

Appendix NNN-3-3
September 26, 2011

The Madison Metropolitan School District Value-Added Model

Value-Added Research Center

August 29, 2011

Overview of Value Added Results in Madison

Value added is the use of statistical technique to isolate the contributions of schools to measured student knowledge from other influences such as prior student knowledge and demographics. In practice, value added focuses on the improvement of students from one year to the next on an annual state examination or other periodic assessment. The Value-Added Research Center (VARC) of the Wisconsin Center for Education Research produces value-added measures for schools in Madison using the Wisconsin Knowledge and Concepts Examination (WKCE) as an outcome. The model controls for prior-year WKCE scores, gender, ethnicity, disability, English language learner, low-income status, parent education, and full academic year enrollment to capture the effects of schools on student performance on the WKCE. This model yields measures of student growth in schools in Madison relative to each other. VARC also produces value-added measures using the entire state of Wisconsin as a data set, which yields measures of student growth in Madison Metropolitan School District (MMSD) relative to the rest of the state.

Some of the most notable results are:

1. Value added for the entire district of Madison relative to the rest of the state is generally positive, but it differs by subject and grade. In both 2008-09 and 2009-10, and in both math and reading, the value added of Madison Metropolitan School District was positive in more grades than it was negative, and the average value added across grades was positive in both subjects in both years. There are variations across grades and subjects, however. In grade 4, value-added is significantly positive in both years in reading and significantly negative in both years in math. In contrast, value-added in math is significantly positive--to a very substantial extent--in grade 7. Some of these variations may be the result of the extent to which instruction in those grades facilitate student learning on tested material relative to non-tested material. Overall, between November 2009 and November 2010, value-added for MMSD as a whole relative to the state was very slightly above average in math and substantially above average in reading. The section "Results from the Wisconsin Value-Added Model" present these results in detail.

2. The variance of value added across schools is generally smaller in Madison than in the state of Wisconsin as a whole, specifically in math. In other words, at least in terms of what is measured by value added, the extent to which schools differ from each other in Madison is smaller than the extent to which schools differ from each other elsewhere in Wisconsin. This appears to be more strongly the case in the middle school grades than in the elementary grades. Some of this result may be an artifact of schools in Madison being relatively large; when schools are large, they encompass more classrooms per grade, leading to more across-classroom variance being within-school rather than across-school. More of this result may be that while the variance across schools in Madison is entirely within one district, the variance across schools for the rest of the state is across many districts, and so differences in district policies will likely generate more variance across the entire state. The section "Results from the Wisconsin Value-Added Model" present results on the variance of value added from the statewide value-added model. This result is also evident in the charts in the "School Value-Added Charts from the MMSD Value-Added Model" section: one can see that the majority of schools' confidence intervals cross

the district average, which means that we cannot reject the hypothesis that these schools' values added are not different from the district average.

Even with a relatively small variance across schools in the district in general, several individual schools have values added that are statistically significantly greater or less than the district average. At the elementary level, both Lake View and Randall have values added in both reading and math that are significantly greater than the district average. In math, Marquette, Nuestro Mundo, Shorewood Hills, and Van Hise also have values added that are significantly greater than the district average. Values added are lower than the district average in math at Crestwood, Hawthorne, Kennedy, and Stephens, and in reading at Allis. At the middle school level, value added in reading is greater than the district average at Toki and lower than the district average at Black Hawk and Sennett. Value added in math is lower than the district average at Toki and Whitehorse.

3. Gaps in student improvement persist across subgroups of students. The value-added model measures gaps in student growth over time by race, gender, English language learner, and several other subgroups. The gaps are overall gaps, *not* gaps relative to the rest of the state. These gaps are especially informative because they are partial coefficients. These measure the black/white, ELL/non-ELL, or high-school/college-graduate-parent gaps, controlling for all variables available, including both demographic variables and schools attended. If one wanted to measure the combined effect of being both ELL and Hispanic relative to non-ELL and white, one would add the ELL/non-ELL gap to the Hispanic/white gap to find the combined effect. The gaps are within-school gaps, based on comparison of students in different subgroups who are in the same schools; consequently, these gaps do not include any effects of students of different subgroups sorting into different schools, and reflect within-school differences only. There does not appear to be an evident trend over time in gaps by race, low-income status, and parent education measured by the value-added model. The section "Coefficients from the MMSD Value-Added Model" present these results.

4. The gap in student improvement by English language learner, race, or low-income status usually does not differ substantively across schools; that between students with disabilities and students without disabilities sometimes does differ across schools. This can be seen in the subgroup value-added results across schools, which appear in the Appendix. There are some schools where value-added for students with disabilities differs substantively from overall value-added. Some of these differences may be due to differences in the composition of students with disabilities across schools, although the model already controls for overall differences between students with learning disabilities, students with speech disabilities, and students with all other disabilities. In contrast, value-added for black, Hispanic, ELL, or economically disadvantaged students is usually very close to overall value added.

Value added for students with disabilities is greater than the school's overall value added in math at Falk and Whitehorse and in reading at Marquette; it is lower than the school's overall value added in math at O'Keefe and Sennett and in reading at Allis, Schenk, and Thoreau. Value added in math for Hispanic students is lower than the school's overall value added at Lincoln, and greater than the school's overall value added at Nuestro Mundo. Value added in math is also higher for ELL and low-income students than it is for the school overall at Nuestro Mundo.

Results from the Wisconsin Value-Added Model

The Value-Added Research Center (VARC) not only produces results for Madison Metropolitan School District (MMSD) using a model specific to the district, but also for the state of Wisconsin as a whole using a model for the entire state. The two models are different in several aspects.

The most conspicuous difference between the two models is in the benchmark for comparison. In the district model, the value-added results are benchmarked to the district average, so that the value added of MMSD itself is set to zero. In the state model, in contrast, the value-added results are benchmarked to the state average. As a result, MMSD has a value added measure that is equal to the average growth of students in MMSD relative to the average growth of observably similar students across the entire state. A positive value added means that students in MMSD are growing faster than similar students across the entire state, while a negative value added means that students in MMSD are growing more slowly. The state model, unlike the district model, can provide context to make comparisons between MMSD and the rest of the state.

A second important difference between the two models is that the model for MMSD is parameterized differently from that for the state. Since there is a wider range of data available for MMSD than there is for the entire state, it is possible to include variables in the MMSD model that are not included in the state model, such as parents' education or language spoken at home. However, even if the variables were the same in the MMSD and state models, the results yielded would still be slightly different. This is because the controls for the different variables included in the model--the previous year's test scores, demographics, etc.--are determined by analyzing the relationship between those variables and the current year's test score. Those relationships will be different statewide than they are within MMSD; as a result, while the controls for the state model are fitted for the entire state, those for the MMSD model will be fitted specifically to MMSD.

The table below presents the district-level value added of MMSD as a whole in the state value-added model. Unlike the results from the MMSD value-added model, which are presented as a two-year moving average, separate results are presented for both 2008-09 and 2009-10. Like the other value-added results, the value-added measure is equal to the average growth of students on the WKCE in MMSD, in this case relative to observably similar students across the rest of the state. For example, in 2009-10, value added for MMSD for third grade was 0.89. This means that students in MMSD gained, on average, 0.89 more points on the WKCE from third grade in November 2009 to fourth grade in November 2010 than observably similar students did across the entire state of Wisconsin. Note that the standard error on this value-added measure is 0.52. In general, a value-added measure is statistically significant if it is at least two standard deviations greater than or less than zero. Since 0.89 is not greater than two times 0.52, or 1.04, then this value-added result is not statistically significant. This means that we cannot reject with 95 percent confidence that third-grade value added for MMSD was zero. (In contrast, third-grade reading value added in 2009-10, which was 1.31, is greater than two times is standard deviation of 0.55, or 1.10. In this case, third-grade reading value-added is statistically significant, and we *can* reject with 95 percent confidence that value-added for MMSD was zero.)

Overall value added, MMSD, from state VA model

	Nov. 2009-Nov. 2010		Nov. 2008-Nov. 2009	
Math	VA	Std. Err.	VA	Std. Err
Grade 3	0.89	(0.52)	1.07	(0.60)
Grade 4	-2.72	(0.62)	-1.82	(0.71)
Grade 5	-3.91	(0.57)	-0.44	(0.60)
Grade 6	3.60	(0.48)	0.65	(0.52)
Grade 7	3.28	(0.58)	3.63	(0.59)
Reading	VA	Std. Err.	VA	Std. Err
Grade 3	1.31	(0.55)	0.34	(0.69)
Grade 4	2.59	(0.51)	3.89	(0.64)
Grade 5	-0.42	(0.52)	-1.47	(0.68)
Grade 6	4.64	(0.56)	2.78	(0.50)
Grade 7	-1.07	(0.58)	0.71	(0.46)

Another statistic of note from the state value-added model is the standard deviation of school-level value added within the district. This is a measure of the extent to which value added differs from school to school; a high standard deviation means that schools differ substantially from each other, while a low standard deviation means that schools do not differ by much in terms of value added. In general, the standard deviation of value-added in Madison is low compared to that across the rest of the state, although only by a relatively small margin in reading in 2009-10. It is important to note, however, that there are two aspects of this issue that might make the variance in Madison relative to the state as a whole seem smaller than it is. First, schools in Madison are relatively large, so that each grade contains more classrooms; as a result, more of the across-classroom variance is within-school rather than across-school. Second, while Madison is entirely one district, the state of Wisconsin spans multiple districts, so the variance of value added across the state of Wisconsin will include variance in policies across districts.

Standard deviation of value added, MMSD, from state VA model

	Nov. 2009-Nov. 2010		Nov. 2008-Nov. 2009	
Math	MMSD	State	MMSD	State
Grade 3	4.75	6.86	3.77	5.80
Grade 4	8.29	8.61	5.81	7.45
Grade 5	6.74	7.61	4.56	6.28
Grade 6	2.25	4.54	4.35	5.06
Grade 7	3.73	5.60	4.59	5.42
Reading	MMSD	State	MMSD	State
Grade 3	5.68	4.93	6.20	5.14
Grade 4	4.74	4.90	1.79	5.15
Grade 5	4.70	4.93	3.11	4.91
Grade 6	3.72	4.04	2.44	4.49
Grade 7	3.38	4.13	1.93	4.54

Distribution of Value Added in MMSD from the Wisconsin Value Added Model

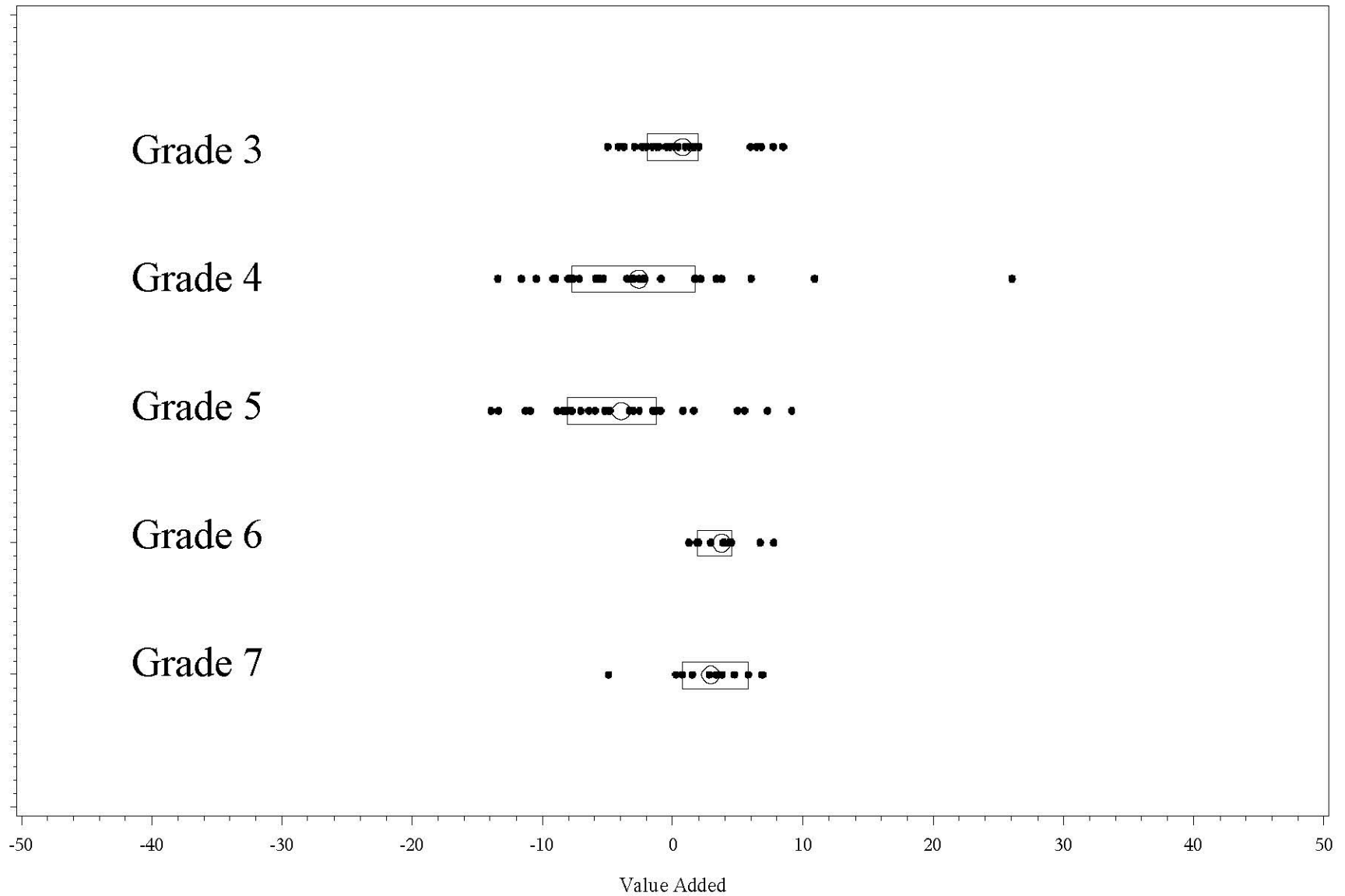
The following pages present graphs of value added from the value-added model for the state of Wisconsin. There are graphs for math and reading, for both Madison and for the state of Wisconsin excluding Milwaukee and Madison.

The first graph plots math value-added from the state value-added model at the grade level for MMSD. Each dot represents a single school in MMSD. There are five ranges of dots, corresponding to each of the grades between grade 3 and grade 7. At the center of each range is a box; the width of this box is equal to the range between the 25th percentile and the 75th percentile in Madison. The range of dots presents one measure of the variance of value-added in MMSD, from the lowest value-added school to the highest value-added school. The width of the box presents another measure of variance of value-added, from the 25th percentile to the 75th percentile. At the absolute center of each range is a circle, which is equal to the average value-added in Madison.

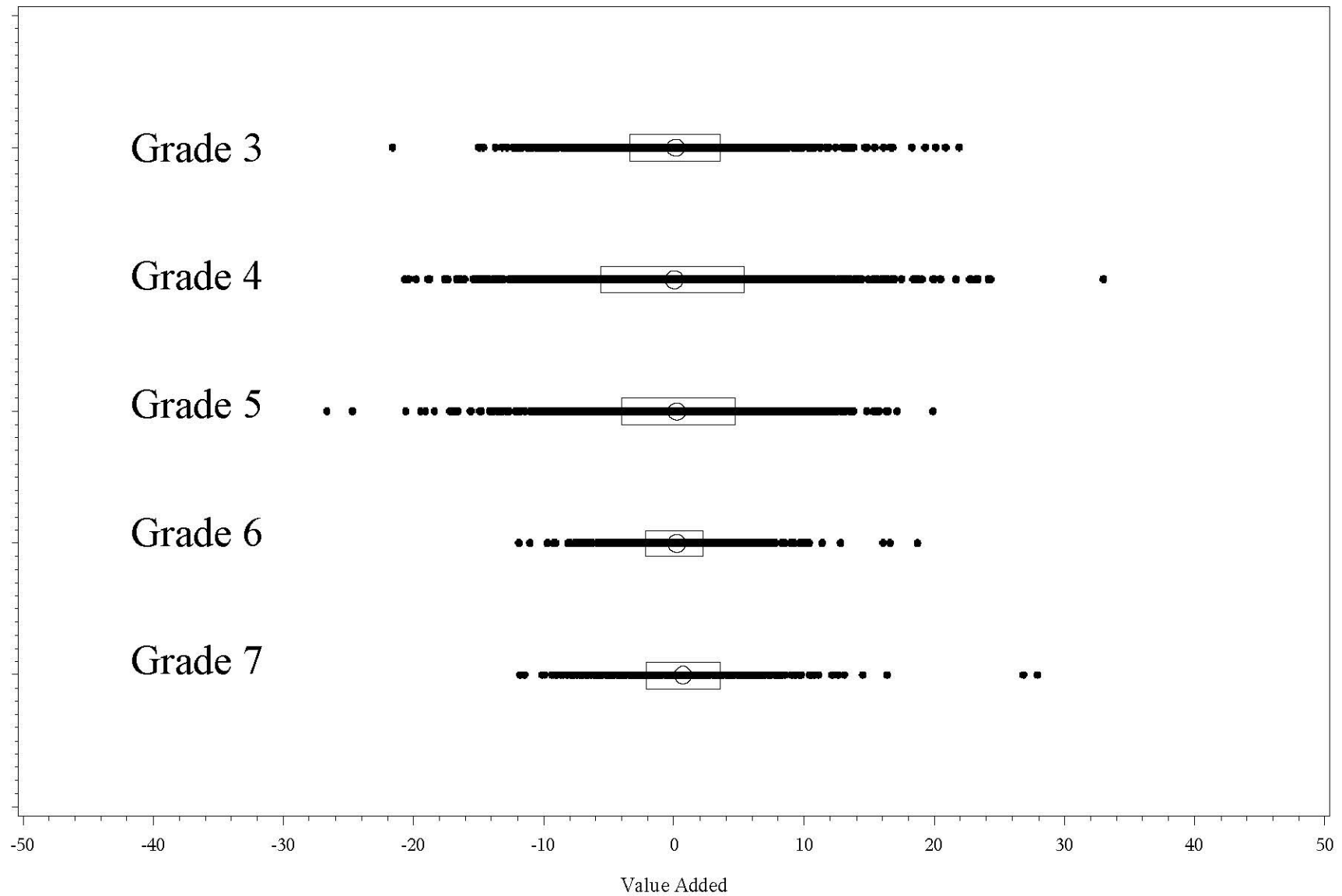
The second graph plots math value-added from the state value-added model at the grade level for the state of Wisconsin, excluding Madison and Milwaukee. These plots can be interpreted in the same way as the plots for Madison, except that each dot represents a single school in Wisconsin outside of Madison and Milwaukee, and the width of each box is the range between the 25th and 75th percentile across schools in Wisconsin outside of Madison and Milwaukee. One can compare the average value-added in Madison with that of the rest of the state by comparing the circles in the Madison chart to their analogues in the chart for the rest of the state. Similarly, one can compare the variance or "spread" of value-added in Madison with that of the rest of the state by comparing the width of the range of dots (from minimum to maximum) or the width of the box (from the 25th to the 75th percentile) between the charts in Madison and the charts for the rest of the state. Interestingly, much of the tighter variance in Madison relative to the rest of the state seems to exist outside the 25th to 75th percentiles rather than within; while the boxes often appear to be of comparable size between Madison and the rest of the state, the overall range for the rest of the state typically appears much wider.

