

Appendix D:1

Details on Change Scores Analysis

To encourage greater exploration of the PSSA data, we present in this appendix more detailed information on the change score comparisons between charter schools and their host districts. Table D:1 provides PSSA scores for both the 1997/98 and schools and each of their host districts. The table also includes information on the concentration of low income students and PSSA participation rates in these schools.

Table D:1 Charter School and Host District Two-Year Trends Compared

Charter Schools							Host Districts						Charter schools minus host districts		
Name of School	Test	2-year average % low income (1998/99)	2-year average % participation	1997/ 1998	1998/ 1999	Diff.	Name of District	2-year average % low income (1998/99)	2-year average % participation	1997/ 1998	1998/ 1999	Diff.	Change in % low income	Change in percent participation	Change in PSSA mean
Keystone Education Center (Greenville comparison)	Math 8	68	76	1080	1120	40	Greenville Area	33	92	1310	1380	70	5		-30
	Reading 8	68	76	1010	1100	90	Greenville Area	33	90	1300	1360	60	5		30
	Math 11	68	73	1000	1170	170	Greenville Area	33	95	1360	1350	-10	5		180
	Reading 11	68	73	1070	1220	150	Greenville Area	33	93	1330	1330	0	5		150
Keystone Education Center (Reynolds comparison)	Math 8	68	76	1080	1120	40	Reynolds	34	92	1240	1260	20	5		20
	Reading 8	68	76	1010	1100	90	Reynolds	34	90	1230	1250	20	5		70
	Math 11	68	73	1000	1170	170	Reynolds	34	95	1260	1220	-40	5		210
	Reading 11	68	73	1070	1220	150	Reynolds	34	93	1300	1220	-80	5		230
Philadelphia Community Academy	Math 11	87	88	1000	1040	40	Philadelphia	82	78	1120	1140	20	13	3	20
	Reading 11	87	93	1010	1130	120	Philadelphia	82	78	1140	1140	0	13	-1	120
Philadelphia Harambee Institute	Math 5		91	1140	1100	-40	Philadelphia	82	94	1140	1140	0		15	-40
	Reading 5		88	1030	1150	120	Philadelphia	82	95	1090	1120	30		23	90
	Writing 6			1170	1070	70	Philadelphia	82		1090	1110	20			50
	Math 8		100	1000	1000	250	Philadelphia	82	91	1120	1140	20		0	230
	Reading 8		97	1000	1000	350	Philadelphia	82	92	1120	1130	10		7	340
World Communications	Writing 6	60		1170	1180	10	Philadelphia	82		1090	1110	20	0		-10
	Math 8	60	98	1110	1160	50	Philadelphia	82	91	1120	1140	20	0	2	30
	Reading 8	60	99	1150	1160	10	Philadelphia	82	92	1120	1130	10	0	-2	0
	Writing 9	60		1200	1250	50	Philadelphia	82		1140	1200	60	0		-10

Note: Where one year of participation or income data are missing, we use the one year of available data as an estimate. Missing values in change scores reflect either the fact that no participation rates are reported for writing or that we were missing a value for one of the two years.

Appendix D:2

Details on the Analysis of Regression Residuals

As discussed in Section 11.5, the regression residual analysis proceeds on the assumption that the analyst has included all relevant demographic factors in the model. Unfortunately, the paucity of comparable data sources on both charter and noncharter schools has limited our analysis to the use of income only. The vast literature on student achievement demonstrates that while income is among the most powerful predictors of student achievement, it is far from the only one. Hence, a model that predicts student achievement based only on student income is likely to produce residuals that are statistically biased. In this appendix we briefly explore the extent and consequences of this statistical bias.

We began by estimating a more fully specified model using data from all noncharter schools in Pennsylvania (we lacked comparable data on all but achievement and income for charter schools). The full model includes, in addition to income, the proportion of nonwhite students, the proportion of single-parent families, and the proportion of adults in the community with at least a college degree. Ideally, we would include many other variables, including the concentration of special education students, pretest scores on student achievement tests, and a host of factors describing students' prior educational experiences. Data for the additional student background factors came from the 1990 U.S. census and are measured at the district level. Using district level predictors in a model of school-level student achievement is likely to bias the standard errors (measure of the variability in the coefficients) but should not bias the coefficients themselves (from which we calculate the residuals). In order to simplify the analysis, we estimated the model on data from the 1998/1999 5th grade math portion of the PSSA only. The results will be different for other years and other portions of the PSSA. Table D:2

