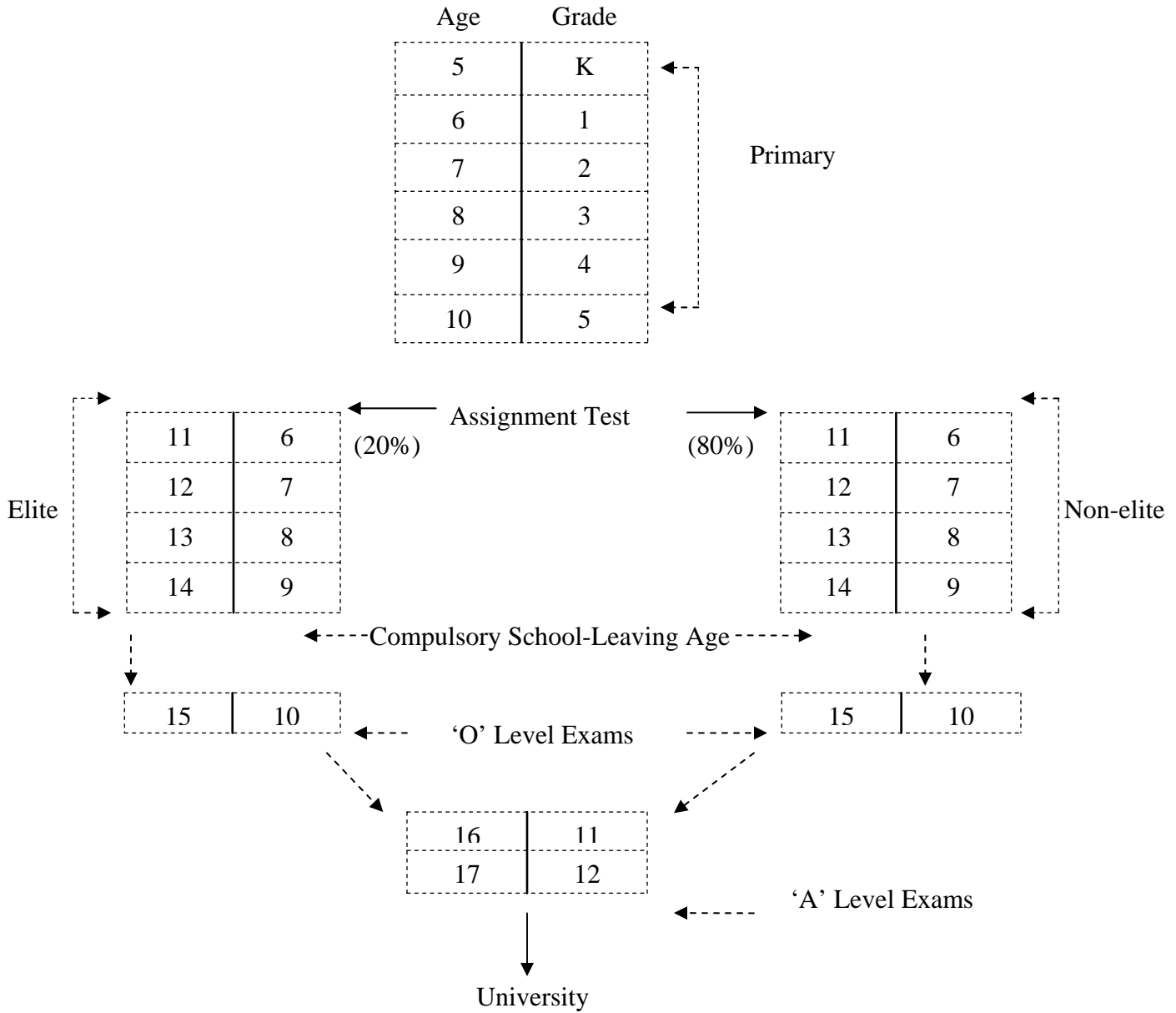
- 2** Read these lines from "Woman with Flower."