The third and fourth graphs present analogous graphs for reading at the grade level. The fifth and sixth grades present graphs for the school level.

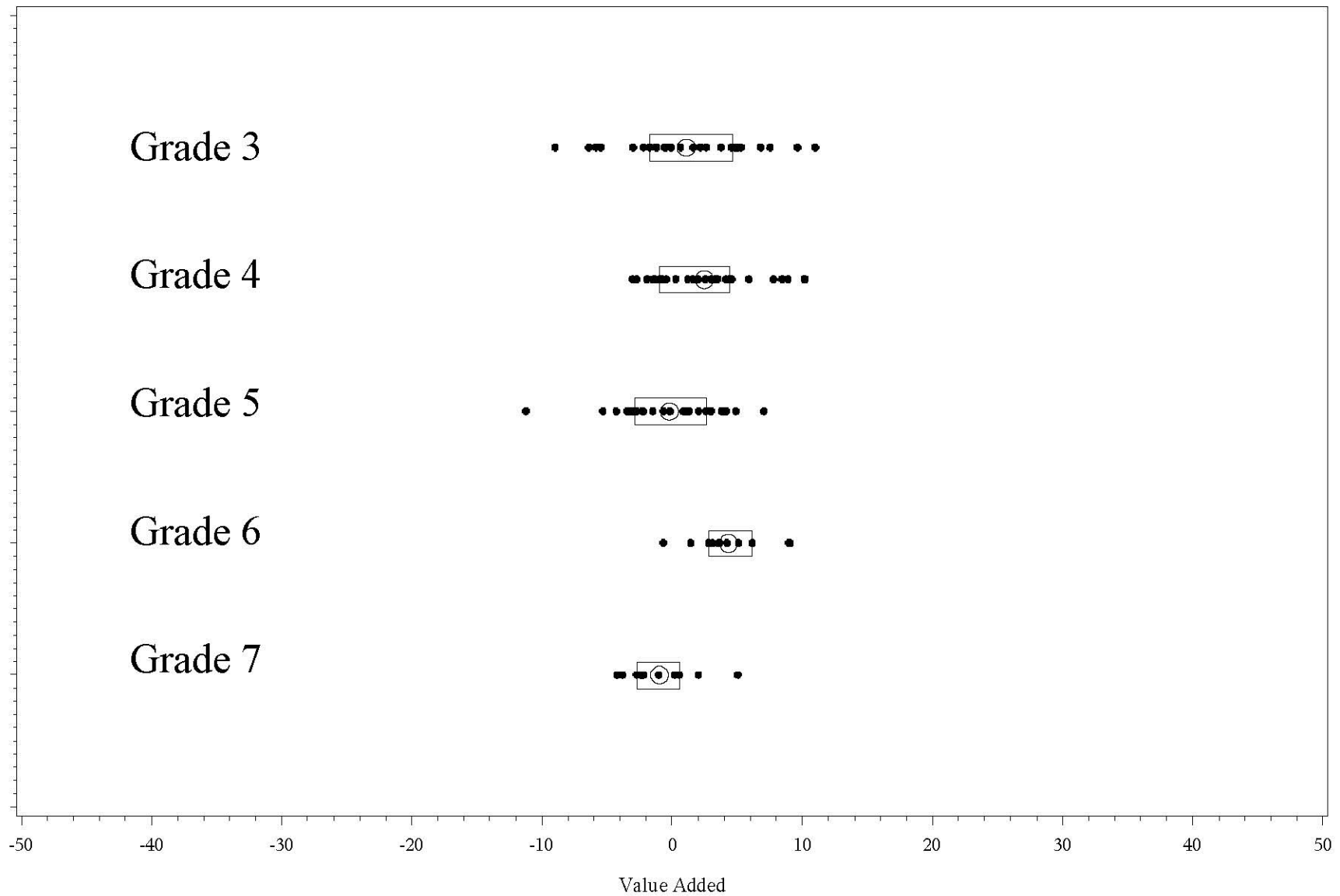
VA in MMSD by school vs. state average, math



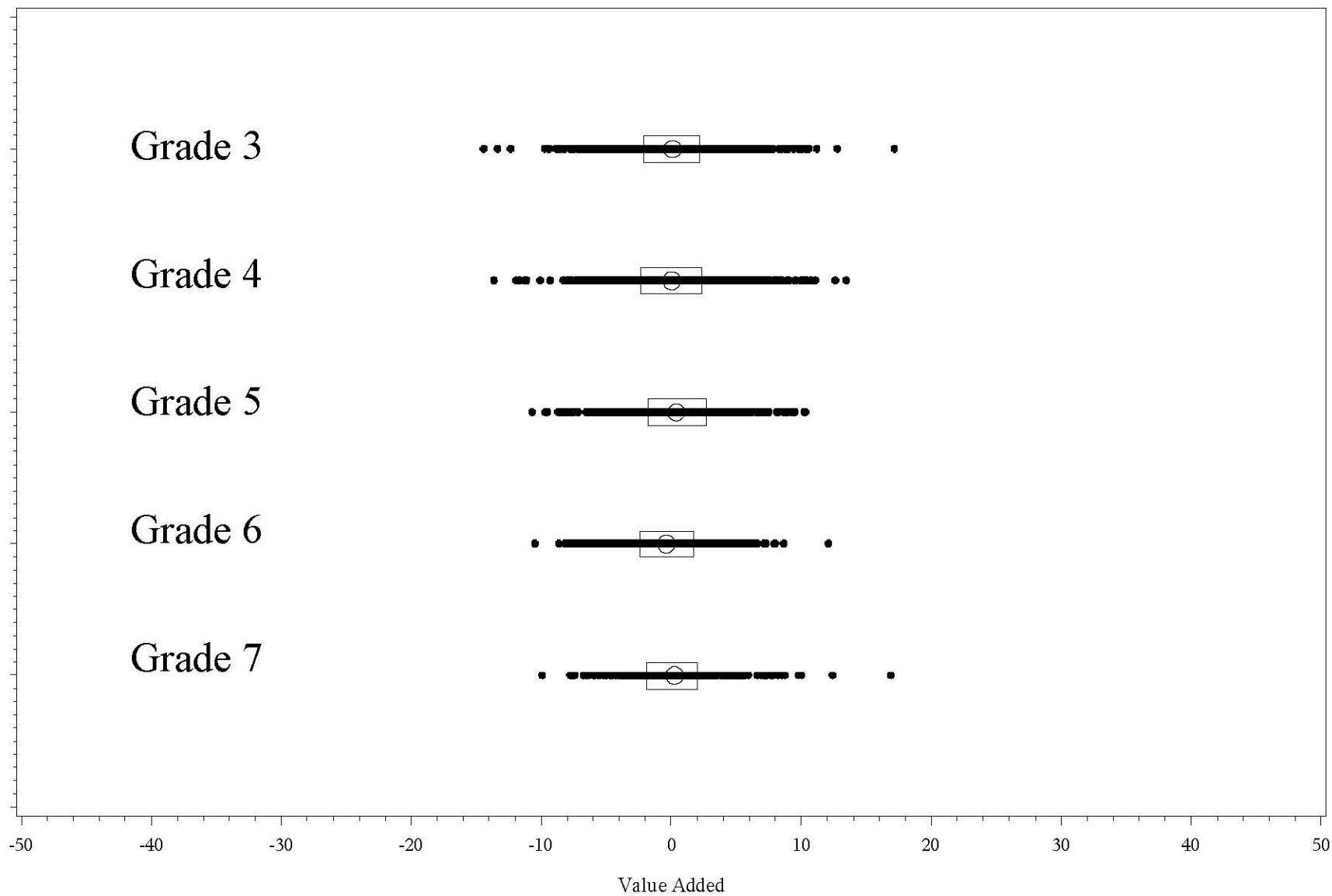
VA in rest of WI (excl. MPS) by school vs. state average, math



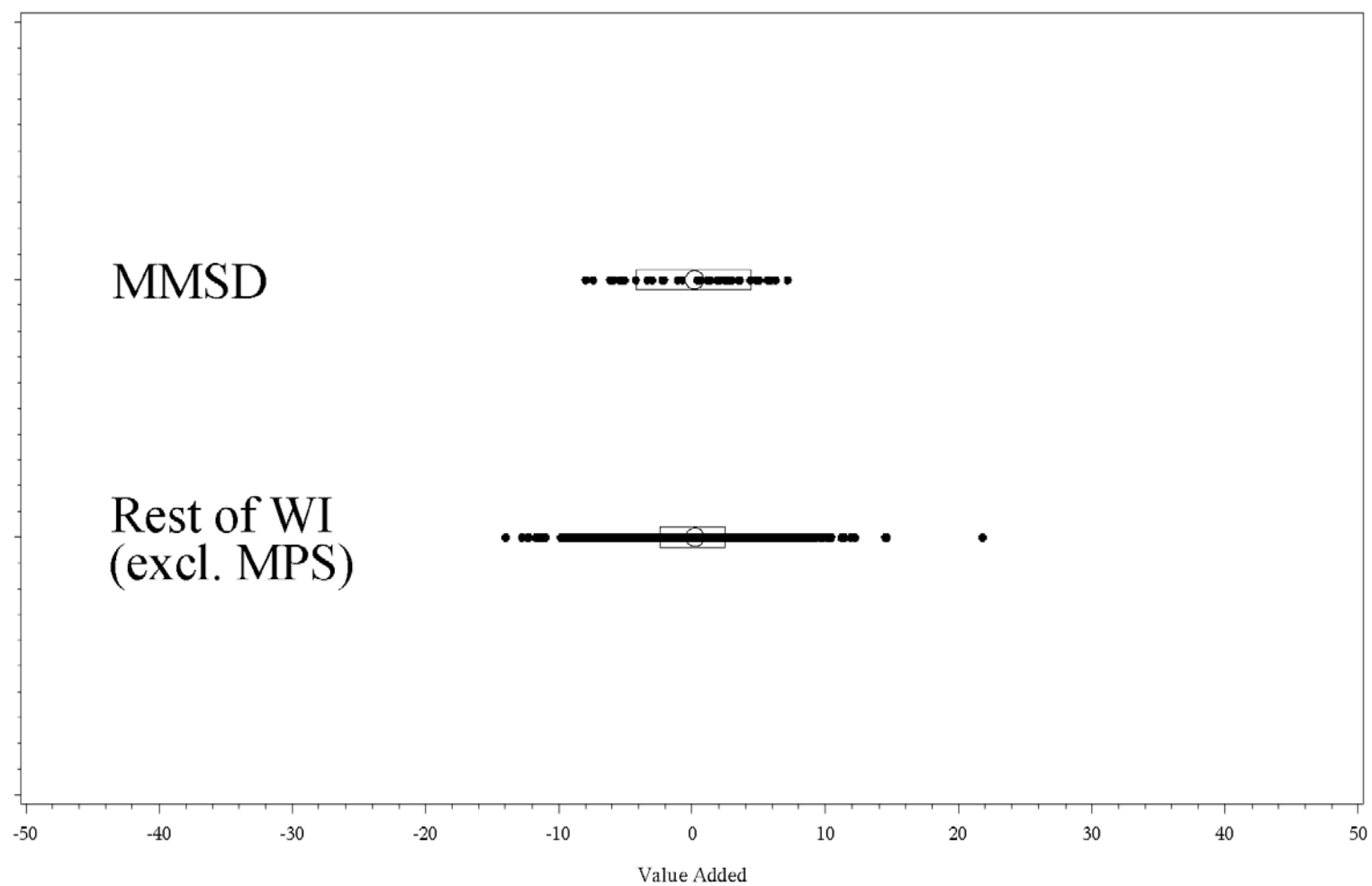
VA in MMSD by school vs. state average, reading



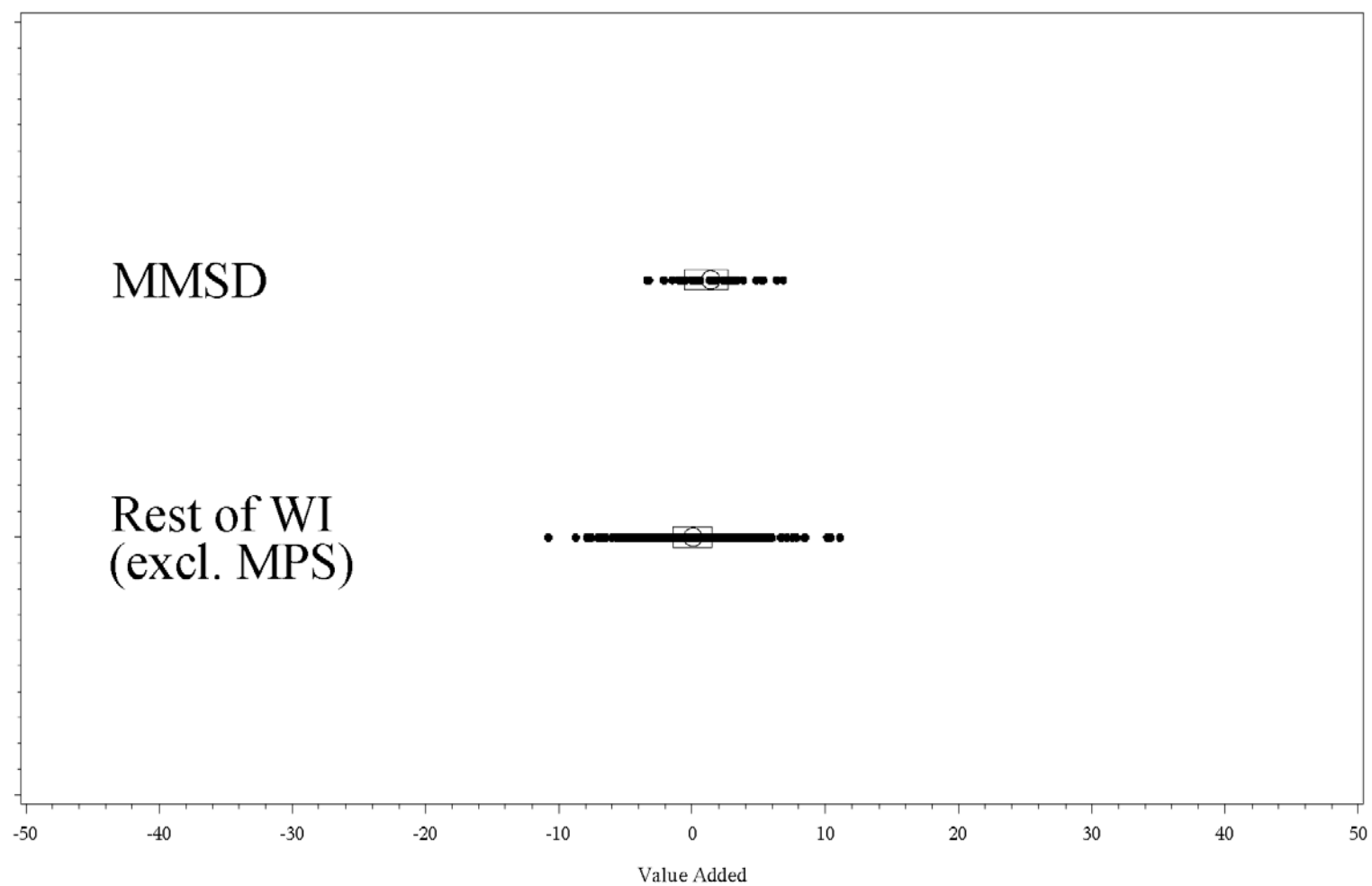
VA in rest of WI (excl. MPS) by school vs. state average, reading