Table D:2 Regression Estimates From Full Model

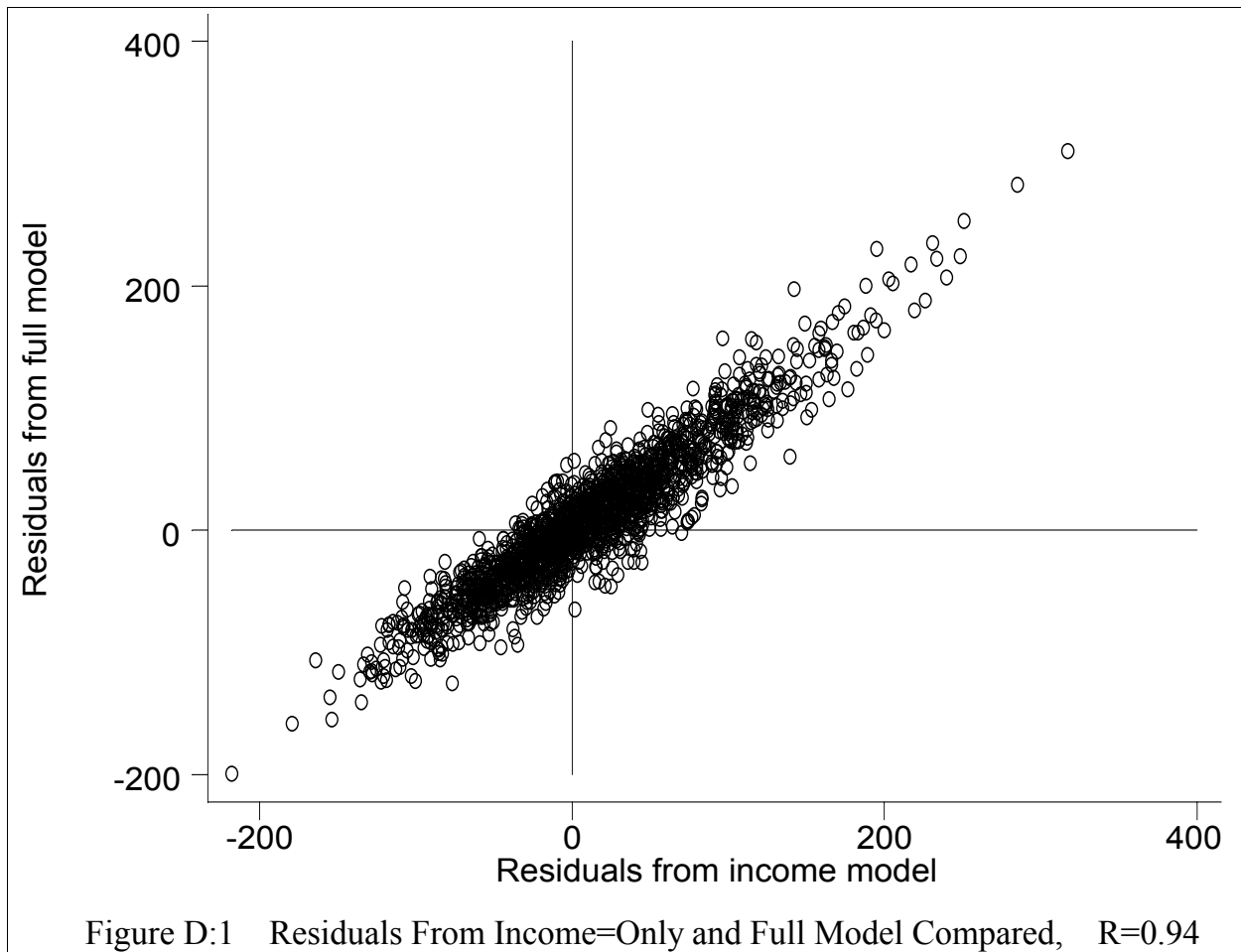
<i>Predictor</i>	<i>Coefficient</i>	<i>Standard error</i>	<i>P> t </i>
% low income	-2.2	0.05	0.00
% nonwhite	-1.7	0.07	0.00
% single parent	2.0	0.17	0.00
% college degree	2.7	0.10	0.00
Intercept	1325	3.65	0.00
R ²	0.73		
P > F	0.00		

Table D:3 Regression Estimates from Income-Only Model

<i>Predictor</i>	<i>Coefficient</i>	<i>Standard error</i>	<i>P> t </i>
% low income	-3.15	0.03	0.00
Intercept	1412	1.24	0.00
R ²	0.69		
P > F	0.00		

presents coefficients for both the full model and the income-only model. Table 11:3 provides estimates from the income-only model.