**The leaf's inclined to find its own direction;
Give it a chance to seek the sunlight for itself.**

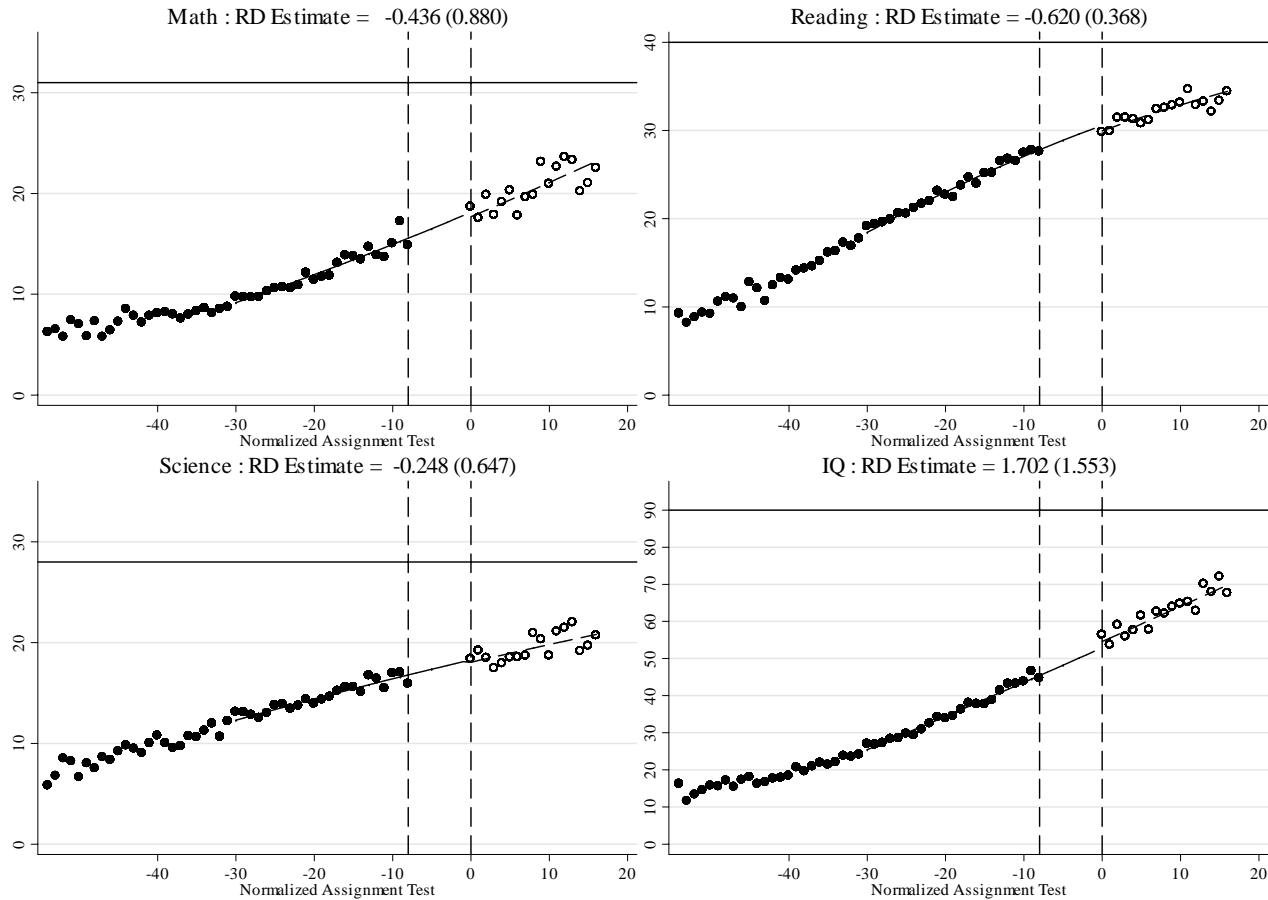
Based on the rest of the poem, which sentence best restates the meaning of these lines?

- F. The leaf isolates itself from other leaves.
- G. The leaf wants to create its own illusions.
- H. The leaf prefers to seek its own destination.
- I. The leaf avoids previously established paths.