VA at school level vs. state average, math



VA at school level vs. state average, reading



Quadrant Charts for MMSD from the Wisconsin Value-Added Model

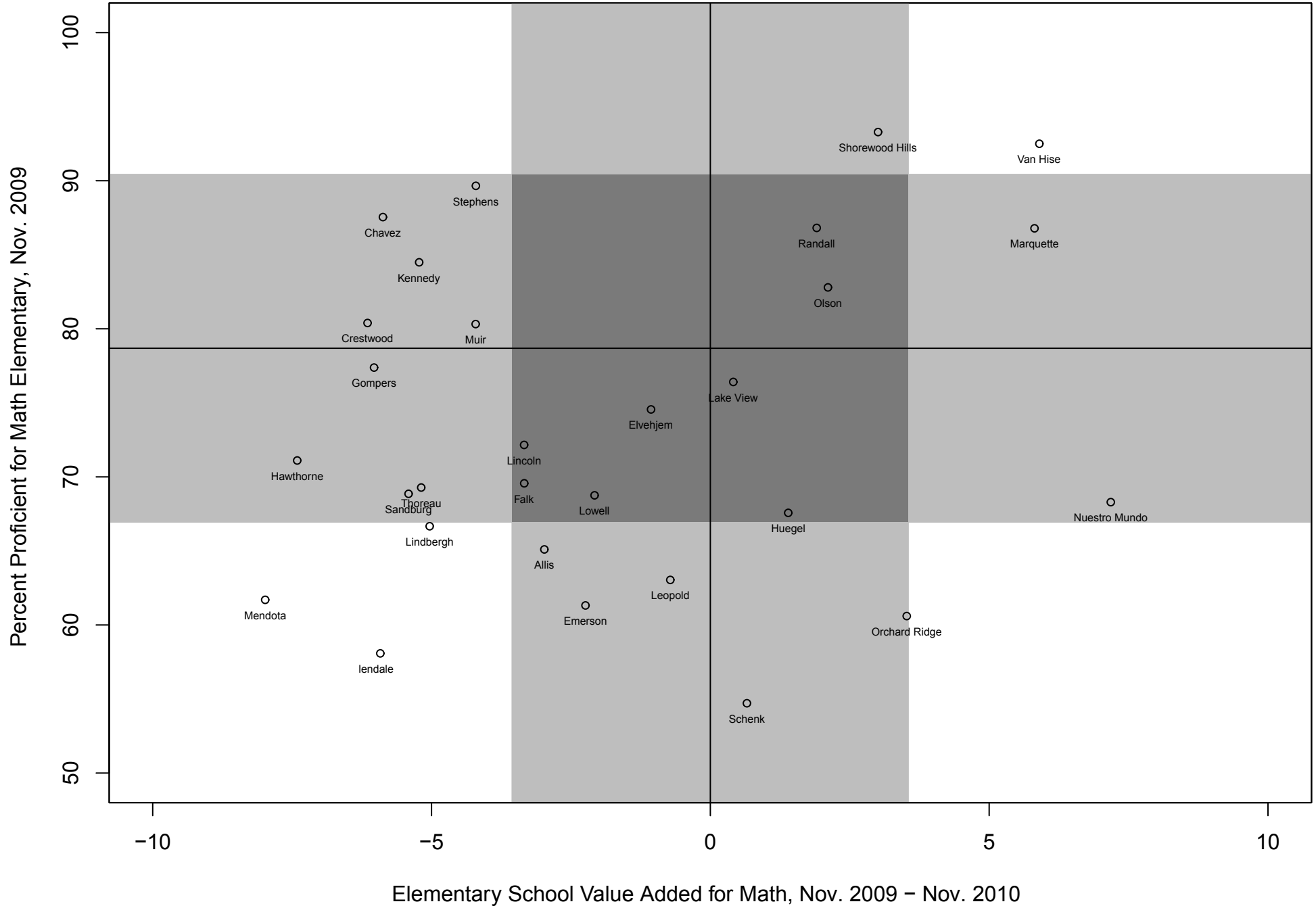
The following tables are quadrant charts that present value added and proficiency rates for individual schools in Madison from the Wisconsin state value-added model. A quadrant chart is useful because it presents a measure of proficiency (which measures student knowledge at a given point in time, in this case November 2009) alongside a measure of growth (which measures student improvement from one point in time to the next, in this case from November 2009 to November 2010).

The horizontal axis of the quadrant charts is value-added, measured from the Wisconsin value-added model. The center of the horizontal axis is set to zero, which is the average value-added for the entire state of Wisconsin. With the state rather than the district average value-added set to zero, it is possible for Madison schools, as a group, to have a value added that is greater than or less than zero. Extending to the left and right of zero is a gray area, representing a range of one standard deviation below the state average and one standard deviation above the state average for value added. This gray area represents approximately the middle two thirds of value added for the state of Wisconsin; areas to the right of the gray area correspond approximately to the top sixth of value added, while areas to the left of the gray area correspond approximately to the lowest sixth of value added.

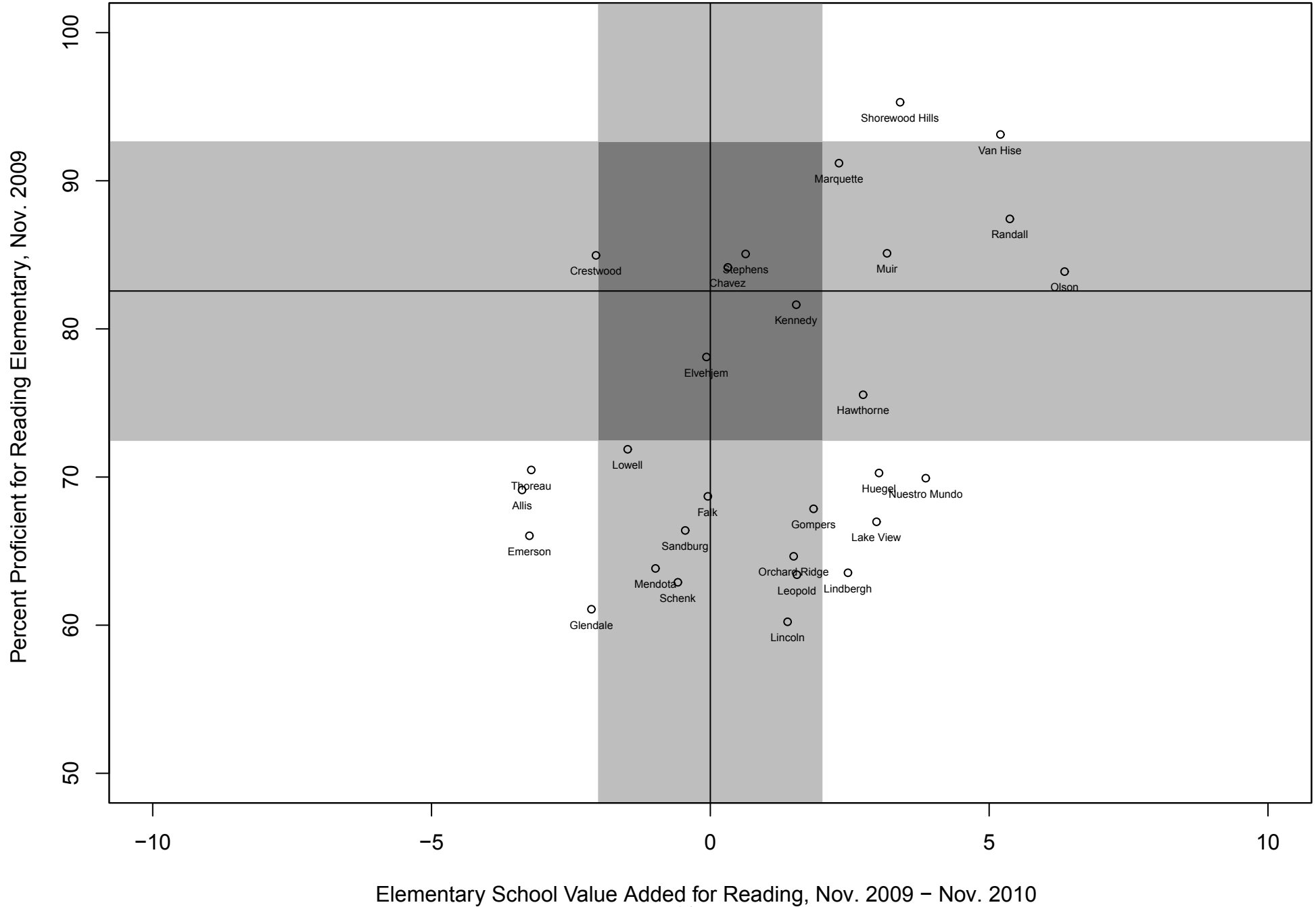
The vertical axis is analogous to the horizontal axis, except that it measures the proficiency rate rather than value added. At the center of the vertical axis is the average proficiency rate for the entire state of Wisconsin in November 2009, which is 79% in math and 83% in reading. Extending up and down from zero is another gray area, representing a range of one standard deviation above the state average and one standard deviation below the state average in proficiency. This gray area should include approximately the middle two-thirds of schools in Wisconsin by proficiency rate; about one-sixth will be below the gray area and about one-sixth will be above it.

It is important to note that the school value-added results from the Wisconsin model cover a shorter span of time than the MMSD model, and may be different from the results in the MMSD model. The results from the Wisconsin model cover one year of growth: that from November 2009 to November 2010. In contrast, the results from the MMSD model average two years of growth: the year from November 2009 to November 2010, as well as the previous growth year from November 2008 to November 2009. Since the MMSD model covers an extra growth year, the one-year results from the Wisconsin model presented in the following quadrant graphs will be different from the two-year results from the MMSD model presented later in the report.

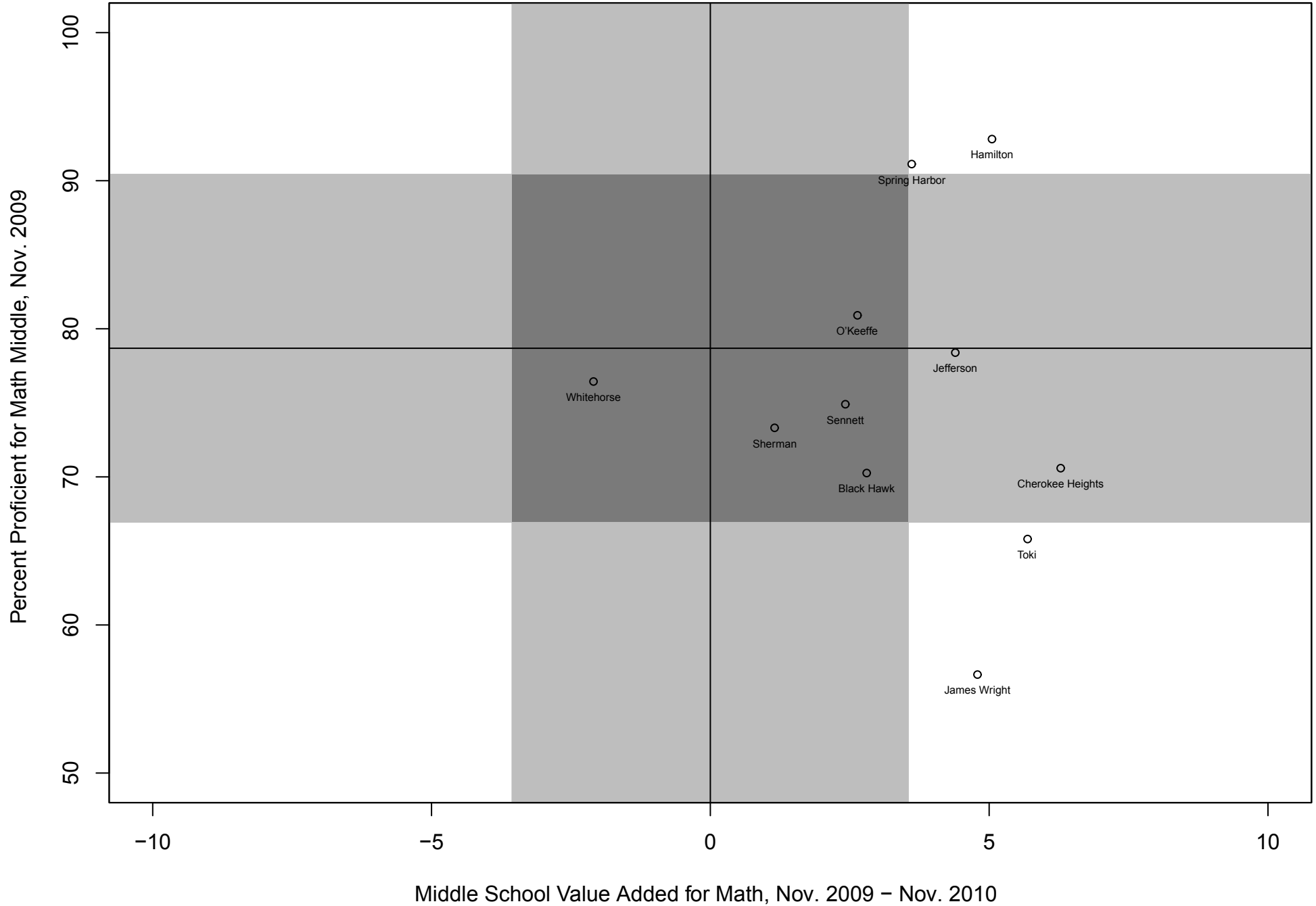
Quadrant Table from the State VA Model Elementary School Math, MMSD Schools vs. State Average



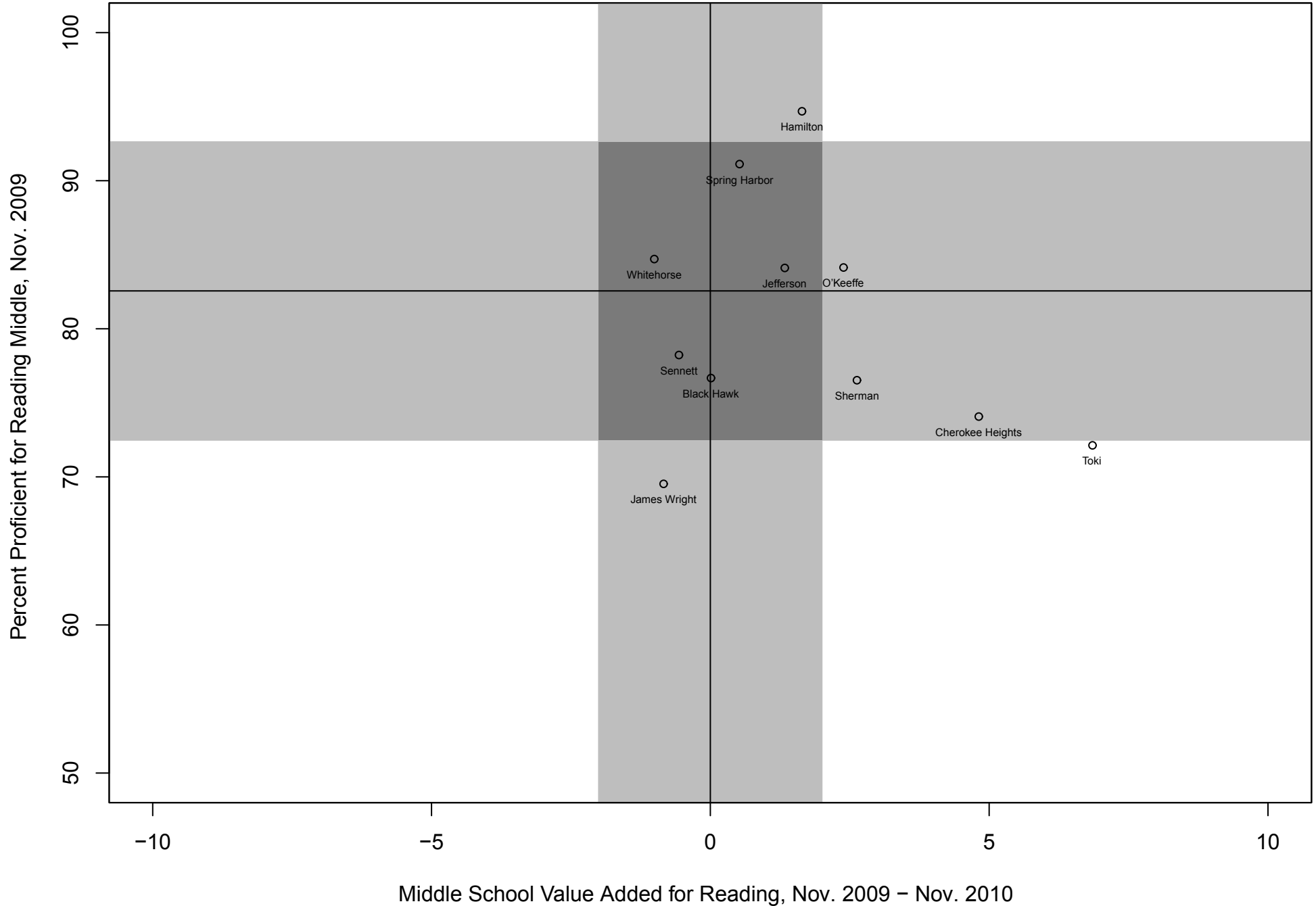
Quadrant Table from the State VA Model
 Elementary School Reading, MMSD Schools vs. State Average



Quadrant Table from the State VA Model
Middle School Math, MMSD Schools vs. State Average



Quadrant Table from the State VA Model
Middle School Reading, MMSD Schools vs. State Average



School Value-Added Charts from the MMSD Value-Added Model

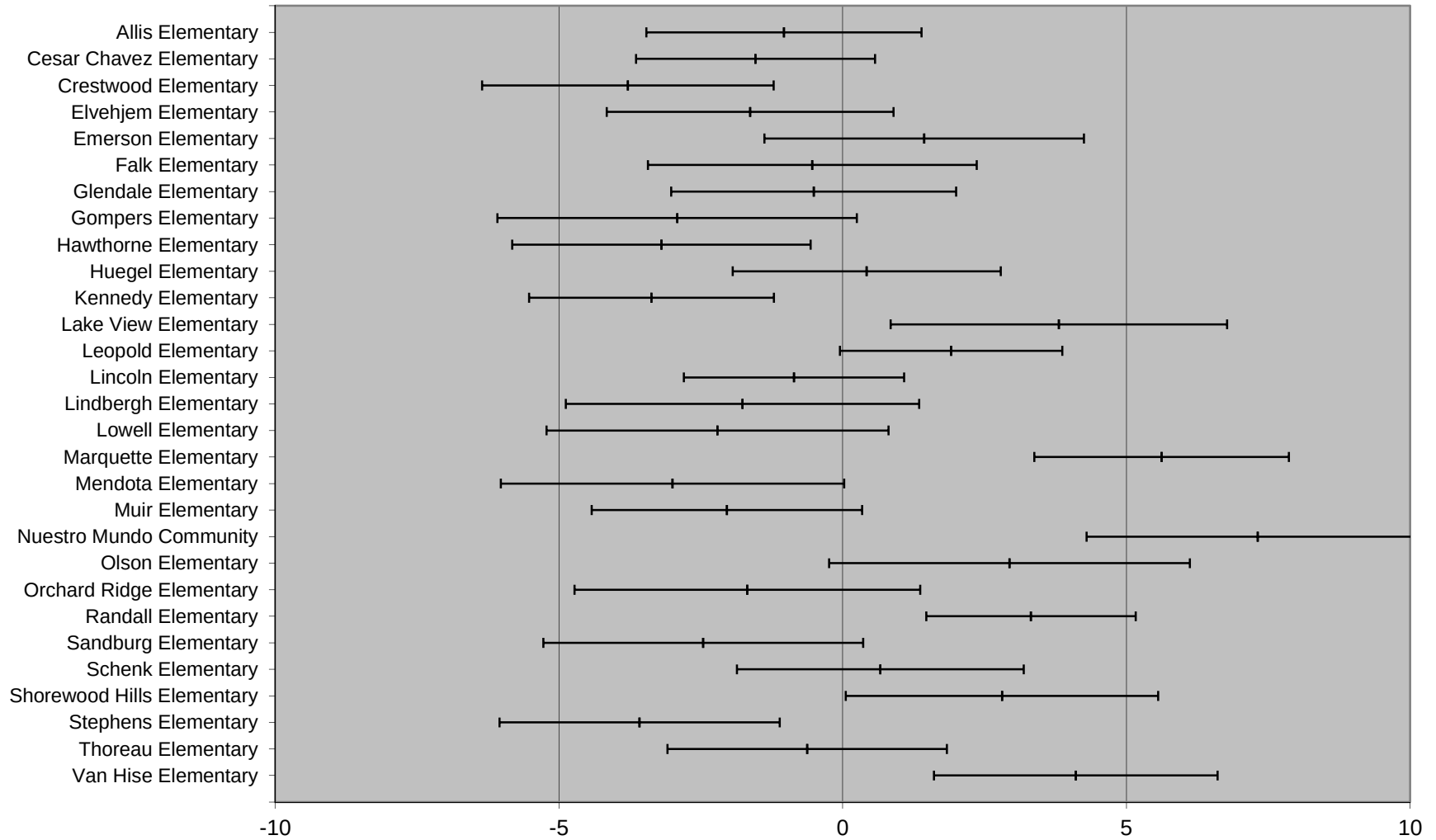
The charts on the following pages present school-level value added for schools in Madison Metropolitan School District (MMSD) over the period between November 2008 to November 2010. These results use the model for MMSD; the benchmark is the district average, which is set to zero. There are four charts: one for elementary-school math, one for elementary-school reading, one for middle-school math, and one for middle-school reading.