Clearly, the addition of the extra student background variables changes the slope on the income variable, reducing it by approximately 1 point. Given that residuals are calculated by comparing predicted and observed values, omission of these variables will clearly statistically bias the residuals. However, the bias is attenuated by the fact that income is strongly and positively correlated with race ($r=0.70$) and single parent status ($r=0.79$).¹ Hence, income in the constrained model picks up much of the unmeasured influence of race and single parent status. Consequently, the ultimate impact on the residuals is quite modest. Indeed, the correlation between residuals from each model is very high ($r=0.94$). The strong relationship between the residuals is illustrated by scatterplot in Figure D:1.



¹ The bivariate correlation between education and income is negative ($r=-0.38$).

Table D:4 Regression Residuals for 5th Grade Math

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Manchester Academy	60	1090	1230	-140
1999	Mosaica Academy	19	1240	1360	-120
1999	Centre Learning Community	10	1370	1380	-10
1999	Nittany Valley Charter School	4	1520	1400	120
1999	Chester Charter School	67	1000	1210	-210
1999	Creative Educational Concepts		1020	1410	
1999	Village CS of Chester-Upland	73	1110	1190	-80
1999	Eugenio Maria de Hosts CS	100	1050	1110	-60
1998	Philadelphia Harambee Institute		1140	1410	
1999	Philadelphia Harambee Institute		1100	1410	
1999	The Laboratory Charter School	97	1080	1120	-40
Mean (weighted)		54	1156	1300	-88
Median		64	1100	1360	-70
St. Dev.		38	160	120	98

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Table D:5 Regression Residuals for 5th Grade Reading

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Manchester Academy	60	1140	1230	-90
1999	Mosaica Academy	19	1220	1360	-140
1999	Centre Learning Community	10	1400	1390	10
1999	Nittany Valley Charter School	4	1460	1410	50
1999	Chester Charter School	67	1070	1210	-140
1999	Creative Educational Concepts		1060		
1999	Village CS of Chester-Upland	73	1130	1190	-60
1999	Eugenio Maria de Hosts CS	100	1070	1100	-30
1998	Philadelphia Harambee Institute		1030		
1999	Philadelphia Harambee Institute		1150		
1999	The Laboratory Charter School	97	1140	1110	30
Mean (weighted)		54	1170	1250	-63
Median		64	1140	1220	-45
St. Dev.		38	140	120	74

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Table D:6 Regression Residuals for 6th Grade Writing

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Mosaica Academy	19	1290	1290	0
1999	Centre Learning Community	10	1250	1310	-60
1999	Nittany Valley Charter School	4	1030*	1320	-290
1999	Creative Educational Concepts		1050		
1999	Village CS of Chester-Upland	73	1110	1150	-40
1999	La Academia Partnership CS	68	1120	1160	-40
1999	Eugenio Maria de Hosts CS	100	1110	1090	20
1998	Philadelphia Harambee Institute		1070		
1999	Philadelphia Harambee Institute		1140		
1998	World Communications CS	60	1170	1180	-10
1999	World Communications CS	60	1180	1180	0
Mean (weighted)		49	1135	1220	-20
Median		60	1120	1180	-25
St. Dev.		34	85	90	110

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

*Reported as a 1000 on public PDE raw data files. Correspondence with PDE staff indicates that the reported number is in error. Also, the scaled score incorporates 33 percent of the examinations that were graded “unscorable,” which count as zeros in generating school means.

Table D:7 Regression Residuals for 8th Grade Math

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Nittany Valley Charter School	4	1580	1380	200
1999	Village CS of Chester-Upland	73	1000	1170	-170
1999	La Academia Partnership CS	68	1060	1180	-120
1998	Keystone Education Center	65	1080	1190	-110
1999	Keystone Education Center	70	1120	1180	-60
1999	Philadelphia Comm Acad CS	93	1050	1100	-50
1998	Philadelphia Harambee Institute		1000		
1999	Philadelphia Harambee Institute		1250		
1998	World Communications CS	60	1110	1190	-80
1999	World Communications CS	60	1160	1210	-50
1999	Ridgeview Academy CS	88	1130	1120	10
Mean (weighted)		65	1140	1190	-69
Median		68	1110	1180	-60
St. Dev.		25	163	80	106

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Table D:8 Regression Residuals for 8th Grade Reading

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Nittany Valley Charter School	4	1450	1380	70
1999	Village CS of Chester-Upland	73	1080	1170	-90
1999	La Academia Partnership CS	68	1030	1180	-150
1998	Keystone Education Center	65	1010	1190	-180
1999	Keystone Education Center	70	1100	1180	-80
1999	Philadelphia Comm Acad CS	93	1050	1110	-60
1998	Philadelphia Harambee Institute		1000		
1999	Philadelphia Harambee Institute		1350		
1998	World Communications CS	60	1150	1200	-50
1999	World Communications CS	60	1160	1210	-50
1999	Ridgeview Academy CS	88	1140	1120	20
Mean (weighted)		65	1138	1193	-69
Median		68	1100	1180	-60
St. Dev.		25	142	78	77

