

SUPPLEMENT TO “THE EFFECT OF SCHOOL CHOICE ON PARTICIPANTS: EVIDENCE FROM RANDOMIZED LOTTERIES”
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APPENDIX B: CALCULATING VALUE ADDED BY
HIGH SCHOOL CAMPUS

TO CALCULATE A ROUGH MEASURE of value added for each high school campus, we find the average gain in scores between eighth and ninth grade above or below what would have been expected for students enrolled in the campus. First, we regress ninth grade reading national percentile score on flexible controls for eighth grade reading score (20 indicators for each 5-percentile point range within the relevant CPS eighth grade cohort), student demographics, and eighth grade campus fixed effects separately for each of three cohorts of ninth graders—1999, 2000, and 2001. Table B.I presents results from these ordinary least squares (OLS) regressions. Next, our value added measure for any given high school is calculated by averaging the residuals from these estimations across students in the three ninth grade cohorts enrolled at that campus.

TABLE B.I
OLS ESTIMATES OF NINTH GRADE READING SCORE^a

Independent Variables	Dependent Variable = 9th Grade Reading Score					
	1999		2000		2001	
	(1) Coeff.	(2) S.E.	(3) Coeff.	(4) S.E.	(5) Coeff.	(6) S.E.
Black	-0.020	0.006	-0.059	0.006	-0.031	0.006
Hispanic	-0.023	0.005	-0.036	0.005	-0.007	0.005
Native American	-0.020	0.028	-0.030	0.026	0.032	0.030
Asian	-0.004	0.007	0.008	0.008	0.008	0.008
Male	-0.004	0.002	-0.003	0.002	-0.007	0.002
Living with a biological parent	0.008	0.003	-0.001	0.003	-0.003	0.003
Age	-0.040	0.003	-0.037	0.003	-0.035	0.003
	<i>Characteristic in 8th grade</i>					
Free-lunch eligible	-0.014	0.003	-0.013	0.004	-0.017	0.004
Eligible for reduced-price lunch	-0.002	0.004	0.001	0.005	0.000	0.005
Ever received bilingual ed.	-0.002	0.005	-0.016	0.005	-0.013	0.005
Received special education	-0.091	0.004	-0.069	0.004	-0.071	0.004

Continues

TABLE B.I—*Continued*

Independent Variables	Dependent Variable = 9th Grade Reading Score					
	1999		2000		2001	
	(1) Coeff.	(2) S.E.	(3) Coeff.	(4) S.E.	(5) Coeff.	(6) S.E.
Reading score						
6–10 percentile	0.044	0.008	0.021	0.009	0.015	0.009
11–15 percentile	0.061	0.007	0.037	0.009	0.030	0.009
16–20 percentile	0.088	0.008	0.053	0.009	0.055	0.008
21–25 percentile	0.103	0.007	0.065	0.008	0.074	0.009
26–30 percentile	0.118	0.008	0.089	0.009	0.087	0.008
31–35 percentile	0.140	0.008	0.096	0.009	0.125	0.009
36–40 percentile	0.156	0.008	0.117	0.009	0.132	0.009
41–45 percentile	0.179	0.008	0.115	0.009	0.159	0.009
46–50 percentile	0.201	0.007	0.140	0.008	0.172	0.009
51–55 percentile	0.236	0.008	0.173	0.009	0.201	0.008
56–60 percentile	0.252	0.008	0.170	0.009	0.246	0.009
61–65 percentile	0.277	0.008	0.208	0.009	0.262	0.009
66–70 percentile	0.308	0.007	0.237	0.008	0.302	0.008
71–75 percentile	0.343	0.009	0.262	0.009	0.318	0.009
76–80 percentile	0.359	0.008	0.308	0.009	0.368	0.008
81–85 percentile	0.408	0.008	0.353	0.009	0.412	0.009
86–90 percentile	0.470	0.007	0.414	0.009	0.463	0.009
91–95 percentile	0.536	0.008	0.511	0.009	0.552	0.008
96–100 percentile	0.638	0.008	0.621	0.009	0.653	0.009
Constant	0.765	0.036	0.748	0.037	0.675	0.037
8th grade campus fixed effects	Yes		Yes		Yes	
Number of observations	19,062		18,873		19,216	
R-squared	0.644		0.623		0.654	

^aThis table presents results from separate OLS regressions run for each of three cohorts of ninth grade students. The dependent variable is expressed in terms of a national percentile rank, ranging from 0.01 (first percentile) to 0.99 (99th percentile). The eighth grade reading score percentiles are percentiles within the relevant CPS eighth grade cohort.

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