Each chart has a set of bars, with each bar corresponding to a school in MMSD. There are 29 bars in the charts of elementary-school value added (with each bar corresponding to a school that serves grade three, four, or five), and 11 bars in the charts of middle-school value added (with each bar corresponding to a school that serves grade six or seven). At the center of each bar is the best estimate of that school's value added. For example, consider a school with a bar that stretches from -1 to +3, with a center point at +1. This means that our best estimate of that school's value added is +1. Students at that school gained 1 point more on the WKCE than observationally similar students across the district from one year to the next. This includes students who were at the school either from November 2008 to November 2009 or from November 2009 to November 2010; the extra point is gained over the course of a single year, either the earlier or the later November-to-November interval.

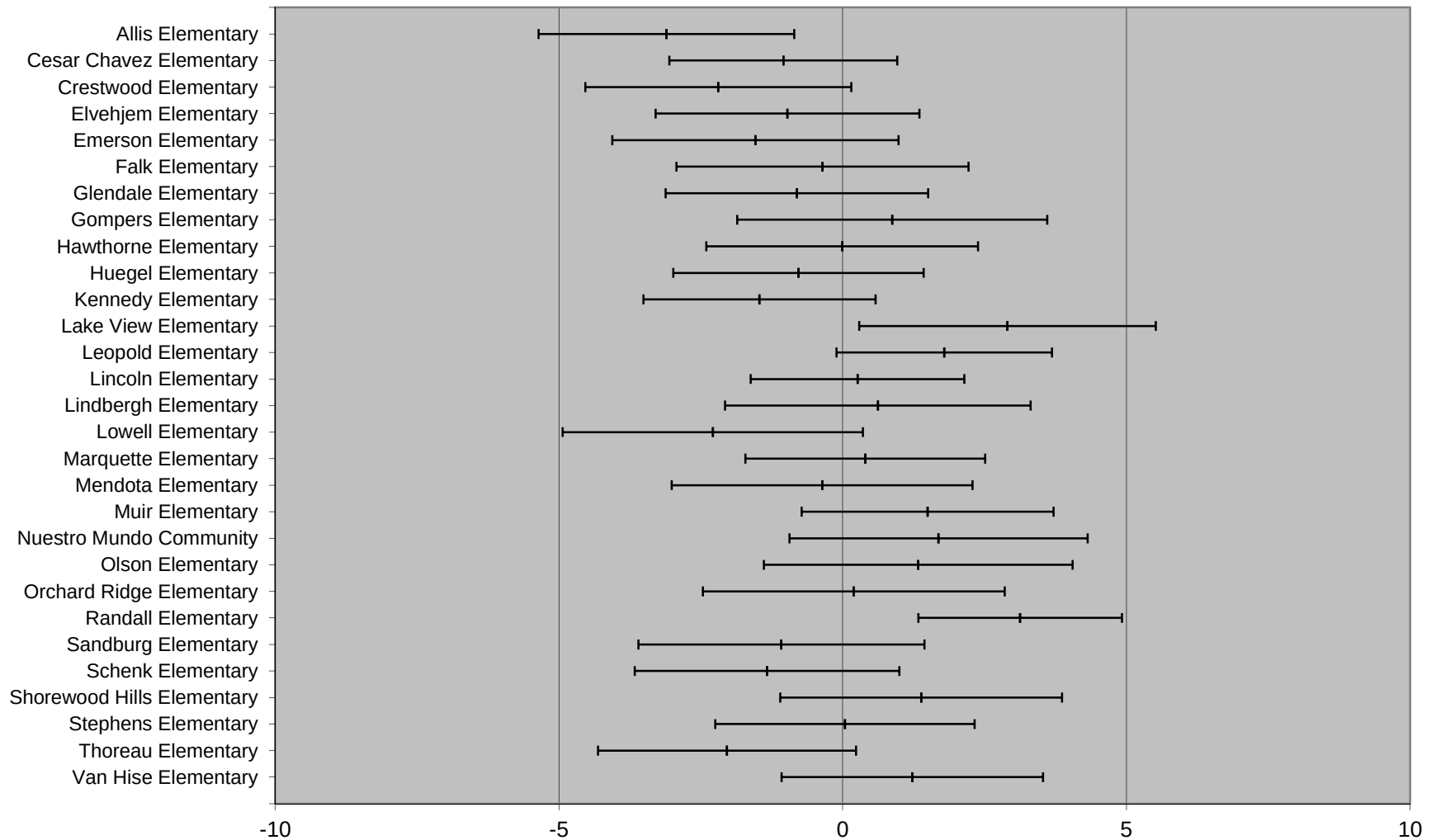
Extending to the left and right of that center point is a 95 percent confidence range of value added. We present a confidence range because value added is based on a finite number of students, which opens up the possibility of randomness: students at a school may be growing more quickly because of something happening at the school, or it could simply be that the school had a fast-growing or slow-growing group of students by chance. We can rule out with 95 percent confidence that the school's value added is outside the bar. In the case of a bar that stretches from -1 to +3, we can be 95 percent confident that the school's value added is not lower than -1, nor is it greater than +3. When the bar is entirely to the right of zero, we often say that value added is positive and *statistically significant*: that students at the school grew more quickly than the district average, to an extent that is unlikely to be attributable to randomness or chance. Similarly, when the bar is entirely to the left of zero, we often say that value added is negative and statistically significant: that students at the school grew more slowly than the district average, to an extent that is unlikely to be attributable to chance.

It is important to note that the school value-added results from the MMSD model cover a longer span of time than the Wisconsin model, and may be different from the results in the Wisconsin model. The results from the Wisconsin model cover one year of growth: that from November 2009 to November 2010. In contrast, the results from the MMSD model average two years of growth: the year from November 2009 to November 2010, as well as the previous growth year from November 2008 to November 2009. Since the MMSD model covers an extra growth year, the two-year results from the MMSD model presented in the following charts will be different from the one-year results from the Wisconsin model presented earlier in the report.

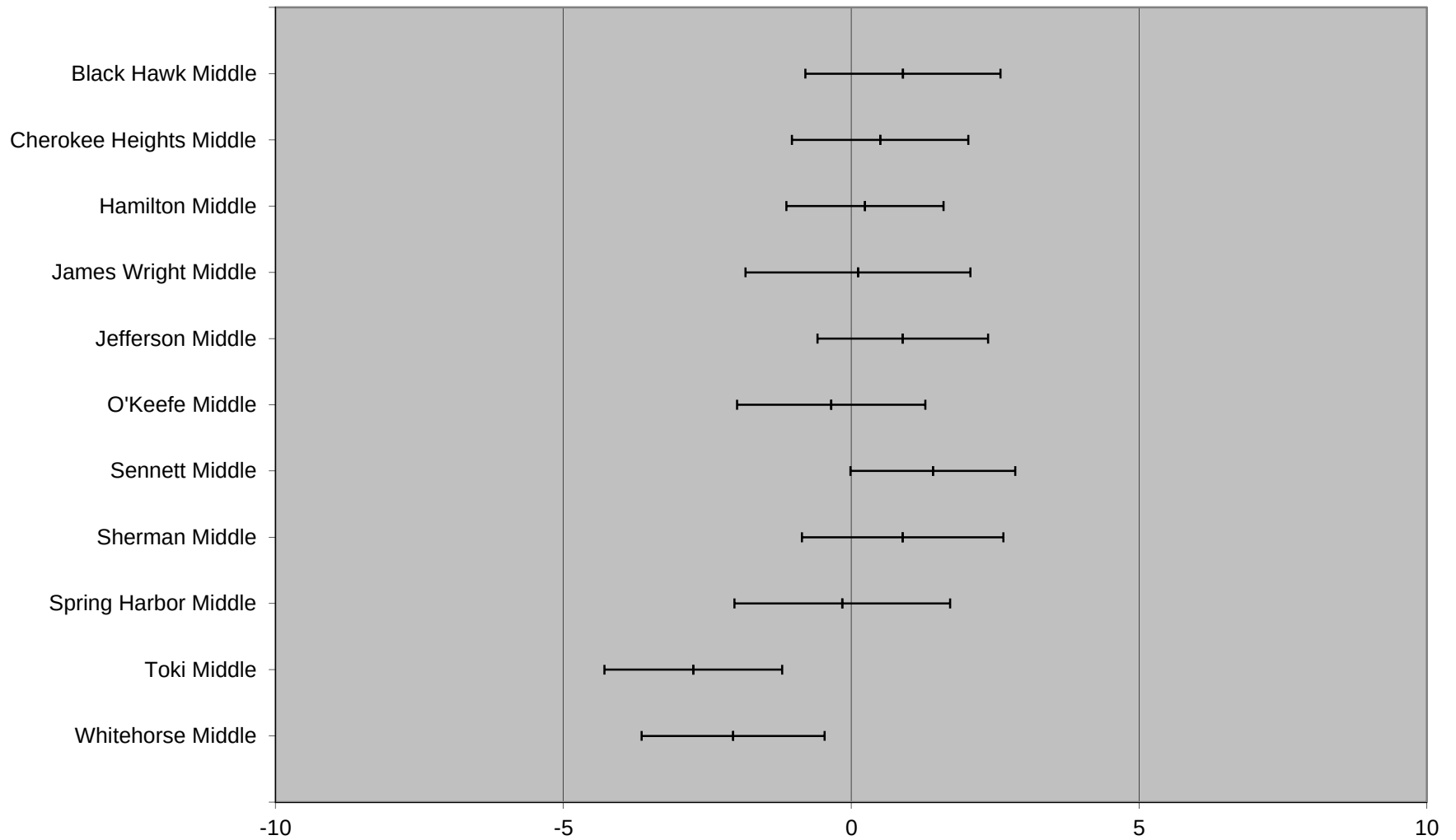
Math Value Added vs. District Average, Elementary Schools, Nov. 2008-Nov. 2010



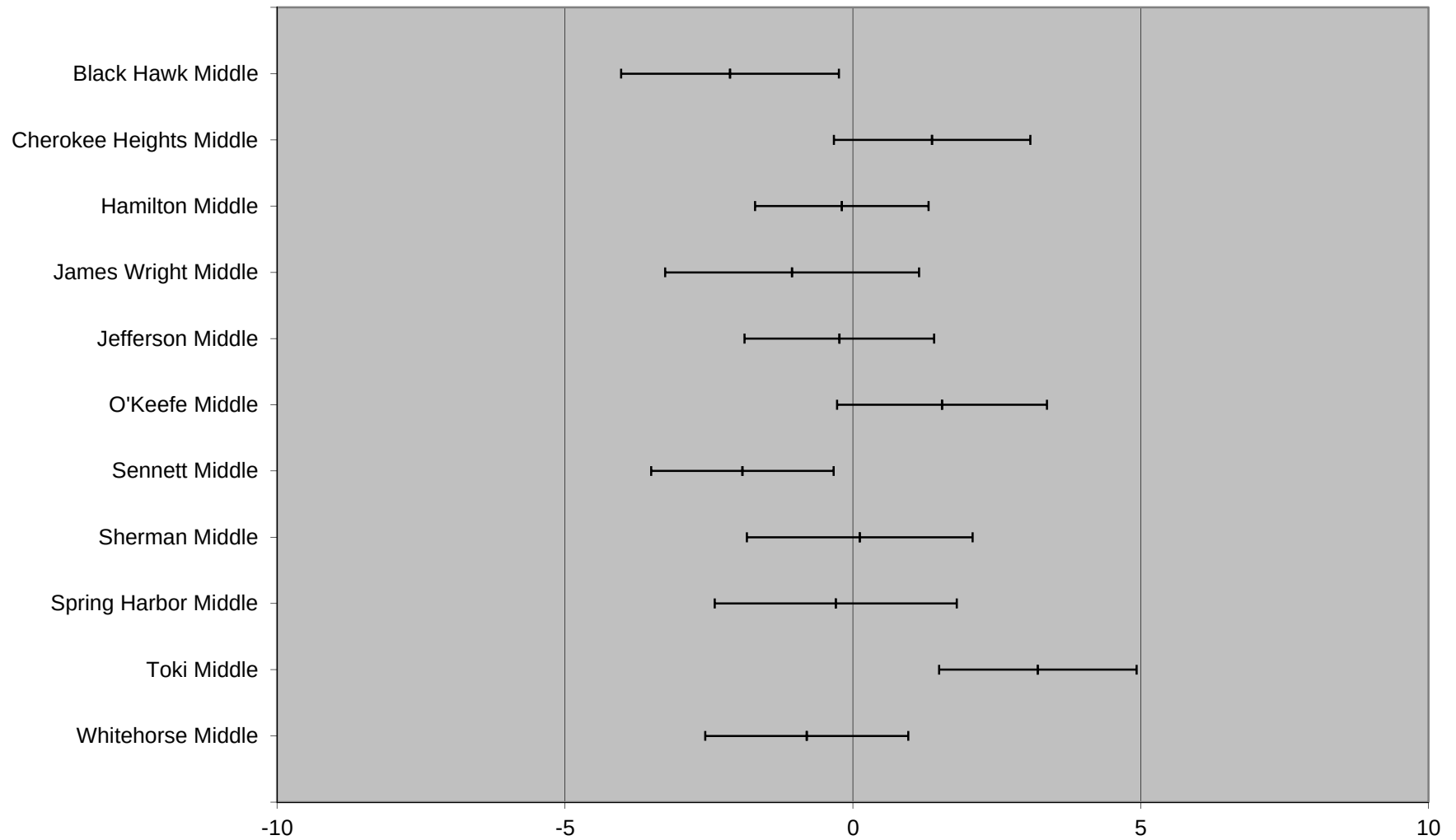
Reading Value Added vs. District Average, Elementary Schools, Nov. 2008-Nov. 2010



Math Value Added vs. District Average, Middle Schools, Nov. 2008-Nov. 2010



Reading Value Added vs. District Average, Middle Schools, Nov. 2008-Nov. 2010



Coefficients from the MMSD Value-Added Model

The following charts present the coefficients used to make adjustments for pretest scores and student characteristics when measuring value added in Madison. These coefficients come from a statistical analysis that compares students in the same schools with each other. The result is a district-wide measure of intra-school differences across students of different demographic groups, controlling for all other measurable characteristics.

The coefficients on student characteristics measure the statistical relationship between test score improvement and student characteristics. Often, these are relative to an omitted student characteristic. For example, the race characteristics are listed as Asian, black, Hispanic, Native American, and biracial, with white as the omitted. Note that the coefficient in elementary school math on black for elementary grades in math for November 2008 to November 2010 is -4.4. This implies that black elementary school students gained about 4 points less on the WKCE than observationally similar white students across MMSD.