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Table D:9 Regression Residuals for 9th Grade Writing

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Village CS of Chester-Upland	73	1200	1210	-10
1999	SUSQ-CYBER CS	0	1200	1410	-210
1999	Center for Economics & Law CS	70	1230	1210	20
1999	Imhotep Charter School	75	1230	1200	30
1999	Multi-cultural Academy CS	89	1330	1160	170
1999	The Preparatory CS	61	1330	1240	90
1998	World Communications CS	60	1200	1230	-30
1999	World Communications CS	60	1250	1240	10
Mean (weighted)		61	1246	1240	18
Median		66	1230	1220	15

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Table D:10 Regression Residuals for 11th Grade Math

Year	Name of School	Percent Low Income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Northeast Charter School	30	1140	1260	-120
1998	Keystone Education Center	65	1000	1130	-130
1999	Keystone Education Center	70	1170	1110	60
1999	SUSQ-CYBER CS	0	1140	1370	-230
1998	Philadelphia Comm Acad CS	80	1000	1050	-50
1999	Philadelphia Comm Acad CS	93	1040	1030	10
1999	Ridgeview Academy CS	88	1230	1050	180
Mean (weighted)		61	1103	1140	-4
Median		70	1140	1110	-50
St. Dev.		34	90	130	136

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Table D:11 Regression Residuals for 11th Grade Reading

Year	Name of School	% low income	Mean PSSA	Predicted Mean PSSA	Difference
1999	Northeast Charter School	30	1110	1260	-150
1998	Keystone Education Center	65	1070	1140	-70
1999	Keystone Education Center	70	1220	1120	100
1999	SUSQ-CYBER CS	0	1220	1360	-140
1998	Philadelphia Comm Acad CS	80	1010	1110	-100
1999	Philadelphia Comm Acad CS	93	1130	1050	80
1999	Ridgeview Academy CS	88	1290	1060	230
Mean (weighted)		61	1150	1160	28
Median		70	1130	1120	-70
St. Dev.		34	98	110	145

Note: Predicted PSSA scores rounded to the nearest 10 to conform with scoring practices

Appendix D:3

Host District Comparisons

Tables D:12 through D:19 provide detailed information on the host district comparisons. Since six charter schools had been open two years at the time these data were collected, we have included a column of “year.” We have also included separate comparisons for each host district where charters are sponsored by more than one (regional charters).

The most important information in the tables is found in the gray area toward the middle of the tables. The righthand column in this area shows the difference between the charter school’s and host district’s score on the relevant portion and year of the PSSA. The numbers are derived by subtracting the host district’s score from that of the charter school. Hence, positive numbers indicate that the charter school outperformed the host district. Negative numbers, by contrast, indicate that the host district outperformed the charter school. To facilitate interpretation of the table, we have printed positive values in green text and negative values in red text. The mean value at the bottom is the average of all differences weighted by charter schools’ average daily membership (ADM).

In addition to this information, the tables also provide information that will facilitate careful interpretation of the difference scores. The columns to the right of the gray area include detailed breakdowns of PSSA scores by quartiles. Quartiles, as the name suggests, divide a distribution of data points into four groups, each containing 25 percent of the data points. These, in combination with the mean PSSA scores, provide readers with a fairly detailed understanding of both the central tendency and dispersion of scores within a school. The tables also provide information on participation rates and concentration of low income students. Countless studies have demonstrated that both factors exert an independent influence on student achievement scores. Readers are encouraged to consider both factors when assessing differences between particular charter schools and their host districts. To facilitate such comparisons, the left column in the gray area provides the difference between charter schools and their host districts in the concentration of low income students. Space constraints prevented us from including such comparisons for participation rates.

Table D:12 Comparisons Between Charter Schools and Their Host Districts: PSSA 5th Grade Math