C: Structure of UK selective schools system

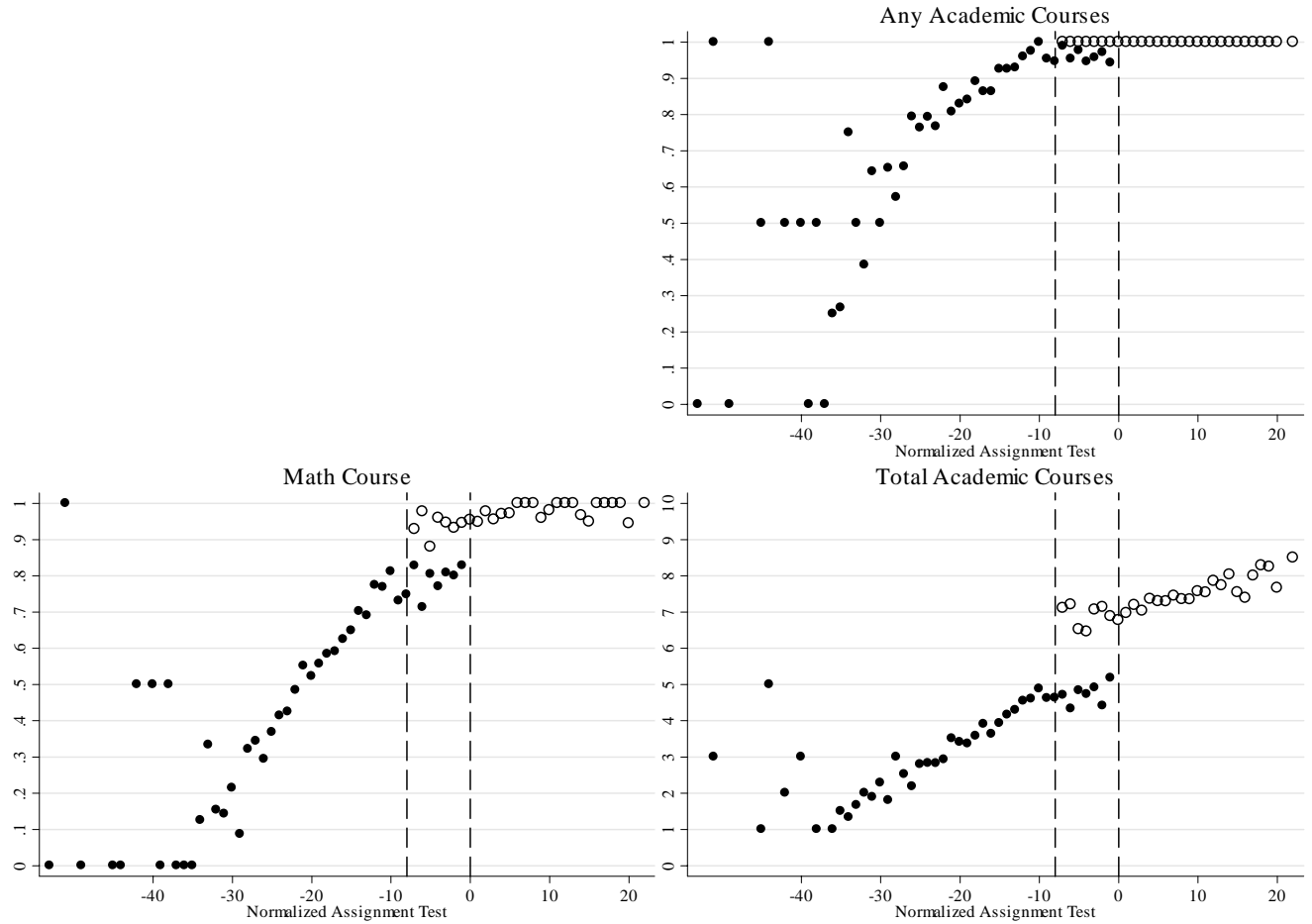


Web Appendix Figure 1: Impact of selective schools on grade nine test scores: RD Estimates



Notes: Solid (open) circles are mean scores among non-selective (selective) school students with the corresponding assignment test score. The assignment test score is normalized to be four at the point at which the predicted probability of selective school attendance is closest to 0.5. Over the eight-point interval around this (indicated by the broken vertical lines), the probability of attending an selective school given the assignment test score rises from around 0.2 to 0.9. The superimposed line represents the predicted test score from the regression discontinuity probit model described in the text (which does not include covariates). The vertical distance between these lines corresponding to a standardized test score of zero is the RD estimate reported above each panel.

Web Appendix Figure 2: Advanced course-taking by assignment test score and school type



Notes: Solid (open) circles are mean scores among non-selective (selective) school students with the corresponding assignment test score. The assignment test score is normalized to be four at the point at which the predicted probability of selective school attendance is closest to 0.5. Over the eight-point interval around this (indicated by the broken vertical lines), the probability of attending an selective school given the assignment test score rises from around 0.2 to 0.9.