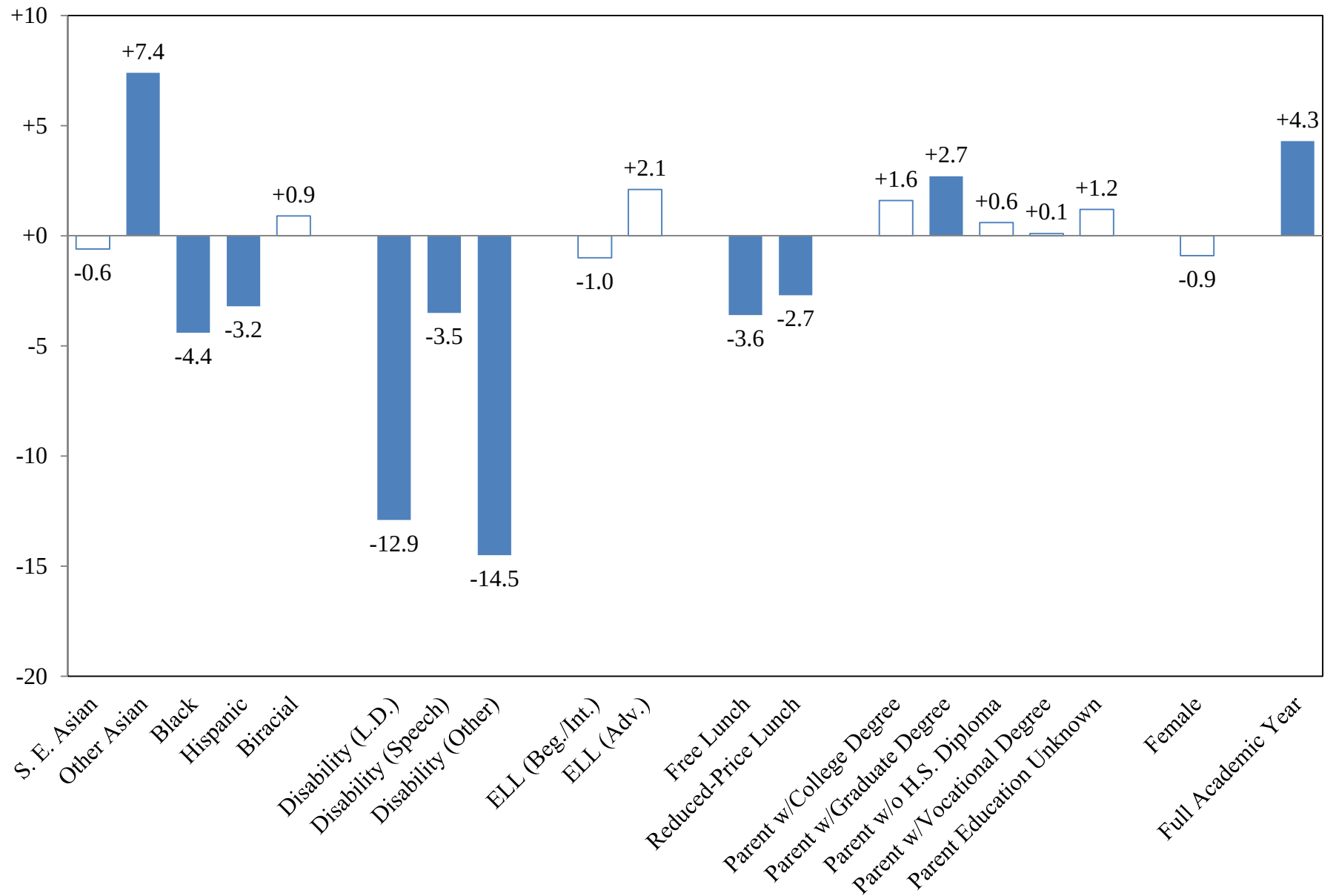
The omitted student characteristics are:

- Male (coefficient on female measured relative to male);
- White (coefficient on black, Hispanic, etc. measured relative to white);
- Without disability (coefficients on disability measured relative to without disability);
- Not ELL (coefficients on ELL measured relative to non-ELL);
- No free or reduced-price lunch (coefficients on FRL measured relative to non-FRL);
- Parent with high school diploma (coefficients on parent education measured relative to parent with high school diploma);
- Not full academic year (coefficients on FAY measured relative to non-FAY)

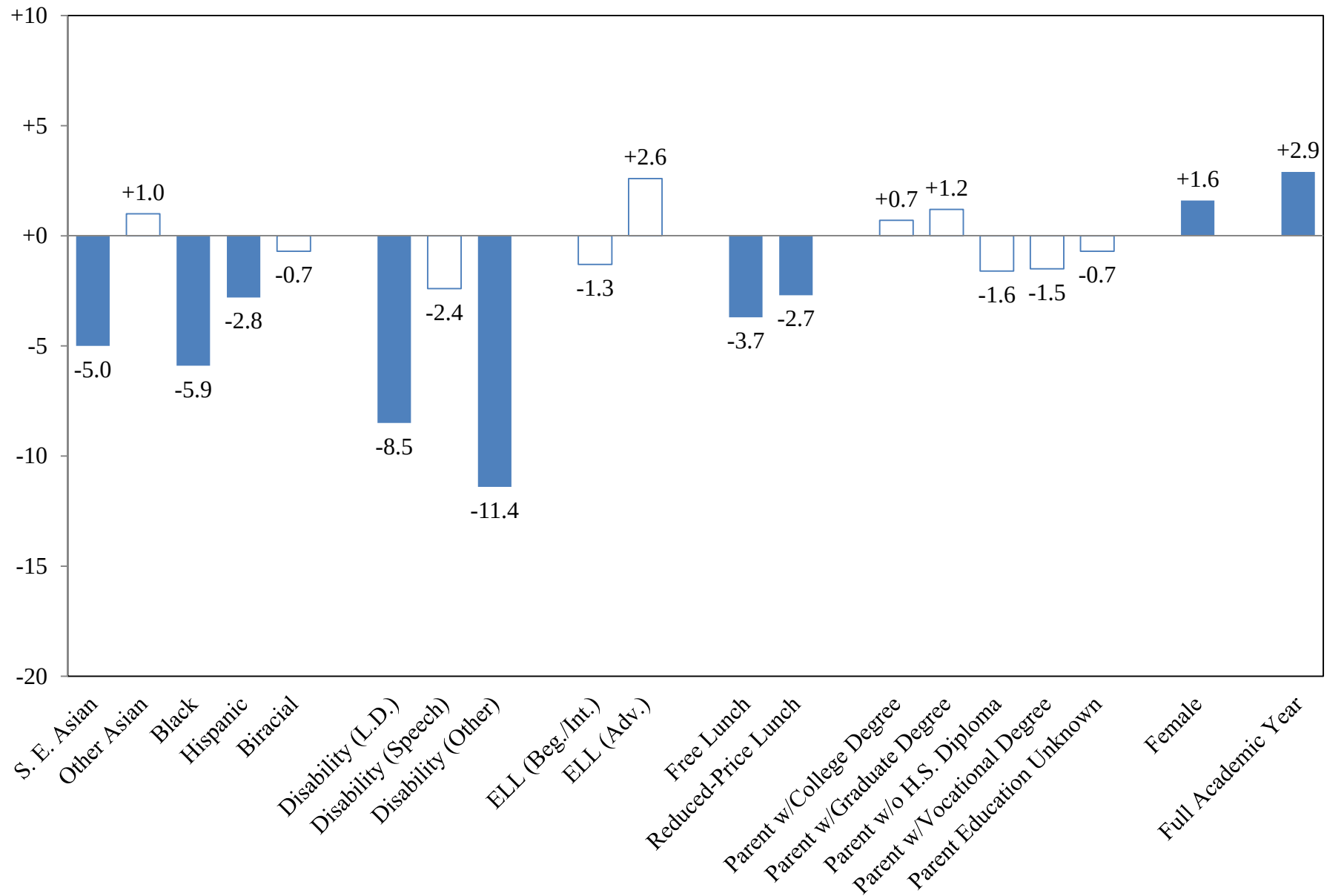
The choice of omitted student characteristic has no intrinsic or statistical value; the results of the value-added model would not change were, for example, female rather than male the omitted.

The coefficients are presented both as bar graphs and as tables. In the bar graphs, a coefficient is presented as a solid bar if the coefficient is statistically significant and as an outline bar if the coefficient is not statistically significant. A coefficient is statistically significant if we can reject with 95 percent confidence the hypothesis that its value is zero. Consequently, if a bar is solid, we can reject that there is no gap district-wide between the specified group (the group on the bar: ELL, or FRL, or parent with college degree) and the omitted group (the groups listed in the bullets above: non-ELL, non-FRL, or parent with high school diploma). If the bar is outlined, we cannot reject the hypothesis that there is no such gap.

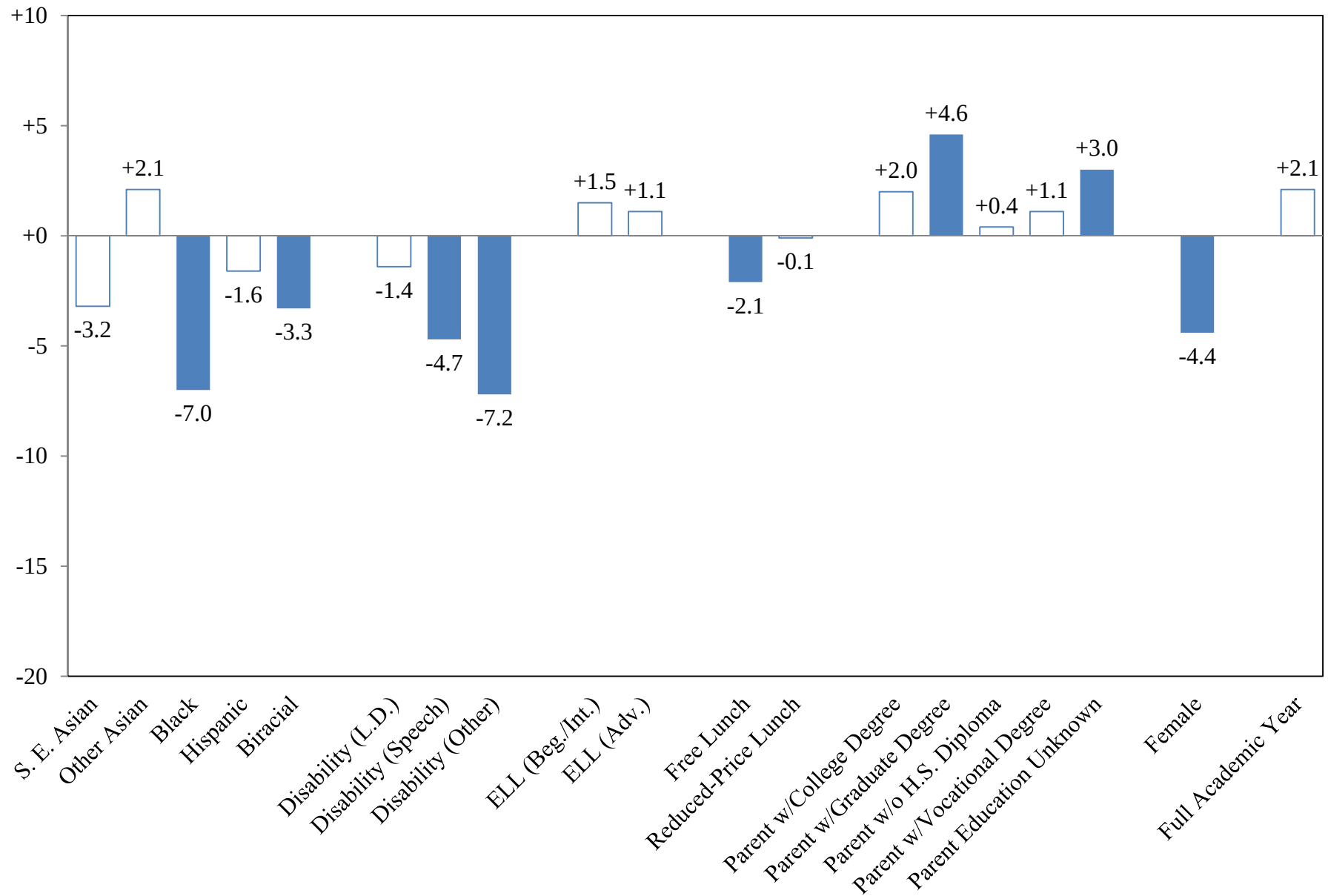
Value Added Coefficients, Elementary School Math, MMSD Model



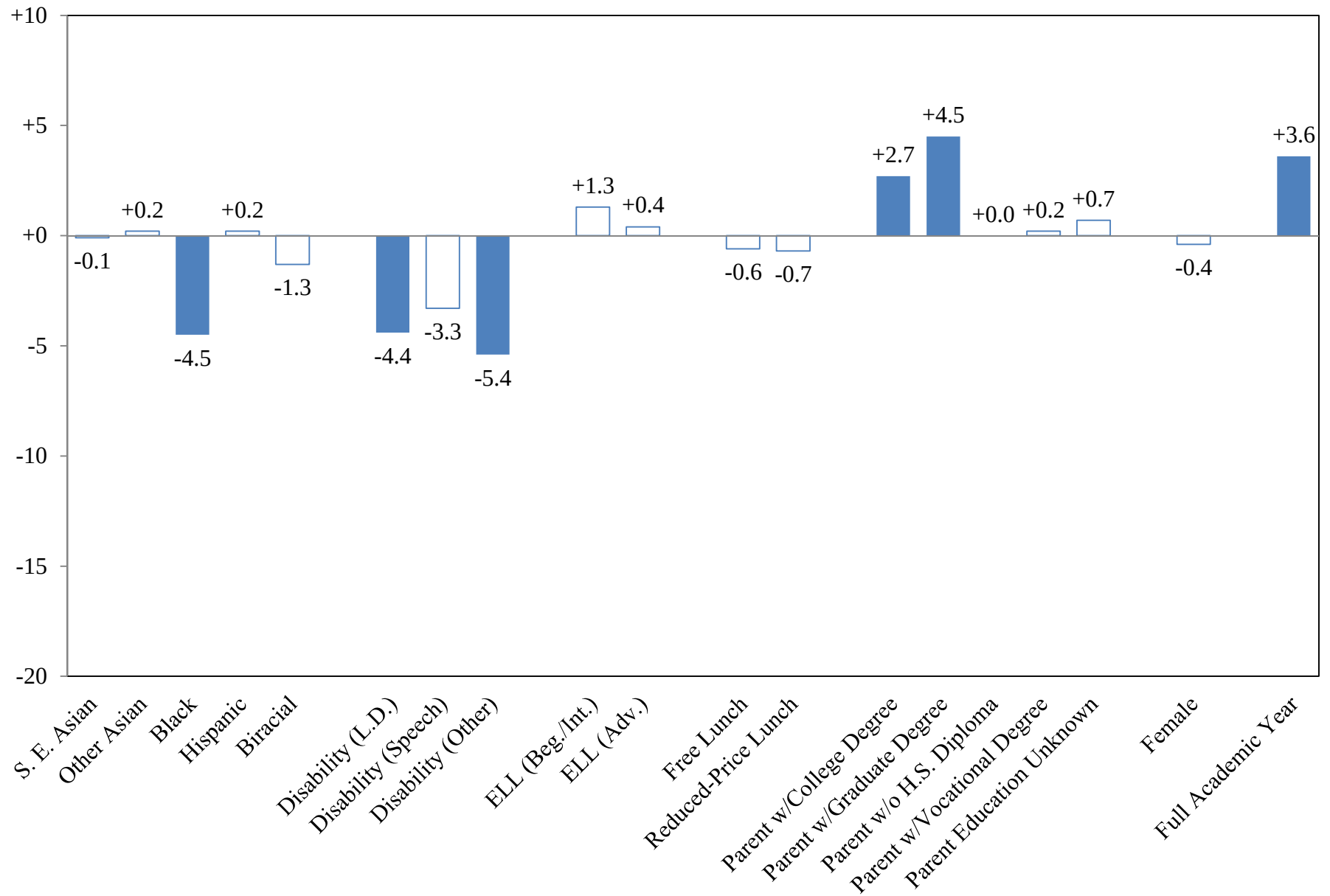
Value Added Coefficients, Elementary School Reading, MMSD Model



Value Added Coefficients, Middle School Math, MMSD Model



Value Added Coefficients, Middle School Reading, MMSD Model



The Distribution of the WKCE in MMSD

Value added is measured in MMSD using points on the WKCE as a unit of measurement. For example, a value added of +3 for third grade math at a given school means that students at that school gained 3 more points on the mathematics WKCE than observationally similar students across MMSD between November of the third grade and November of the fourth grade.

The tables below present summary statistics about attainment on the WKCE in MMSD across students. These tables provide some context for interpreting results that use the WKCE scale. For example, consider again the case of a school with a value added of +3 for the third grade, where students gained 3 more WKCE points in mathematics between the third and fourth grade than similar students across the district. We can see that the 25th percentile across students on the fourth grade math WKCE is 435, while the 50th percentile on the fourth grade math WKCE is 471--a difference of 36 points. Therefore, a value added of +3 math WKCE points from third grade to fourth grade represents $3/36$, or one-twelfth of the difference between the 25th percentile and the 50th percentile on the fourth grade math WKCE.

Distribution of the WKCE in mathematics and reading across students in MMSD

WKCE in mathematics, November 2010

Grade	3	4	5	6	7	8
5th percentile	346	381	399	406	446	434
25th percentile	397	435	459	473	499	509
50th percentile	430	471	495	512	536	549
75th percentile	465	503	529	551	570	588
95th percentile	515	552	582	610	617	634
Mean	431	468	493	511	534	545
Standard deviation	55	54	56	61	54	62

WKCE in reading, November 2010

Grade	3	4	5	6	7	8
5th percentile	367	375	385	390	412	421
25th percentile	426	442	449	463	480	495
50th percentile	456	479	484	501	518	536
75th percentile	485	512	518	539	551	576
95th percentile	526	556	559	585	597	620
Mean	452	473	480	496	512	532
Standard deviation	53	58	56	62	59	63

Appendix: Historical and Subgroup Results from the MMSD Value-Added Model

Appendix Tables A1 and A2: Value Added By School, Relative to District Average

Tables A1 and A2 present value added at the school level for elementary and middle schools serving grades 3 through 8 in Madison Metropolitan School District. The average value added in these tables across all of the schools in MMSD is zero; these results are relative to the district rather than the state average. Values added are presented for three overlapping time periods: the period between the November 2006 to November 2008 WKCE administrations, the more recent period between the November 2007 and November 2009 WKCE, and the most recent period between the November 2008 and November 2010 WKCE. This presents value added as a two-year moving average to increase precision and avoid overinterpretation of trends.

Also presented in Tables A1 and A2 is value added for the November 2008 to November 2010 period for five subgroups: students with disabilities, English language learners, black students, Hispanic students, and low-income students. The subgroup results measure value-added specifically for each subgroup of students within the school. The subgroup value-added results come from a differential-effects value-added model that is slightly different from the value-added model used to produce overall value added. Consequently, small differences between overall value added and subgroup value added should not be overinterpreted.

In some cases, no subgroup results are produced. These cases are noted with an asterisk (*). There are two cases in which no subgroup result is produced. The first case is when the value-added model does not uncover any differences across schools in the growth of students of that subgroup that cannot be explained with differences across schools in the growth of all students overall. In this case, no separate results are presented for any school for that particular subgroup. The second case is when there are fewer than five students in a given school in that subgroup. In that case, results for that subgroup are only suppressed for that particular school.

VA is equal to the school's value added. It is equal to the number of extra points students at a school scored on the WKCE relative to observationally similar students across the district. A school with a zero value added is an average school in terms of value added. Students at a school with a value added of +3 scored 3 points higher on the WKCE than observationally similar students across the district.