Charter Schools		Host Districts			Charter Minus Host		Detailed Score Breakdown										
							Charter School Quartile				Host District Quartile						
Year	Name of School	% Low Income	% Partic	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Top	Hi-mid	Lo-mid	Bottom	Top	Hi-mid	Lo-mid	Bottom
1999	Manchester Academy	60		1090	Pittsburgh	76	1250	-16	-160	0	0	21	79	15	19	33	33
1999	Mosaica Academy	19	100	1240	Bensalem Township	24	1330	-5	-90	12	16	42	30	25	28	33	14
1999	Centre Learning Community	10	89	1370	Bald Eagle Area	43	1260	-33	110	38	29	8	25	13	24	37	26
1999	Centre Learning Community	10	89	1370	Bellefonte Area	15	1380	-5	-10	38	29	8	25	37	28	23	12
1999	Centre Learning Community	10	89	1370	State College Area	9	1400	1	-30	38	29	8	25	36	30	25	9
1999	Nittany Valley	4	100	1520	State College Area	9	1400	-5	120	50	33	0	17	36	30	25	9
1999	Chester CS	37		1000	Chester-Upland	63	1110	-26	-110	0	3	7	90	1	7	18	75
1999	Creative Educational Concepts		80	1020	Chester-Upland	63	1110		-90	0	0	0	100	1	7	18	75
1999	Village CS of Chester-Upland	73	86	1110	Chester-Upland	63	1110	10	0	0	0	28	72	1	7	18	75
1999	Eugenio Maria De Hosts CS	100	93	1050	Philadelphia	82	1140	18	-90	0	0	19	81	3	9	24	64
1998	Philadelphia Harambee Institute		83	1140	Philadelphia	82	1140		0	0	11	17	72	4	9	22	66
1999	Philadelphia Harambee Institute		98	1100	Philadelphia	82	1140		-40	0	3	21	77	3	9	24	64
1999	The Laboratory CS	97	90	1080	Philadelphia	82	1140	15	-60	0	11	8	81	3	9	24	64
Average Difference (Weighted by Av. Daily Membership)									-61								

Table D:13 Comparisons Between Charter Schools and Their Host Districts: PSSA 5th Grade Reading

Charter Schools		Host Districts			Charter Minus Host		Detailed Score Breakdown										
							Charter School Quartile				Host District Quartile						
Year	Name of School	% Low Income	% Partic	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Top	Hi-mid	Lo-mid	Bottom	Top	Hi-mid	Lo-mid	Bottom
1999	Manchester Academy	60		1140	Pittsburgh	76.3	1230	-16	-90		7	29	64	14	19	31	36
1999	Mosaica Academy	19	100	1220	Bensalem Township	24.4	1320	-5	-100	8	28	24	40	25	30	28	17
1999	Centre Learning Community	10	85	1400	Bald Eagle Area	43	1310	-33	90	44	30	9	17	26	29	22	23
1999	Centre Learning Community	10	85	1400	Bellefonte Area	14.7	1340	-5	60	44	30	9	17	31	26	28	15
1999	Centre Learning Community	10	85	1400	State College Area	8.7	1390	1	10	44	30	9	17	42	28	20	10
1999	Nittany Valley	4	100	1460	State College Area	8.7	1390	-5	70	67	17		17	42	28	20	10
1999	Chester CS	67	82	1070	Chester-Upland	63	1090	4	-20	7	4	14	75	4	6	22	69
1999	Creative Educational Concepts		90	1060	Chester-Upland	63	1090		-30			11	89	4	6	22	69
1999	Village CS of Chester-Upland	73	86	1130	Chester-Upland	63	1090	10	40		6	39	56	4	6	22	69
1999	Eugenio Maria De Hosts CS	100	93	1070	Philadelphia	81.6	1120	18	-50		3	27	70	4	10	22	64
1998	Philadelphia Harambee Institute		75	1030	Philadelphia	81.5	1090		-60	5	5	20	70	5	10	21	65
1999	Philadelphia Harambee Institute		98	1150	Philadelphia	81.6	1120		30	5	5	39	51	4	10	22	64
1999	The Laboratory CS	97	93	1140	Philadelphia	81.6	1120	15	20	5	13	24	58	4	10	22	64
Average Difference (Weighted by Av. Daily Membership)									-25								

Table D:14 Comparisons Between Charter Schools and Their Host Districts: PSSA 8th Grade Math

Charter Schools					Host Districts		Charter Minus Host		Detailed Score Breakdown								
									Charter School Quartile				Host District Quartile				
Year	Name of School	% Low Income	% Partic	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Top	Hi-mid	Lo-mid	Bottom	Top	Hi-mid	Lo-mid	Bottom
1999	Nittany Valley	4	100	1580	State College Area	9	1420	-5	160	50	0	0	50	42	31	19	8
1999	Village CS of Chester-Upland	73	47	1000	Chester-Upland	63	1120	10	-120	0	14	14	71	2	9	25	64
1999	La Academia Partnership CS	68	52	1060	Lancaster	59	1170	9	-110	0	0	25	75	10	12	23	55
1998	Keystone Education Center	65	76	1080	Greenville Area	38	1310	27	-230	3	0	31	66	23	25	29	23
1998	Keystone Education Center	65	76	1080	Reynolds	38	1240	27	-160	3	0	31	66	9	24	39	28
1999	Keystone Education Center	70		1120	Greenville Area	27	1380	43	-260	4	9	22	65	34	34	23	9
1999	Keystone Education Center	70		1120	Reynolds	39	1260	31	-140	4	9	22	65	10	32	31	28
1999	Philadelphia Comm Acad CS	93	100	1050	Philadelphia	82	1140	12	-90	0	0	17	83	5	11	25	59
1998	Philadelphia Harambee Institute		100	1000	Philadelphia	82	1120		-120	0	0	21	79	5	10	24	61
1999	Philadelphia Harambee Institute		100	1250	Philadelphia	82	1140		110	0	31	54	15	5	11	25	59
1998	World Communications CS	60	97	1110	Philadelphia	82	1120	-22	-10	0	9	36	55	5	10	24	61
1999	World Communications CS	60	99	1160	Philadelphia	82	1140	-22	20	1	8	40	51	5	11	25	59
1999	Ridgeview Academy CS	88		1130	Greater Latrobe	26	1370	62	-240	4	11	21	64	31	33	25	11