Web Appendix Table 1c: The impact of selective schools on test scores: by sex

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Math (Girls: mean=14.957, sd= 4.956; Boys: mean= 19.019, sd=6.052)							
Girls	6.457 (0.642)	0.858 (0.566)	0.786 (0.554)	0.768 (0.549)	-0.627 (0.973)	-0.548 (0.954)	-0.564 (0.956)
Boys	9.272 (0.678)	2.734 (0.648)	2.736 (0.645)	2.593 (0.635)	1.550 (1.144)	1.627 (1.154)	1.443 (1.165)
Panel B: Reading (Girls: mean= 28.445, sd=7.423; Boys: mean=29.060, sd=7.695)							
Girls	8.287 (0.790)	0.328 (0.425)	0.192 (0.455)	0.162 (0.450)	-1.060 (0.717)	-0.972 (0.702)	-1.021 (0.714)
Boys	8.284 (0.773)	0.932 (0.405)	0.875 (0.373)	0.759 (0.368)	-0.212 (0.637)	-0.086 (0.620)	-0.315 (0.663)
Panel C: Science (Girls: mean=16.390, sd=4.354; Boys: mean=18.288, sd=4.715)							
Girls	4.435 (0.463)	0.287 (0.510)	0.259 (0.516)	0.230 (0.517)	-0.215 (0.609)	-0.151 (0.639)	-0.181 (0.654)
Boys	4.894 (0.446)	0.961 (0.381)	1.026 (0.348)	0.908 (0.349)	-0.513 (0.657)	-0.348 (0.683)	-0.498 (0.653)
Panel D: IQ (Girls: mean= 46.501, sd=15.015; Boys: mean= 52.390, sd=15.773)							
Girls	22.913 (1.873)	2.952 (0.862)	2.819 (0.870)	2.777 (0.855)	3.052 (1.500)	3.279 (1.522)	3.211 (1.508)
Boys	23.992 (2.042)	3.316 (0.877)	3.418 (0.880)	3.225 (0.896)	1.626 (1.874)	1.968 (1.921)	1.598 (1.885)

Notes: Columns refer to specifications in Table 1a. Rows report estimates for separate regressions for boys and girls. Samples include all students with non-missing outcomes and assignment test scores in the interval [90,140]. Means in panel headings refer to means among students in non-selective schools with assignment test scores in the marginal interval [112,116].

Web Appendix Table 1d: The impact of selective schools on test scores: by SES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Math (L: mean=16.46, sd=4.84; M: mean=16.42; sd=5.40, H: m=16.90, sd=5.99)							
Low-SES	8.354 (0.750)	5.116 (0.894)	4.864 (1.005)		2.715 (1.693)	2.898 (1.758)	
Mid-SES	7.687 (0.603)	2.249 (0.539)	1.753 (0.443)		-0.271 (0.915)	-0.188 (0.905)	
High-SES	7.421 (0.698)	1.835 (0.641)	0.970 (0.557)		1.340 (1.291)	1.309 (1.276)	
Panel B: Reading (L: mean=27.98, sd=47.53; M: mean=28.58; sd=7.33, H: m=29.25, sd=7.24)							
Low-SES	8.076 (0.933)	0.010 (0.575)	-0.097 (0.576)		-1.826 (1.515)	-1.826 (1.515)	
Mid-SES	7.917 (0.773)	0.530 (0.509)	0.305 (0.523)		-1.169 (0.696)	-0.945 (0.655)	
High-SES	8.013 (0.699)	1.263 (0.449)	1.007 (0.464)		0.520 (0.709)	0.520 (0.709)	
Panel C: Science (L: mean=17.12, sd=4.51; M: mean=16.82; sd=4.39, H: m=17.63, sd=4.42)							
Low-SES	4.931 (0.604)	1.500 (0.845)	1.003 (0.808)		-2.228 (1.092)	-2.470 (1.180)	
Mid-SES	4.284 (0.407)	0.824 (0.459)	0.410 (0.426)		-0.688 (0.675)	-0.501 (0.714)	
High-SES	4.413 (0.477)	1.069 (0.548)	0.538 (0.534)		0.995 (0.810)	1.109 (0.850)	
Panel D: IQ (L: mean=47.47, sd=13.68; M: mean=48.75; sd=14.80, H: m=50.15, sd=16.44)							
Low-SES	23.122 (2.147)	4.408 (1.479)	3.809 (1.471)		2.811 (2.710)	3.142 (2.768)	
Mid-SES	23.033 (1.954)	4.156 (1.262)	3.121 (1.111)		1.218 (1.774)	1.680 (1.712)	
High-SES	22.787 (1.882)	3.847 (0.935)	2.970 (0.878)		3.715 (1.929)	3.792 (2.005)	

Notes: Columns refer to specifications in Table 1a. Rows report estimates for separate regressions for low-, mid- and high-SES. Samples include all students with non-missing outcomes and Assignment test scores in the interval [90,140]. Means in panel headings refer to means among students in non-selective schools with assignment test scores in the marginal interval [112,116].