Std. Err. is the standard error of the school's value added. Because schools have only a finite number of students, value added (and any other school-level statistic) is measured with some error. Although it is impossible to ascertain the sign of measurement error, we can measure its likely magnitude by using its standard error. This makes it possible to create a plausible range for a school's true value added. In particular, a school's measured value added plus or minus 1.96 standard errors provides a 95 percent confidence interval for a school's true value added.

N is the number of students used to measure value added. It covers students whose WKCE scores can be matched from one year to the next. In the subgroup results, N is equal to the number of students in the subgroup whose WKCE scores can be matched from one year to the next.

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
225 Allis Elementary						
Nov. 2006-Nov. 2008	-2.3	(1.1)	409	-4.2	(1.2)	407
Nov. 2007-Nov. 2009	-0.8	(1.1)	386	-3.0	(1.2)	384
Nov. 2008-Nov. 2010	-1.0	(1.2)	362	-3.1	(1.1)	360
Subgroups, 2008-10:						
Disability	-4.6	(2.7)	50	-11.4	(3.1)	50
ELL	-0.4	(1.8)	126	-3.0	(1.2)	124
Black	-1.1	(1.7)	84	-2.4	(1.9)	83
Hispanic	-1.4	(2.1)	101	-2.2	(1.6)	100
Low-income	-0.8	(1.3)	254	-2.8	(1.2)	253
110 Cesar Chavez Elementary						
Nov. 2006-Nov. 2008	-0.5	(1.0)	500	-0.8	(1.1)	492
Nov. 2007-Nov. 2009	0.8	(1.0)	493	-1.6	(1.1)	493
Nov. 2008-Nov. 2010	-1.5	(1.1)	497	-1.0	(1.0)	495
Subgroups, 2008-10:						
Disability	-1.2	(2.9)	40	-3.5	(3.5)	40
ELL	-5.1	(2.2)	75	-1.0	(1.0)	73
Black	-1.8	(1.8)	44	-0.6	(2.1)	44
Hispanic	-3.9	(2.4)	69	-1.6	(1.7)	67
Low-income	-3.3	(1.7)	120	-1.7	(1.5)	119
105 Crestwood Elementary						
Nov. 2006-Nov. 2008	-2.6	(1.2)	332	-1.2	(1.3)	331
Nov. 2007-Nov. 2009	-3.7	(1.3)	300	-3.2	(1.4)	301
Nov. 2008-Nov. 2010	-3.8	(1.3)	314	-2.2	(1.2)	314
Subgroups, 2008-10:						
Disability	-6.3	(2.9)	43	-1.4	(3.3)	43
ELL	-4.5	(2.6)	35	-2.2	(1.2)	35
Black	-4.4	(1.9)	52	-3.5	(2.1)	52
Hispanic	-2.7	(2.9)	36	-2.0	(1.8)	36
Low-income	-4.7	(1.8)	102	-2.5	(1.5)	102
165 Elvehjem Elementary						
Nov. 2006-Nov. 2008	3.4	(1.2)	350	3.4	(1.3)	348
Nov. 2007-Nov. 2009	-1.3	(1.2)	333	1.5	(1.3)	331
Nov. 2008-Nov. 2010	-1.6	(1.3)	339	-1.0	(1.2)	338
Subgroups, 2008-10:						
Disability	-2.8	(2.6)	58	-4.0	(3.0)	58
ELL	-2.6	(2.9)	20	-1.0	(1.2)	20
Black	-1.3	(1.9)	42	-2.0	(2.2)	42
Hispanic	-3.7	(3.4)	17	-1.0	(1.9)	17
Low-income	-1.4	(1.8)	100	-0.9	(1.6)	99

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
180 Emerson Elementary						
Nov. 2006-Nov. 2008	0.3	(1.3)	255	0.3	(1.4)	254
Nov. 2007-Nov. 2009	3.1	(1.3)	268	3.2	(1.4)	268
Nov. 2008-Nov. 2010	1.4	(1.4)	254	-1.5	(1.3)	254
Subgroups, 2008-10:						
Disability	5.9	(2.7)	53	2.1	(3.1)	53
ELL	1.5	(2.6)	36	-1.6	(1.3)	36
Black	0.9	(1.9)	61	-2.0	(2.0)	61
Hispanic	1.6	(3.1)	29	-1.6	(1.9)	29
Low-income	1.4	(1.5)	173	-1.5	(1.4)	173
210 Falk Elementary						
Nov. 2006-Nov. 2008	-1.6	(1.3)	265	-1.5	(1.4)	265
Nov. 2007-Nov. 2009	-0.7	(1.4)	236	-2.6	(1.5)	236
Nov. 2008-Nov. 2010	-0.5	(1.5)	233	-0.4	(1.3)	232
Subgroups, 2008-10:						
Disability	5.9	(2.9)	40	0.6	(3.4)	40
ELL	0.6	(2.6)	36	-0.4	(1.3)	35
Black	0.0	(1.8)	83	0.5	(1.8)	83
Hispanic	-1.5	(3.3)	21	-1.3	(2.0)	21
Low-income	-0.1	(1.6)	149	-0.4	(1.4)	148
255 Glendale Elementary						
Nov. 2006-Nov. 2008	-1.1	(1.3)	294	1.8	(1.4)	289
Nov. 2007-Nov. 2009	2.4	(1.2)	313	0.7	(1.4)	311
Nov. 2008-Nov. 2010	-0.5	(1.3)	345	-0.8	(1.2)	342
Subgroups, 2008-10:						
Disability	-1.2	(2.6)	60	3.6	(2.9)	60
ELL	-0.8	(1.8)	133	-0.8	(1.2)	130
Black	-0.3	(1.7)	93	-1.0	(1.8)	93
Hispanic	-1.8	(2.1)	103	0.2	(1.6)	100
Low-income	-0.3	(1.3)	282	-0.8	(1.2)	281
675 Gompers Elementary						
Nov. 2006-Nov. 2008	0.5	(1.3)	250	1.4	(1.4)	250
Nov. 2007-Nov. 2009	0.4	(1.4)	216	1.8	(1.5)	215
Nov. 2008-Nov. 2010	-2.9	(1.6)	193	0.9	(1.4)	192
Subgroups, 2008-10:						
Disability	1.6	(3.4)	22	8.3	(4.1)	22
ELL	-2.5	(2.7)	32	0.9	(1.4)	31
Black	-2.8	(2.0)	47	1.9	(2.1)	47
Hispanic	-4.1	(3.5)	16	1.0	(2.0)	16
Low-income	-2.4	(2.0)	75	0.6	(1.7)	74

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
48 Hawthorne Elementary						
Nov. 2006-Nov. 2008	-2.0	(1.3)	283	-1.9	(1.4)	282
Nov. 2007-Nov. 2009	-0.4	(1.2)	297	-0.7	(1.4)	297
Nov. 2008-Nov. 2010	-3.2	(1.3)	298	0.0	(1.2)	298
Subgroups, 2008-10:						
Disability	-6.7	(2.9)	38	-1.2	(3.5)	38
ELL	-3.7	(2.1)	87	0.1	(1.2)	87
Black	-3.2	(1.7)	85	-0.5	(1.9)	85
Hispanic	0.9	(2.7)	49	0.0	(1.8)	49
Low-income	-3.5	(1.5)	197	-0.2	(1.3)	197
660 Huegel Elementary						
Nov. 2006-Nov. 2008	-2.2	(1.1)	397	-0.9	(1.2)	396
Nov. 2007-Nov. 2009	-2.4	(1.1)	381	-3.1	(1.2)	381
Nov. 2008-Nov. 2010	0.4	(1.2)	375	-0.8	(1.1)	375
Subgroups, 2008-10:						
Disability	-2.4	(2.6)	59	-1.2	(2.9)	59
ELL	2.7	(2.5)	48	-0.7	(1.1)	48
Black	0.2	(1.7)	77	1.7	(1.9)	77
Hispanic	2.0	(2.8)	43	-0.3	(1.8)	43
Low-income	0.3	(1.5)	164	0.4	(1.4)	164
375 Kennedy Elementary						
Nov. 2006-Nov. 2008	0.8	(1.0)	465	-0.6	(1.1)	466
Nov. 2007-Nov. 2009	-0.3	(1.1)	459	-1.4	(1.2)	459
Nov. 2008-Nov. 2010	-3.4	(1.1)	478	-1.5	(1.0)	478
Subgroups, 2008-10:						
Disability	-5.6	(2.5)	68	-4.2	(2.8)	68
ELL	-2.3	(3.0)	11	-1.3	(1.1)	11
Black	-3.8	(1.7)	58	-1.4	(2.0)	58
Hispanic	-2.5	(3.6)	9	-1.5	(1.9)	9
Low-income	-3.4	(1.7)	117	-2.3	(1.5)	117
435 Lake View Elementary						
Nov. 2006-Nov. 2008	-1.2	(1.4)	224	-0.9	(1.5)	221
Nov. 2007-Nov. 2009	1.0	(1.4)	215	2.0	(1.5)	215
Nov. 2008-Nov. 2010	3.8	(1.5)	222	2.9	(1.3)	222
Subgroups, 2008-10:						
Disability	1.3	(3.1)	33	2.5	(3.7)	33
ELL	3.6	(2.3)	58	2.9	(1.3)	58
Black	3.1	(1.9)	61	2.8	(2.0)	61
Hispanic	4.7	(3.1)	28	2.7	(1.9)	28
Low-income	3.2	(1.6)	144	3.1	(1.4)	144

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
475 Leopold Elementary						
Nov. 2006-Nov. 2008	0.8	(1.0)	547	-1.1	(1.1)	533
Nov. 2007-Nov. 2009	2.2	(1.0)	546	2.1	(1.1)	537
Nov. 2008-Nov. 2010	1.9	(1.0)	584	1.8	(1.0)	582
Subgroups, 2008-10:						
Disability	3.4	(2.4)	71	3.3	(2.8)	70
ELL	2.3	(1.6)	188	1.8	(1.0)	187
Black	1.7	(1.4)	175	1.5	(1.5)	175
Hispanic	3.7	(1.7)	163	2.3	(1.4)	163
Low-income	1.5	(1.1)	396	2.1	(1.1)	395
15 Lincoln Elementary						
Nov. 2006-Nov. 2008	1.9	(1.0)	581	2.6	(1.0)	576
Nov. 2007-Nov. 2009	-0.8	(1.0)	572	0.1	(1.0)	570
Nov. 2008-Nov. 2010	-0.9	(1.0)	602	0.3	(1.0)	596
Subgroups, 2008-10:						
Disability	-1.5	(2.4)	74	4.7	(2.7)	74
ELL	-2.1	(1.4)	260	0.2	(1.0)	255
Black	-1.3	(1.5)	120	-0.2	(1.7)	120
Hispanic	-3.7	(1.6)	187	-0.7	(1.3)	182
Low-income	-1.6	(1.1)	414	0.0	(1.0)	408
65 Lindbergh Elementary						
Nov. 2006-Nov. 2008	0.3	(1.4)	229	0.2	(1.5)	228
Nov. 2007-Nov. 2009	0.3	(1.4)	217	0.6	(1.5)	217
Nov. 2008-Nov. 2010	-1.8	(1.6)	203	0.6	(1.4)	204
Subgroups, 2008-10:						
Disability	-2.2	(3.4)	22	1.8	(4.1)	22
ELL	-2.2	(2.2)	77	0.6	(1.4)	77
Black	-1.6	(2.1)	35	0.9	(2.3)	36
Hispanic	-2.0	(3.2)	25	0.1	(2.0)	25
Low-income	-1.9	(1.7)	153	0.4	(1.4)	153
495 Lowell Elementary						
Nov. 2006-Nov. 2008	-3.9	(1.4)	201	-5.7	(1.6)	200
Nov. 2007-Nov. 2009	-4.5	(1.5)	196	-5.0	(1.6)	193
Nov. 2008-Nov. 2010	-2.2	(1.5)	213	-2.3	(1.3)	209
Subgroups, 2008-10:						
Disability	-1.7	(3.2)	29	2.0	(3.8)	29
ELL	-3.3	(2.6)	37	-2.2	(1.4)	33
Black	-2.4	(1.9)	60	-3.7	(2.0)	60
Hispanic	-5.2	(3.2)	26	-2.2	(1.9)	25
Low-income	-2.5	(1.7)	117	-2.4	(1.5)	114

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
525 Marquette Elementary						
Nov. 2006-Nov. 2008	2.8	(1.1)	403	0.8	(1.2)	398
Nov. 2007-Nov. 2009	2.9	(1.1)	392	1.4	(1.2)	391
Nov. 2008-Nov. 2010	5.6	(1.1)	434	0.4	(1.1)	434
Subgroups, 2008-10:						
Disability	6.6	(2.5)	67	6.0	(2.8)	68
ELL	3.5	(2.9)	17	0.4	(1.1)	16
Black	6.6	(1.8)	44	1.1	(2.2)	43
Hispanic	3.9	(3.3)	19	0.5	(1.9)	19
Low-income	5.7	(1.7)	107	1.0	(1.5)	107
555 Mendota Elementary						
Nov. 2006-Nov. 2008	-0.2	(1.4)	201	-0.3	(1.6)	201
Nov. 2007-Nov. 2009	-0.4	(1.5)	199	-2.0	(1.6)	199
Nov. 2008-Nov. 2010	-3.0	(1.5)	214	-0.4	(1.4)	213
Subgroups, 2008-10:						
Disability	-2.4	(2.8)	45	0.9	(3.2)	45
ELL	-1.7	(3.0)	15	-0.4	(1.4)	14
Black	-2.4	(1.7)	108	0.7	(1.7)	107
Hispanic	-3.6	(3.5)	16	-0.7	(2.0)	16
Low-income	-2.4	(1.6)	148	0.0	(1.4)	148
390 Muir Elementary						
Nov. 2006-Nov. 2008	-1.8	(1.1)	380	1.1	(1.2)	376
Nov. 2007-Nov. 2009	-0.4	(1.1)	385	0.1	(1.2)	382
Nov. 2008-Nov. 2010	-2.0	(1.2)	374	1.5	(1.1)	372
Subgroups, 2008-10:						
Disability	0.7	(2.4)	69	5.2	(2.8)	68
ELL	-2.8	(2.3)	56	1.6	(1.2)	54
Black	-2.5	(1.8)	55	1.3	(2.1)	55
Hispanic	-4.5	(3.0)	34	1.5	(1.8)	34
Low-income	-2.1	(1.6)	133	1.6	(1.4)	133
125 Nuestro Mundo Community						
Nov. 2006-Nov. 2008	0.5	(2.1)	40	3.6	(2.4)	40
Nov. 2007-Nov. 2009	2.6	(1.7)	122	3.5	(1.9)	122
Nov. 2008-Nov. 2010	7.3	(1.5)	206	1.7	(1.3)	206
Subgroups, 2008-10:						
Disability	*	*	5	*	*	5
ELL	10.7	(2.0)	99	1.7	(1.4)	99
Black	7.4	(2.1)	25	1.3	(2.4)	25
Hispanic	11.7	(2.1)	96	1.6	(1.6)	96
Low-income	9.1	(1.8)	108	1.6	(1.5)	108

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
140 Olson Elementary						
Nov. 2007-Nov. 2009	0.8	(1.9)	87	-1.8	(2.1)	87
Nov. 2008-Nov. 2010	2.9	(1.6)	188	1.3	(1.4)	188
Subgroups, 2008-10:						
Disability	4.1	(3.8)	12	2.4	(4.9)	12
ELL	4.1	(3.2)	11	1.5	(1.4)	11
Black	2.8	(2.0)	48	2.2	(2.1)	48
Hispanic	5.0	(3.7)	10	1.4	(2.1)	10
Low-income	2.9	(2.0)	68	1.8	(1.7)	68
615 Orchard Ridge Elementary						
Nov. 2006-Nov. 2008	1.9	(1.3)	244	-0.9	(1.4)	243
Nov. 2007-Nov. 2009	-1.4	(1.4)	228	-2.2	(1.5)	229
Nov. 2008-Nov. 2010	-1.7	(1.6)	214	0.2	(1.4)	215
Subgroups, 2008-10:						
Disability	-1.4	(3.0)	38	-5.2	(3.4)	38
ELL	-2.1	(3.0)	17	0.2	(1.4)	17
Black	-1.6	(1.8)	78	-0.9	(1.9)	78
Hispanic	-2.3	(3.5)	17	0.4	(2.0)	17
Low-income	-1.1	(1.8)	120	0.4	(1.5)	120
645 Randall Elementary						
Nov. 2006-Nov. 2008	0.9	(0.9)	610	3.9	(1.0)	606
Nov. 2007-Nov. 2009	1.8	(0.9)	634	4.4	(1.0)	631
Nov. 2008-Nov. 2010	3.3	(0.9)	661	3.1	(0.9)	661
Subgroups, 2008-10:						
Disability	4.9	(2.3)	83	5.1	(2.6)	83
ELL	1.5	(2.0)	92	3.2	(0.9)	92
Black	2.7	(1.6)	69	3.2	(2.0)	69
Hispanic	2.7	(2.6)	51	3.0	(1.7)	51
Low-income	2.6	(1.5)	172	2.8	(1.3)	172
40 Sandburg Elementary						
Nov. 2006-Nov. 2008	-2.4	(1.3)	264	-1.1	(1.4)	262
Nov. 2007-Nov. 2009	-3.2	(1.4)	251	-2.9	(1.5)	249
Nov. 2008-Nov. 2010	-2.5	(1.4)	261	-1.1	(1.3)	260
Subgroups, 2008-10:						
Disability	-3.4	(3.1)	32	-3.2	(3.7)	32
ELL	-1.8	(2.0)	101	-1.1	(1.3)	100
Black	-2.5	(2.0)	45	-0.9	(2.2)	45
Hispanic	-0.6	(2.3)	83	-0.8	(1.7)	82
Low-income	-2.4	(1.6)	162	-1.2	(1.4)	161