Table D:15 Comparisons Between Charter Schools and Their Host Districts: PSSA 8th Grade Reading

Charter Schools		Host Districts			Charter Minus Host		Detailed Score Breakdown										
							Charter School Quartile				Host District Quartile						
Year	Name of School	% Low Income	% Partic	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Top	Hi-mid	Lo-mid	Bottom	Top	Hi-mid	Lo-mid	Bottom
1999	Nittany Valley	4	100	1450	State College Area	9	1400	-5	50	50	0	0	50	43	28	18	11
1999	Village CS of Chester-Upland	73	53	1080	Chester-Upland	63	1110	10	-30	0	0	38	63	4	11	24	62
1999	La Academia Partnership CS	68	57	1030	Lancaster	59	1170	9	-140	0	8	23	69	11	15	24	50
1998	Keystone Education Center	65	76	1010	Greenville Area	38	1300	27	-290	0	0	21	79	24	28	25	24
1998	Keystone Education Center	65	76	1010	Reynolds	38	1230	27	-220	0	0	21	79	14	23	27	36
1999	Keystone Education Center	70		1100	Greenville Area	27	1360	43	-260	4	13	9	74	30	31	28	11
1999	Keystone Education Center	70		1100	Reynolds	39	1250	31	-150	4	13	9	74	17	25	23	36
1999	Philadelphia Comm Acad CS	93	87	1050	Philadelphia	82	1130	11	-80	0	5	15	80	7	12	24	57
1998	Philadelphia Harambee Institute		93	1000	Philadelphia	82	1120		-120	0	0	13	87	7	13	25	55
1999	Philadelphia Harambee Institute		100	1350	Philadelphia	82	1130		220	15	31	46	8	7	12	24	57
1998	World Communications CS	60	100	1150	Philadelphia	82	1120	-22	30	5	16	32	46	7	13	25	55
1999	World Communications CS	60	98	1160	Philadelphia	82	1130	-22	30	4	17	26	54	7	12	24	57
1999	Ridgeview Academy CS	88		1140	Greater Latrobe	26	1370	62	-230	4	7	32	57	34	33	22	12

Table D:16 Comparisons Between Charter Schools and Their Host Districts: PSSA 11th Grade Math