Web Appendix Table 2b: Impact of selective schools on advanced course-taking (matched data): by sex

	Full sample (N=1244)			Marginal area excluded (N=1039)		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: P(any course) by sex; mean(boys)=0.765; mean(girls)= 0.792						
Boys	0.085 (0.066)	0.094 (0.073)	0.080 (0.064)	0.108 (0.078)	0.129 (0.083)	0.115 (0.085)
Girls	0.205 (0.069)	0.206 (0.070)	0.214 (0.069)	0.090 (0.050)	0.082 (0.047)	0.080 (0.046)
Panel B: P(academic course) by sex; mean(boys)=0.735; mean(girls)=0.778						
Boys	0.109 (0.073)	0.116 (0.080)	0.100 (0.071)	0.089 (0.073)	0.113 (0.075)	0.097 (0.080)
Girls	0.209 (0.068)	0.209 (0.069)	0.218 (0.069)	0.072 (0.052)	0.062 (0.047)	0.051 (0.047)
Panel C: P(math course) by sex; mean(boys)=0.705; mean(girls)=0.514						
Boys	0.044 (0.057)	0.049 (0.063)	0.020 (0.056)	0.117 (0.082)	0.147 (0.079)	0.124 (0.086)
Girls	0.395 (0.072)	0.419 (0.069)	0.419 (0.071)	0.215 (0.076)	0.199 (0.078)	0.181 (0.081)
Panel D: Total academic courses by sex; mean(boys)=3.852; mean(girls)=3.388						
Boys	0.839 (0.343)	0.794 (0.363)	0.663 (0.362)	1.712 (0.601)	1.818 (0.605)	1.662 (0.587)
Girls	2.705 (0.256)	2.744 (0.256)	2.691 (0.254)	2.091 (0.383)	2.045 (0.430)	1.911 (0.000)
Panel E: "First Stage" P(Attending Selective School)						
Boys				0.855 (0.0542)	0.856 (0.0551)	0.853 (0.0567)
Girls				0.865 (0.0534)	0.867 (0.0527)	0.858 (0.0548)

Notes: See notes to Table 2a. Each row reports results of models estimated separately for boys and girls. In full sample, N=814(girls), N=772(boys).

Web Appendix Table 2c: Impact of selective schools on advanced course-taking (matched data): by SES

	Full sample (N=1244)			Marginal area excluded (N=1039)		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: P(Any course) by SES: mean(low)=0.55; mean(mid)= 0.702; mean(high)=0.649						
Low-SES	0.303 (0.130)	0.324 (0.117)		0.180 (0.053)	0.205 (0.064)	
Mid-SES	0.068 (0.057)	0.055 (0.054)		.	.	
High-SES	0.051 (0.051)	0.052 (0.050)		0.036 0.036	(0.100) (0.100)	
Panel B: P(Academic course) by SES: mean(low)=0.49; mean(mid)=0.678; mean(high)=0.649						
Low-SES	0.334 (0.133)	0.350 (0.144)		0.184 (0.062)	0.201 (0.076)	
Mid-SES	0.064 (0.060)	0.050 (0.052)		.	.	
High-SES	0.052 (0.056)	0.054 (0.056)		-0.011 (0.089)	-0.032 (0.084)	
Panel C: P(Math course) by SES: mean(low)=0.3; mean(mid)=0.512; mean(high)=0.511						
Low-SES	0.406 (0.103)	0.482 (0.089)		0.439 (0.123)	0.459 (0.122)	
Mid-SES	0.101 (0.060)	0.073 (0.064)		0.088 (0.063)	0.099 (0.058)	
High-SES	0.170 (0.074)	0.165 (0.076)		0.130 (0.148)	0.119 (0.149)	
Panel D: Total Aca courses by SES: mean(low)=1.900; mean(mid)=3.010; mean(high)=3.021						
Low-SES	1.943 (0.539)	2.057 (0.477)		3.073 (1.169)	3.150 (1.136)	
Mid-SES	1.709 (0.380)	1.760 (0.380)		1.544 (0.492)	1.725 (0.489)	
High-SES	1.383 (0.382)	1.312 (0.366)		1.677 (0.718)	1.514 (0.733)	
Panel E: "First Stage" P(Attend Selective School)						
Low-SES				0.738 (0.123)	0.734 (0.121)	
Mid-SES				0.935 (0.0327)	0.934 (0.0340)	
High-SES				0.775 (0.0454)	0.776 (0.0454)	

Notes: See notes to Table 2a. Each row reports results of models estimated separately for low-, medium- or high-SES students. Specification (3) excluded since each row reports estimates for single SES category hence no SES controls. No estimates reported for med-SES in Panels A and B since all students with normalized assignment test scores to the right of the marginal area take at least one academic course. In full sample, N=422 (low-SES), N=732 (med-SES), N=422 (high-SES).