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
300 Schenk Elementary						
Nov. 2006-Nov. 2008	-1.4	(1.2)	301	-1.6	(1.3)	302
Nov. 2007-Nov. 2009	-3.5	(1.2)	307	-0.9	(1.4)	306
Nov. 2008-Nov. 2010	0.7	(1.3)	332	-1.3	(1.2)	329
Subgroups, 2008-10:						
Disability	-1.6	(2.7)	54	-9.2	(3.0)	54
ELL	1.8	(2.2)	73	-1.3	(1.2)	70
Black	1.7	(1.7)	98	-1.4	(1.8)	98
Hispanic	1.6	(2.7)	49	-1.4	(1.8)	46
Low-income	0.9	(1.4)	219	-1.3	(1.3)	216
735 Shorewood Hills Elementary						
Nov. 2006-Nov. 2008	5.1	(1.2)	304	4.6	(1.4)	292
Nov. 2007-Nov. 2009	3.5	(1.3)	289	4.1	(1.4)	282
Nov. 2008-Nov. 2010	2.8	(1.4)	278	1.4	(1.3)	273
Subgroups, 2008-10:						
Disability	4.6	(3.0)	34	4.2	(3.6)	34
ELL	4.5	(2.3)	67	1.6	(1.3)	62
Black	2.3	(2.1)	20	2.1	(2.4)	20
Hispanic	3.1	(3.7)	9	1.2	(2.0)	9
Low-income	3.6	(2.0)	69	1.9	(1.7)	67
270 Stephens Elementary						
Nov. 2006-Nov. 2008	-0.3	(1.1)	419	-2.0	(1.2)	413
Nov. 2007-Nov. 2009	-1.9	(1.1)	392	-0.7	(1.2)	388
Nov. 2008-Nov. 2010	-3.6	(1.3)	360	0.0	(1.2)	360
Subgroups, 2008-10:						
Disability	-3.1	(2.7)	54	-2.3	(3.1)	54
ELL	-4.8	(2.3)	66	0.1	(1.2)	66
Black	-1.9	(1.9)	42	1.4	(2.2)	42
Hispanic	-5.1	(3.1)	27	-0.3	(1.9)	27
Low-income	-2.9	(1.9)	85	0.2	(1.6)	85
780 Thoreau Elementary						
Nov. 2006-Nov. 2008	-0.3	(1.2)	331	0.7	(1.3)	331
Nov. 2007-Nov. 2009	-0.9	(1.2)	339	0.3	(1.3)	339
Nov. 2008-Nov. 2010	-0.6	(1.3)	350	-2.0	(1.2)	350
Subgroups, 2008-10:						
Disability	-3.2	(3.0)	41	-12.5	(3.5)	41
ELL	0.3	(2.4)	58	-2.0	(1.2)	58
Black	-1.0	(1.7)	93	-4.1	(1.8)	93
Hispanic	1.0	(2.7)	49	-1.2	(1.8)	49
Low-income	-0.8	(1.5)	177	-2.4	(1.3)	177

Table A1. Elementary School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
795 Van Hise Elementary						
Nov. 2006-Nov. 2008	0.6	(1.3)	268	-2.4	(1.4)	267
Nov. 2007-Nov. 2009	2.6	(1.2)	315	0.1	(1.3)	315
Nov. 2008-Nov. 2010	4.1	(1.3)	334	1.2	(1.2)	333
Subgroups, 2008-10:						
Disability	3.6	(3.3)	23	1.6	(4.2)	23
ELL	4.0	(2.5)	48	1.3	(1.2)	47
Black	4.5	(2.0)	18	1.5	(2.4)	18
Hispanic	1.7	(3.4)	16	0.5	(1.9)	16
Low-income	5.4	(2.0)	59	1.3	(1.7)	58

Table A2. Middle School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
690 Black Hawk Middle						
Nov. 2006-Nov. 2008	0.3	(0.8)	429	1.2	(1.0)	427
Nov. 2007-Nov. 2009	2.8	(1.0)	446	0.0	(0.9)	444
Nov. 2008-Nov. 2010	0.9	(0.9)	479	-2.1	(1.0)	478
Subgroups, 2008-10:						
Disability	1.7	(2.2)	71	-3.8	(1.9)	71
ELL	1.1	(1.3)	95	*	*	94
Black	0.9	(1.0)	103	-2.1	(1.3)	103
Hispanic	*	*	56	*	*	55
Low-income	1.3	(1.0)	265	-2.1	(1.0)	264
90 Cherokee Heights Middle						
Nov. 2006-Nov. 2008	0.3	(0.7)	658	-1.0	(0.8)	658
Nov. 2007-Nov. 2009	-0.3	(0.8)	680	-1.6	(0.8)	673
Nov. 2008-Nov. 2010	0.5	(0.8)	628	1.4	(0.9)	623
Subgroups, 2008-10:						
Disability	1.5	(1.9)	111	2.0	(1.7)	111
ELL	-0.5	(1.3)	116	*	*	111
Black	0.6	(0.9)	173	1.4	(1.1)	172
Hispanic	*	*	106	*	*	102
Low-income	0.6	(1.0)	336	1.5	(0.9)	332
810 Hamilton Middle						
Nov. 2006-Nov. 2008	-0.1	(0.6)	922	2.1	(0.8)	916
Nov. 2007-Nov. 2009	-0.8	(0.8)	906	1.8	(0.8)	902
Nov. 2008-Nov. 2010	0.2	(0.7)	887	-0.2	(0.8)	885
Subgroups, 2008-10:						
Disability	1.0	(2.2)	75	0.6	(1.8)	75
ELL	1.3	(1.4)	72	*	*	69
Black	0.2	(0.9)	52	0.3	(1.3)	52
Hispanic	*	*	43	*	*	44
Low-income	0.8	(1.2)	154	-0.3	(0.9)	155
440 James Wright Middle						
Nov. 2006-Nov. 2008	-0.1	(0.8)	322	0.2	(1.1)	309
Nov. 2007-Nov. 2009	-2.0	(1.2)	315	-0.7	(1.0)	308
Nov. 2008-Nov. 2010	0.1	(1.0)	308	-1.1	(1.1)	308
Subgroups, 2008-10:						
Disability	2.2	(2.1)	72	-0.1	(1.9)	72
ELL	-0.1	(1.2)	128	*	*	128
Black	0.3	(1.1)	98	-0.7	(1.3)	98
Hispanic	*	*	106	*	*	106
Low-income	0.2	(1.0)	263	-1.1	(1.1)	263

Table A2. Middle School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
370 Jefferson Middle						
Nov. 2006-Nov. 2008	-0.8	(0.7)	498	0.4	(0.9)	497
Nov. 2007-Nov. 2009	-0.4	(0.9)	540	1.1	(0.9)	537
Nov. 2008-Nov. 2010	0.9	(0.8)	652	-0.2	(0.8)	649
Subgroups, 2008-10:						
Disability	3.6	(1.8)	113	-0.7	(1.6)	113
ELL	1.0	(1.4)	70	*	*	67
Black	0.9	(0.9)	103	-0.3	(1.2)	103
Hispanic	*	*	49	*	*	49
Low-income	0.7	(1.1)	195	0.0	(0.9)	194
540 O'Keefe Middle						
Nov. 2006-Nov. 2008	0.9	(0.7)	507	-1.7	(0.9)	506
Nov. 2007-Nov. 2009	1.8	(0.9)	527	0.5	(0.9)	526
Nov. 2008-Nov. 2010	-0.3	(0.8)	523	1.5	(0.9)	522
Subgroups, 2008-10:						
Disability	-5.6	(2.1)	81	1.1	(1.8)	82
ELL	-0.3	(1.4)	50	*	*	48
Black	-0.5	(1.0)	91	1.2	(1.3)	91
Hispanic	*	*	42	*	*	42
Low-income	-1.5	(1.1)	226	1.5	(1.0)	226
665 Sennett Middle						
Nov. 2006-Nov. 2008	-1.4	(0.7)	750	-1.3	(0.8)	744
Nov. 2007-Nov. 2009	0.7	(0.8)	765	-1.5	(0.8)	761
Nov. 2008-Nov. 2010	1.4	(0.7)	738	-1.9	(0.8)	737
Subgroups, 2008-10:						
Disability	-1.8	(1.6)	146	-2.6	(1.5)	147
ELL	1.4	(1.2)	151	*	*	150
Black	1.3	(0.9)	167	-2.5	(1.1)	166
Hispanic	*	*	145	*	*	145
Low-income	1.0	(0.9)	407	-2.1	(0.9)	405
710 Sherman Middle						
Nov. 2006-Nov. 2008	0.1	(0.7)	519	0.7	(0.9)	517
Nov. 2007-Nov. 2009	1.3	(1.0)	460	0.7	(0.9)	459
Nov. 2008-Nov. 2010	0.9	(0.9)	441	0.1	(1.0)	441
Subgroups, 2008-10:						
Disability	-1.6	(2.2)	73	-1.4	(1.9)	73
ELL	0.6	(1.3)	117	*	*	117
Black	0.7	(1.0)	122	0.2	(1.2)	122
Hispanic	*	*	65	*	*	65
Low-income	0.9	(1.0)	285	0.2	(1.0)	285

Table A2. Middle School Value Added

School	Math			Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
850 Spring Harbor Middle						
Nov. 2006-Nov. 2008	1.2	(0.8)	340	0.6	(1.0)	338
Nov. 2007-Nov. 2009	3.6	(1.1)	344	1.3	(1.0)	342
Nov. 2008-Nov. 2010	-0.2	(1.0)	340	-0.3	(1.1)	340
Subgroups, 2008-10:						
Disability	2.3	(2.5)	46	-1.3	(2.0)	47
ELL	-0.3	(1.6)	23	*	*	22
Black	-0.1	(1.1)	40	-0.3	(1.4)	40
Hispanic	*	*	14	*	*	14
Low-income	0.6	(1.4)	95	-0.3	(1.2)	96
620 Toki Middle						
Nov. 2006-Nov. 2008	0.2	(0.7)	707	-1.1	(0.8)	703
Nov. 2007-Nov. 2009	-4.9	(0.9)	664	-1.0	(0.8)	659
Nov. 2008-Nov. 2010	-2.7	(0.8)	599	3.2	(0.9)	595
Subgroups, 2008-10:						
Disability	-4.3	(1.7)	127	3.8	(1.6)	125
ELL	-1.5	(1.4)	73	*	*	71
Black	-2.8	(0.9)	177	3.0	(1.1)	175
Hispanic	*	*	59	*	*	58
Low-income	-2.6	(1.0)	284	3.2	(0.9)	281
315 Whitehorse Middle						
Nov. 2006-Nov. 2008	0.5	(0.7)	556	-0.1	(0.9)	556
Nov. 2007-Nov. 2009	0.8	(0.9)	572	-0.4	(0.9)	573
Nov. 2008-Nov. 2010	-2.1	(0.8)	556	-0.8	(0.9)	556
Subgroups, 2008-10:						
Disability	2.4	(2.0)	95	1.9	(1.7)	95
ELL	-2.6	(1.4)	59	*	*	59
Black	-1.8	(1.0)	101	-0.2	(1.2)	101
Hispanic	*	*	56	*	*	56
Low-income	-1.8	(1.1)	244	-0.7	(1.0)	244

Appendix Tables A3, A4, A5, and A6: Value Added By Grade, Relative to District Average

Tables A3, A4, A5, and A6 present value added at the grade level. The average value added in these tables across all of the schools in MMSD is zero; these results are relative to the district rather than the state average. Like the case of school-level value added, these reflect three overlapping two-year growth periods: November 2006 to November 2008, November 2007 to November 2009, and November 2008 to November 2010. It also presents results for the November 2008 to November 2010 period for five subgroups: students with disabilities, English language learners, black students, Hispanic students, and low-income students.

The results in Tables A3, A4, A5, and A6 are broken down by grade. For example, a school's value added for grade 3 for the November 2008 to November 2010 period is based on the growth of students at that school progressing from grade 3 to grade 4 from either November 2008 to November 2009 or November 2009 to November 2010. If that value-added measure is -2, then students progressing from grade 3 to grade 4 at that school scored 2 points lower on the WKCE than observationally similar students progressing from grade 3 to grade 4 across the district.

VA is the value added of the school, and is equal to the number of extra points students at that school scored on the WKCE relative to observationally similar students at other schools. **Std. Err.** is the standard error of value added, and **N** is the number of students used to measure value added.

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
225 Allis Elementary									
Nov. 2006-Nov. 2008	-11.5	(2.5)	124	1.9	(1.8)	146	0.2	(1.8)	139
Nov. 2007-Nov. 2009	-3.4	(2.2)	118	2.5	(2.2)	131	-1.0	(1.7)	137
Nov. 2008-Nov. 2010	-1.0	(2.2)	113	-3.6	(2.5)	125	1.5	(2.0)	124
Subgroups, 2008-10:									
Disability	-3.4	(5.0)	13	-4.0	(2.7)	14	1.5	(4.6)	23
ELL	-0.8	(2.3)	48	0.5	(4.3)	35	0.3	(3.3)	43
Black	-1.6	(3.1)	21	-2.8	(3.2)	33	0.4	(3.5)	30
Hispanic	*	*	35	-0.4	(4.5)	29	-2.3	(3.5)	37
Low-income	-0.9	(2.4)	80	-2.8	(2.8)	85	1.4	(2.3)	89
110 Cesar Chavez Elementary									
Nov. 2006-Nov. 2008	-2.8	(2.1)	184	-0.5	(1.7)	167	2.0	(1.7)	149
Nov. 2007-Nov. 2009	-0.9	(1.9)	190	0.6	(2.0)	162	2.7	(1.7)	141
Nov. 2008-Nov. 2010	-1.2	(1.8)	186	-1.7	(2.2)	176	-1.3	(2.0)	135
Subgroups, 2008-10:									
Disability	-3.6	(5.2)	10	-1.8	(2.4)	12	6.7	(5.1)	18
ELL	-1.4	(2.0)	30	-3.0	(4.7)	28	-9.0	(4.7)	17
Black	-1.8	(3.2)	11	-3.0	(3.3)	18	2.9	(4.1)	15
Hispanic	*	*	23	-2.1	(4.7)	27	-3.8	(4.3)	19
Low-income	-2.5	(3.3)	41	-6.5	(3.8)	41	-2.1	(3.4)	38
105 Crestwood Elementary									
Nov. 2006-Nov. 2008	-4.2	(2.5)	122	-1.7	(1.9)	111	-0.9	(2.0)	99
Nov. 2007-Nov. 2009	-4.1	(2.2)	112	-4.6	(2.3)	99	-0.2	(1.9)	89
Nov. 2008-Nov. 2010	-1.9	(2.2)	111	-7.5	(2.6)	111	-0.6	(2.2)	92
Subgroups, 2008-10:									
Disability	-6.5	(5.0)	12	-7.4	(2.8)	13	-1.0	(5.0)	18
ELL	-1.9	(2.4)	16	-7.4	(5.6)	16	*	*	3
Black	-2.1	(3.1)	21	-8.5	(3.6)	16	-1.4	(4.1)	15
Hispanic	*	*	13	-3.5	(5.4)	17	-2.9	(5.6)	6
Low-income	-3.0	(3.3)	38	-7.4	(3.9)	38	-3.9	(3.9)	26
165 Elvehjem Elementary									
Nov. 2006-Nov. 2008	8.1	(2.6)	113	1.9	(1.9)	122	-0.3	(1.9)	115
Nov. 2007-Nov. 2009	-0.5	(2.3)	101	-0.9	(2.3)	115	-1.6	(1.8)	117
Nov. 2008-Nov. 2010	-2.9	(2.1)	131	-3.5	(2.7)	102	2.4	(2.1)	106
Subgroups, 2008-10:									
Disability	-6.2	(4.2)	24	-3.5	(2.9)	19	8.2	(5.5)	15
ELL	-2.8	(2.3)	12	-9.9	(7.1)	6	*	*	2
Black	-2.3	(3.2)	13	-3.2	(3.6)	15	2.4	(4.2)	14
Hispanic	*	*	9	*	*	4	*	*	4
Low-income	-3.7	(3.3)	40	-1.5	(4.3)	28	3.2	(3.6)	32

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
180 Emerson Elementary	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	-1.0	(2.9)	83	-0.4	(2.0)	90	2.2	(2.1)	82
Nov. 2007-Nov. 2009	1.1	(2.4)	86	0.8	(2.4)	96	4.8	(2.0)	86
Nov. 2008-Nov. 2010	0.4	(2.4)	84	-1.8	(3.0)	81	4.1	(2.3)	89
Subgroups, 2008-10:									
Disability	1.5	(4.5)	17	-1.6	(3.1)	16	11.7	(4.8)	20
ELL	0.6	(2.5)	16	-4.1	(6.1)	12	1.8	(5.6)	8
Black	0.5	(3.1)	21	-1.5	(3.7)	17	-0.1	(3.7)	23
Hispanic	*	*	11	-3.6	(6.3)	10	3.3	(5.2)	8
Low-income	0.7	(2.6)	59	-1.3	(3.3)	57	2.6	(2.7)	57
210 Falk Elementary	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	-2.7	(2.8)	88	-1.0	(2.0)	88	-0.5	(2.1)	89
Nov. 2007-Nov. 2009	-1.4	(2.5)	78	-0.8	(2.5)	80	0.5	(2.0)	78
Nov. 2008-Nov. 2010	-0.8	(2.4)	81	-1.3	(3.0)	78	0.7	(2.4)	74
Subgroups, 2008-10:									
Disability	0.7	(4.7)	15	-1.3	(3.2)	10	16.4	(5.4)	15
ELL	-0.9	(2.5)	13	4.2	(5.9)	14	1.0	(5.4)	9
Black	-1.3	(2.9)	33	-1.1	(3.6)	23	4.7	(3.4)	27
Hispanic	*	*	7	-2.4	(7.0)	6	-0.9	(5.2)	8
Low-income	-1.7	(2.8)	52	-1.1	(3.5)	49	4.6	(2.9)	48
255 Glendale Elementary	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	3.1	(2.7)	105	0.6	(2.0)	86	-5.9	(2.0)	103
Nov. 2007-Nov. 2009	0.4	(2.2)	112	3.0	(2.3)	106	2.3	(1.9)	95
Nov. 2008-Nov. 2010	-0.9	(2.1)	119	2.6	(2.6)	113	-2.5	(2.1)	113
Subgroups, 2008-10:									
Disability	-3.7	(4.7)	16	2.7	(2.8)	14	-2.9	(4.1)	30
ELL	-0.7	(2.2)	51	3.0	(4.0)	41	-1.8	(3.3)	41
Black	-1.2	(3.0)	27	3.0	(3.3)	29	-1.5	(3.2)	37
Hispanic	*	*	39	2.5	(4.4)	32	-2.3	(3.6)	32
Low-income	-0.4	(2.3)	95	2.2	(2.7)	94	-1.3	(2.2)	93
675 Gompers Elementary	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	3.0	(3.0)	76	2.1	(2.0)	92	-3.9	(2.1)	82
Nov. 2007-Nov. 2009	2.8	(2.7)	51	-0.4	(2.5)	77	-1.1	(2.0)	88
Nov. 2008-Nov. 2010	-2.8	(2.5)	65	-4.8	(3.4)	55	0.0	(2.4)	73
Subgroups, 2008-10:									
Disability	1.5	(5.2)	9	-4.6	(3.6)	6	3.3	(6.9)	7
ELL	-2.8	(2.6)	14	-1.4	(6.5)	9	-2.2	(5.4)	9
Black	-2.9	(3.2)	18	-4.6	(4.1)	14	0.8	(4.1)	15
Hispanic	*	*	6	*	*	4	-1.1	(5.5)	6
Low-income	-1.9	(3.4)	28	-1.8	(4.8)	19	-1.6	(3.7)	28