									Detailed Score Breakdown								
Charter Schools				Host Districts			Charter Minus Host		Charter School Quartile				Host District Quartile				
Year	Name of School	% Low Income	% Partic	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Top	Hi-mid	Lo-mid	Bottom	Top	Hi-mid	Lo-mid	Bottom
1999	Northeast CS	30		1140	Abington Heights	6	1340	24	-200	0	50	50	0	24	32	24	20
1999	Northeast CS	30		1140	Carbondale Area	53	1220	-23	-80	0	50	50	0	9	23	35	34
1999	Northeast CS	30		1140	Dunmore	26	1280	4	-140	0	50	50	0	18	26	36	20
1999	Northeast CS	30		1140	Lakeland	14	1280	16	-140	0	50	50	0	17	31	18	34
1999	Northeast CS	30		1140	North Pocono	28	1400	2	-260	0	50	50	0	36	30	23	12
1999	Northeast CS	30		1140	Old Forge	13	1290	17	-150	0	50	50	0	18	32	22	28
1999	Northeast CS	30		1140	Riverside	39	1280	-9	-140	0	50	50	0	19	26	26	30
1999	Northeast CS	30		1140	Scranton	32	1240	-2	-100	0	50	50	0	11	24	32	33
1999	Northeast CS	30		1140	Valley View	17	1330	13	-190	0	50	50	0	21	31	34	14
1999	Northeast CS	30		1140	Forest City Regional	40	1270	-10	-130	0	50	50	0	15	25	33	27
1999	Northeast CS	30		1140	Wallenpaupack Area	29	1310	1	-170	0	50	50	0	17	36	29	18
1999	Northeast CS	30		1140	Wayne Highlands	39	1320	-9	-180	0	50	50	0	22	31	35	12
1999	Northeast CS	30		1140	Western Wayne	47	1260	-17	-120	0	50	50	0	10	31	36	23
1998	Keystone Edu. Center	65	73	1000	Greenville Area	38	1360	27	-360	0	0	9	91	30	33	13	24
1998	Keystone Edu. Center	65	73	1000	Reynolds	38	1260	27	-260	0	0	9	91	11	26	44	19
1999	Keystone Edu. Center	70		1170	Greenville Area	27	1350	43	-180	0	31	24	45	33	27	22	18
1999	Keystone Edu. Center	70		1170	Reynolds	39	1220	31	-50	0	31	24	45	13	19	29	39
1999	SUSQ-Cyber CS	0		1140	Berwick Area	51	1270	-51	-130	0	8	42	50	14	24	38	23
1999	SUSQ-Cyber CS	0		1140	Bloomsburg Area	44	1310	-44	-170	0	8	42	50	20	34	28	18
1999	SUSQ-Cyber CS	0		1140	Milton Area	29	1240	-29	-100	0	8	42	50	11	25	32	33
1998	Phila. Comm Acad CS	80	86	1000	Philadelphia	82	1120	-2	-120	0	0	0	100	8	12	22	59
1999	Phila. Comm Acad CS	93	89	1040	Philadelphia	82	1140	11	-100	0	2	14	83	7	13	23	57
1999	Ridgeview Academy	88		1230	Greater Latrobe	26	1330	62	-100	13	31	13	44	24	31	24	21

Table D:17 Comparisons Between Charter Schools and Their Host Districts: PSSA 11th Grade Reading

Charter Schools		Host Districts			Charter Minus Host		Detailed Score Breakdown										
							Charter School Quartile				Host District Quartile						
Year	Name of School	% Low Income	% Partic	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Top	Hi-mid	Lo-mid	Bottom	Top	Hi-mid	Lo-mid	Bottom
1999	Northeast CS	30		1110	Abington Heights	6	1300	24	-190	0	0	33	67	21	31	23	25
1999	Northeast CS	30		1110	Carbondale Area	53	1260	-23	-150	0	0	33	67	18	28	24	30
1999	Northeast CS	30		1110	Dunmore	26	1260	4	-150	0	0	33	67	13	32	30	26
1999	Northeast CS	30		1110	Lakeland	14	1270	16	-160	0	0	33	67	19	31	24	25
1999	Northeast CS	30		1110	North Pocono	28	1430	2	-320	0	0	33	67	47	28	20	5
1999	Northeast CS	30		1110	Old Forge	13	1320	17	-210	0	0	33	67	25	28	30	17
1999	Northeast CS	30		1110	Riverside	39	1280	-9	-170	0	0	33	67	21	23	28	27
1999	Northeast CS	30		1110	Scranton	32	1280	-2	-170	0	0	33	67	18	32	27	24
1999	Northeast CS	30		1110	Valley View	17	1350	13	-240	0	0	33	67	32	23	30	15
1999	Northeast CS	30		1110	Forest City Regional	40	1310	-10	-200	0	0	33	67	25	27	30	18
1999	Northeast CS	30		1110	Wallenpaupack Area	29	1300	1	-190	0	0	33	67	23	33	26	19
1999	Northeast CS	30		1110	Wayne Highlands	39	1290	-9	-180	0	0	33	67	21	29	24	25
1999	Northeast CS	30		1110	Western Wayne	47	1280	-17	-170	0	0	33	67	13	38	26	23
1998	Keystone Edu. Center	65	73	1070	Greenville Area	38	1330	27	-260	0	0	36	64	33	25	25	17
1998	Keystone Edu. Center	65	73	1070	Reynolds	38	1300	27	-230	0	0	36	64	23	28	31	18
1999	Keystone Edu. Center	70		1220	Greenville Area	27	1330	43	-110	10	20	30	40	30	31	19	20
1999	Keystone Edu. Center	70		1220	Reynolds	39	1220	31	0	10	20	30	40	13	30	19	38
1999	SUSQ-Cyber CS	0		1220	Berwick Area	51	1290	-51	-70	0	17	67	17	20	31	28	22
1999	SUSQ-Cyber CS	0		1220	Bloomsburg Area	44	1330	-44	-110	0	17	67	17	26	34	26	14
1999	SUSQ-Cyber CS	0		1220	Milton Area	29	1220	-29	0	0	17	67	17	11	27	26	36
1998	Phila.Comm. Acad CS	80	93	1010	Philadelphia	82	1140	-2	-130	0	0	17	83	9	15	24	53
1999	Phila.Comm. Acad CS	93	92	1130	Philadelphia	82	1140	11	-10	2	12	37	49	9	15	23	53
1999	Ridgeview Academy	88		1290	Greater Latrobe	26	1320	62	-30	25	25	13	38	27	31	22	21

Table D:18 Comparisons Between Charter Schools and Their Host Districts: PSSA 6th Grade Writing

Charter Schools		Host Districts			Charter Minus Host		Detailed Score Breakdown											
							Charter School Qualitative Rating (%)					Host District Qualitative Rating (%)						
Year	Name of School	% Low Income	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Excel- lent	Good	Fair	Weak	Poor	Excel- lent	Good	Fair	Weak	Poor
1999	Mosaica Academy	19	1290	Bensalem Township	24	1300	-5	-10	8	38	46	8	0	6	51	39	4	0
1999	Centre Learning Community	10	1250	Bald Eagle Area	43	1190	-33	60	5	43	43	10	0	1	28	55	13	1
1999	Centre Learning Community	10	1250	Bellefonte Area	15	1260	-5	-10	5	43	43	10	0	11	37	40	7	4
1999	Centre Learning Community	10	1250	State College Area	9		1		5	43	43	10	0	0	0	0	0	0
1999	Nittany Valley	4	1030	State College Area	9		-5		0	50	17	0	0					
1999	Creative Ed.Concepts		1050	Chester-Upland	63	1170		-120	0	13	60	20	0	3	24	52	18	2
1999	Village CS of Chester-Upland	73	1110	Chester-Upland	63	1170	10	-60	0	13	38	50	0	3	24	52	18	2
1999	La Academia Partnership CS	68	1120	Lancaster	59	1170	9	-50	0	0	81	13	6	1	27	52	18	1
1999	Eugenio Maria de Hosts CS	100	1110	Philadelphia	82	1110	18	0	0	9	69	20	0	1	16	48	29	3
1998	Philadelphia Harambee Institute		1070	Philadelphia	82	1090	-82	-20	0	17	25	58	0	1	14	46	32	4
1999	Philadelphia Harambee Institute		1140	Philadelphia	82	1110	-82	30	0	15	66	19	0	1	16	48	29	3
1998	World Communications CS	60	1170	Philadelphia	82	1090	-22	80	0	18	64	16	0	1	14	46	32	4
1999	World Communications CS	60	1180	Philadelphia	82	1110	-22	70	0	27	58	12	1	1	16	48	29	3

Note: Not All Schools Were Required to Administer the Writing Portion of the PSSA During the 1997/98 and 1998/99 Academic Years.

Table D:19 Comparisons Between Charter Schools and Their Host Districts: PSSA 9th Grade Writing

Charter Schools		Host Districts		Detailed Score Breakdown														
				Charter Minus Host		Charter School Qualitative Rating (%)					Host District Qualitative Rating (%)							
Year	Name of School	% Low Income	Mean PSSA	Name of District	% Low Income	Mean PSSA	% Low Income	Mean PSSA	Excellent	Good	Fair	Weak	Poor	Excellent	Good	Fair	Weak	Poor
1999	Village CS of Chester-Upland	73	1200	Chester-Upland	63	1100	10	100	0	7	43	43	7	0	2	44	37	6
1999	SUSQ-Cyber CS	0	1200	Berwick Area	51	1320	-51	-120	0	71	14	14	0	1	16	68	13	0
1999	SUSQ-Cyber CS	0	1200	Bloomsburg Area	44	1400	-44	-200	0	71	14	14	0	8	31	55	6	1
1999	SUSQ-Cyber CS	0	1200	Milton Area	29	1390	-29	-190	0	71	14	14	0	13	26	37	23	1
1999	Center for Economics and Law CS	70	1230	Philadelphia	82	1200	-12	30	0	8	60	25	5	2	13	42	29	8
1999	Imhotep CS	75	1230	Philadelphia	82	1200	-7	30	3	24	44	15	3	2	13	42	29	8
1999	Multi-cultural Academy CS	89	1330	Philadelphia	82	1200	7	130	4	24	52	20	0	2	13	42	29	8
1999	The Preparatory CS	61	1330	Philadelphia	82	1200	-21	130	1	15	71	14	0	2	13	42	29	8
1998	World Communications CS	60	1200	Philadelphia	82	1140	-22	60	0	6	37	50	7	1	8	35	36	11
1999	World Communications CS	60	1250	Philadelphia	82	1200	-22	50	0	4	65	31	0	2	13	42	29	8