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
48 Hawthorne Elementary									
Nov. 2006-Nov. 2008	-2.9	(2.7)	103	3.1	(2.0)	93	-7.3	(2.1)	87
Nov. 2007-Nov. 2009	-2.9	(2.4)	96	4.4	(2.3)	102	-2.1	(1.9)	99
Nov. 2008-Nov. 2010	-4.5	(2.2)	101	2.4	(2.8)	96	-4.3	(2.2)	101
Subgroups, 2008-10:									
Disability	-9.1	(5.0)	12	2.5	(3.0)	11	-13.4	(5.4)	15
ELL	-4.6	(2.4)	28	1.6	(4.6)	28	-1.1	(3.7)	31
Black	-3.7	(2.9)	30	2.1	(3.4)	30	-5.7	(3.6)	25
Hispanic	*	*	15	5.5	(5.7)	15	-1.5	(4.2)	19
Low-income	-4.3	(2.6)	67	1.4	(3.2)	62	-4.8	(2.6)	68
660 Huegel Elementary									
Nov. 2006-Nov. 2008	-3.1	(2.4)	131	-3.2	(1.8)	138	1.1	(1.8)	128
Nov. 2007-Nov. 2009	-2.6	(2.1)	129	-3.4	(2.2)	128	0.0	(1.8)	124
Nov. 2008-Nov. 2010	-0.5	(2.1)	129	-0.3	(2.5)	127	1.9	(2.1)	119
Subgroups, 2008-10:									
Disability	-2.5	(4.5)	19	-0.5	(2.7)	24	-0.9	(5.5)	16
ELL	-0.3	(2.3)	19	3.8	(6.1)	12	2.9	(4.7)	17
Black	-0.7	(2.9)	28	-1.2	(3.3)	27	4.0	(3.8)	22
Hispanic	*	*	15	2.8	(5.9)	13	4.0	(4.6)	15
Low-income	-1.7	(2.8)	59	-1.7	(3.4)	54	5.0	(3.0)	51
375 Kennedy Elementary									
Nov. 2006-Nov. 2008	3.4	(2.3)	151	-0.8	(1.8)	151	0.3	(1.7)	163
Nov. 2007-Nov. 2009	-0.1	(2.0)	161	0.2	(2.1)	140	-0.9	(1.7)	158
Nov. 2008-Nov. 2010	-3.0	(1.9)	172	-3.0	(2.2)	164	-2.8	(1.9)	142
Subgroups, 2008-10:									
Disability	-5.1	(4.4)	22	-3.1	(2.4)	24	-4.1	(4.8)	22
ELL	*	*	5	*	*	2	*	*	4
Black	-3.5	(3.1)	14	-3.0	(3.2)	26	-4.0	(3.9)	18
Hispanic	*	*	1	*	*	4	*	*	4
Low-income	-2.5	(3.4)	38	-0.4	(3.7)	44	-6.6	(3.6)	35
435 Lake View Elementary									
Nov. 2006-Nov. 2008	0.6	(3.0)	77	-0.8	(2.1)	73	-2.2	(2.2)	74
Nov. 2007-Nov. 2009	3.9	(2.5)	80	0.9	(2.6)	70	-2.6	(2.1)	65
Nov. 2008-Nov. 2010	6.5	(2.4)	84	4.0	(3.1)	75	-3.2	(2.5)	63
Subgroups, 2008-10:									
Disability	4.6	(5.0)	12	4.2	(3.2)	11	-6.0	(6.1)	10
ELL	6.5	(2.5)	23	-0.8	(5.5)	17	2.3	(4.4)	18
Black	4.8	(3.1)	20	4.1	(3.7)	22	-2.9	(3.8)	19
Hispanic	*	*	10	-2.1	(6.6)	8	3.3	(5.0)	10
Low-income	4.5	(2.7)	57	2.8	(3.5)	47	-1.0	(3.0)	40

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
475 Leopold Elementary									
Nov. 2006-Nov. 2008	-0.5	(2.1)	175	-0.9	(1.7)	183	3.6	(1.6)	189
Nov. 2007-Nov. 2009	2.9	(1.8)	201	2.2	(1.9)	179	0.3	(1.6)	166
Nov. 2008-Nov. 2010	0.9	(1.7)	230	6.0	(2.0)	193	-1.7	(1.8)	161
Subgroups, 2008-10:									
Disability	6.0	(4.3)	24	5.6	(2.3)	24	2.3	(4.6)	23
ELL	1.3	(1.8)	76	5.0	(3.2)	68	-2.4	(3.4)	44
Black	1.4	(2.3)	73	5.4	(2.7)	55	-3.0	(3.0)	47
Hispanic	*	*	62	6.1	(3.4)	60	-0.4	(3.3)	41
Low-income	0.9	(2.0)	156	5.4	(2.3)	136	-2.9	(2.2)	104
15 Lincoln Elementary									
Nov. 2006-Nov. 2008	1.6	(2.0)	207	1.5	(1.6)	194	2.0	(1.6)	180
Nov. 2007-Nov. 2009	-1.1	(1.9)	190	0.2	(1.8)	197	-1.1	(1.6)	185
Nov. 2008-Nov. 2010	-0.3	(1.8)	205	2.6	(2.0)	192	-4.1	(1.7)	205
Subgroups, 2008-10:									
Disability	-2.2	(4.5)	20	2.5	(2.3)	28	-2.8	(4.4)	26
ELL	-0.4	(1.9)	100	-0.6	(2.9)	85	-2.2	(2.7)	75
Black	-0.1	(2.8)	34	2.7	(2.9)	37	-7.0	(3.0)	49
Hispanic	*	*	62	-2.6	(3.3)	63	-2.6	(2.8)	62
Low-income	-0.7	(2.0)	141	-0.2	(2.3)	136	-3.5	(2.0)	137
65 Lindbergh Elementary									
Nov. 2006-Nov. 2008	1.2	(3.1)	73	-1.2	(2.1)	73	1.4	(2.1)	83
Nov. 2007-Nov. 2009	2.1	(2.6)	71	-0.8	(2.6)	70	-0.7	(2.0)	76
Nov. 2008-Nov. 2010	-0.3	(2.5)	68	1.6	(3.2)	66	-4.9	(2.5)	69
Subgroups, 2008-10:									
Disability	*	*	5	1.8	(3.4)	9	-12.1	(6.8)	8
ELL	-0.3	(2.6)	27	3.2	(4.8)	25	-5.6	(3.9)	25
Black	-0.5	(3.3)	15	2.6	(4.2)	7	-5.5	(4.2)	13
Hispanic	*	*	11	0.3	(6.8)	7	-5.3	(5.3)	7
Low-income	-0.6	(2.6)	56	2.2	(3.5)	51	-5.3	(2.9)	46
495 Lowell Elementary									
Nov. 2006-Nov. 2008	-11.8	(3.0)	74	2.3	(2.1)	64	-3.4	(2.3)	63
Nov. 2007-Nov. 2009	-4.8	(2.5)	72	-0.5	(2.6)	65	-4.0	(2.1)	59
Nov. 2008-Nov. 2010	-0.4	(2.4)	74	-2.7	(3.1)	74	-2.5	(2.5)	65
Subgroups, 2008-10:									
Disability	-1.7	(5.4)	8	-2.6	(3.3)	12	2.0	(6.4)	9
ELL	-0.4	(2.6)	9	2.1	(5.6)	16	-11.5	(5.0)	12
Black	-1.5	(3.1)	23	-1.6	(3.7)	20	-3.0	(3.9)	17
Hispanic	*	*	7	-4.4	(6.3)	10	-5.7	(5.1)	9
Low-income	-2.6	(3.0)	40	0.6	(3.8)	39	-4.3	(3.1)	38

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
525 Marquette Elementary									
Nov. 2006-Nov. 2008	-0.4	(2.5)	127	3.1	(1.9)	125	3.4	(1.8)	151
Nov. 2007-Nov. 2009	-2.2	(2.1)	135	5.5	(2.2)	129	3.8	(1.8)	128
Nov. 2008-Nov. 2010	1.8	(2.0)	151	9.7	(2.4)	142	4.1	(1.9)	141
Subgroups, 2008-10:									
Disability	1.4	(4.7)	17	9.9	(2.6)	24	7.6	(4.4)	26
ELL	1.7	(2.2)	8	*	*	5	*	*	4
Black	3.3	(3.2)	13	9.4	(3.5)	15	7.1	(4.1)	16
Hispanic	*	*	9	*	*	5	*	*	5
Low-income	0.5	(3.4)	36	10.3	(4.2)	30	5.5	(3.4)	41
555 Mendota Elementary									
Nov. 2006-Nov. 2008	-1.4	(2.9)	81	0.5	(2.1)	71	-0.1	(2.4)	49
Nov. 2007-Nov. 2009	-0.8	(2.6)	70	0.9	(2.6)	69	-0.9	(2.1)	60
Nov. 2008-Nov. 2010	-2.4	(2.5)	72	-3.8	(3.1)	71	-1.0	(2.4)	71
Subgroups, 2008-10:									
Disability	0.0	(4.6)	16	-4.0	(3.3)	14	1.0	(5.3)	15
ELL	*	*	5	*	*	5	*	*	5
Black	-2.5	(2.8)	38	-3.2	(3.4)	37	1.2	(3.2)	33
Hispanic	*	*	6	*	*	4	-1.5	(5.5)	6
Low-income	-1.5	(2.7)	52	-3.0	(3.6)	46	0.2	(2.8)	50
390 Muir Elementary									
Nov. 2006-Nov. 2008	0.1	(2.5)	121	-2.5	(1.8)	133	-1.5	(1.9)	126
Nov. 2007-Nov. 2009	1.7	(2.2)	125	-1.7	(2.2)	128	-1.0	(1.7)	132
Nov. 2008-Nov. 2010	-2.3	(2.1)	129	-1.4	(2.5)	124	-1.3	(2.0)	121
Subgroups, 2008-10:									
Disability	2.0	(4.7)	16	-0.9	(2.7)	22	-3.4	(4.0)	31
ELL	-2.3	(2.3)	18	-7.9	(5.5)	17	0.4	(4.4)	21
Black	-2.6	(3.2)	15	-1.6	(3.4)	23	-1.7	(4.0)	17
Hispanic	*	*	11	-8.7	(6.6)	8	-2.0	(4.6)	15
Low-income	0.3	(3.0)	50	-4.0	(3.7)	44	-2.8	(3.4)	39
125 Nuestro Mundo Community									
Nov. 2006-Nov. 2008	1.8	(3.7)	40						
Nov. 2007-Nov. 2009	0.1	(2.5)	82	5.4	(3.0)	40			
Nov. 2008-Nov. 2010	0.0	(2.4)	82	20.0	(3.0)	84	-2.0	(2.9)	40
Subgroups, 2008-10:									
Disability	*	*	1	*	*	3	*	*	1
ELL	0.3	(2.4)	47	29.7	(4.1)	40	-2.5	(4.8)	12
Black	0.6	(3.5)	8	19.4	(4.0)	9	-1.3	(4.6)	8
Hispanic	*	*	45	28.5	(4.1)	39	-1.6	(4.6)	12
Low-income	1.3	(2.9)	47	26.2	(3.8)	41	-2.1	(3.8)	20

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
140 Olson Elementary									
Nov. 2007-Nov. 2009	-0.6	(3.0)	33	1.8	(2.8)	43	0.5	(2.6)	11
Nov. 2008-Nov. 2010	2.2	(2.5)	69	4.0	(3.0)	77	0.1	(2.8)	42
Subgroups, 2008-10:									
Disability	*	*	2	4.0	(3.2)	9	*	*	1
ELL	*	*	4	*	*	3	*	*	4
Black	2.7	(3.3)	16	3.3	(3.7)	21	-0.4	(4.2)	11
Hispanic	*	*	2	*	*	3	*	*	5
Low-income	3.4	(3.5)	27	1.4	(4.3)	27	0.9	(4.4)	14
615 Orchard Ridge Elementary									
Nov. 2006-Nov. 2008	4.5	(3.0)	76	1.2	(2.0)	83	-0.3	(2.1)	85
Nov. 2007-Nov. 2009	3.5	(2.6)	68	-7.2	(2.5)	75	0.2	(2.0)	85
Nov. 2008-Nov. 2010	2.0	(2.4)	75	-15.5	(3.2)	64	4.4	(2.4)	75
Subgroups, 2008-10:									
Disability	-4.7	(5.2)	10	-15.2	(3.4)	13	18.0	(5.3)	15
ELL	2.0	(2.6)	8	*	*	3	5.0	(5.9)	6
Black	1.5	(3.1)	23	-16.8	(3.7)	24	8.4	(3.3)	31
Hispanic	*	*	6	*	*	3	5.1	(5.2)	8
Low-income	1.9	(3.1)	38	-16.5	(3.9)	36	8.0	(2.9)	46
645 Randall Elementary									
Nov. 2006-Nov. 2008	3.1	(2.1)	194	0.0	(1.6)	197	-0.1	(1.5)	219
Nov. 2007-Nov. 2009	3.7	(1.8)	219	0.7	(1.8)	207	0.2	(1.5)	208
Nov. 2008-Nov. 2010	6.1	(1.7)	229	-2.8	(1.9)	227	4.8	(1.7)	205
Subgroups, 2008-10:									
Disability	10.5	(4.4)	23	-2.3	(2.2)	29	-0.2	(4.1)	31
ELL	6.1	(1.9)	38	-0.4	(4.6)	30	-3.8	(4.2)	24
Black	7.9	(2.9)	24	-4.4	(3.1)	22	0.8	(3.7)	23
Hispanic	*	*	14	5.0	(5.4)	18	-3.3	(4.3)	19
Low-income	9.5	(2.8)	66	-4.6	(3.3)	59	-2.7	(3.2)	47
40 Sandburg Elementary									
Nov. 2006-Nov. 2008	-4.5	(2.8)	92	-1.6	(2.0)	93	0.0	(2.1)	79
Nov. 2007-Nov. 2009	-5.6	(2.4)	83	-2.1	(2.4)	92	0.3	(2.0)	76
Nov. 2008-Nov. 2010	-2.4	(2.3)	101	-5.5	(3.0)	82	1.4	(2.3)	78
Subgroups, 2008-10:									
Disability	0.3	(4.7)	16	-5.7	(3.2)	10	-7.1	(7.2)	6
ELL	-2.3	(2.3)	39	-7.0	(4.2)	36	6.2	(3.9)	26
Black	-2.5	(3.2)	16	-5.1	(3.9)	9	0.5	(3.8)	20
Hispanic	*	*	30	-6.0	(4.5)	29	7.3	(3.9)	24
Low-income	-3.5	(2.8)	56	-5.3	(3.4)	52	3.1	(2.7)	54

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
300 Schenk Elementary									
Nov. 2006-Nov. 2008	2.8	(2.8)	92	-3.9	(1.9)	106	-0.3	(2.0)	103
Nov. 2007-Nov. 2009	0.0	(2.3)	98	-6.9	(2.3)	105	-1.4	(1.9)	104
Nov. 2008-Nov. 2010	2.7	(2.1)	120	-5.3	(2.7)	104	2.4	(2.1)	108
Subgroups, 2008-10:									
Disability	3.2	(5.0)	13	-5.2	(2.9)	20	-6.2	(4.8)	21
ELL	3.0	(2.3)	37	-7.4	(5.1)	22	6.1	(4.9)	14
Black	4.6	(2.8)	35	-4.9	(3.3)	29	2.5	(3.3)	34
Hispanic	*	*	24	-5.4	(5.8)	14	4.4	(4.9)	11
Low-income	4.7	(2.5)	78	-5.9	(3.1)	69	1.1	(2.5)	72
735 Shorewood Hills Elementary									
Nov. 2006-Nov. 2008	14.3	(2.8)	90	1.1	(2.0)	105	1.1	(2.0)	109
Nov. 2007-Nov. 2009	5.7	(2.4)	95	-0.2	(2.4)	93	2.4	(1.9)	101
Nov. 2008-Nov. 2010	0.0	(2.3)	97	2.4	(2.8)	96	4.9	(2.3)	85
Subgroups, 2008-10:									
Disability	3.2	(5.3)	9	2.7	(3.0)	14	-0.2	(6.0)	11
ELL	0.3	(2.4)	27	3.4	(5.0)	23	4.7	(4.6)	17
Black	-0.2	(3.5)	6	2.1	(3.8)	10	*	*	4
Hispanic	*	*	3	*	*	2	*	*	4
Low-income	0.6	(3.6)	26	3.2	(4.5)	24	6.9	(4.3)	19
270 Stephens Elementary									
Nov. 2006-Nov. 2008	0.7	(2.3)	146	0.1	(1.8)	145	-1.5	(1.9)	128
Nov. 2007-Nov. 2009	-2.0	(2.1)	132	-1.0	(2.2)	125	-1.6	(1.7)	135
Nov. 2008-Nov. 2010	-3.0	(2.1)	134	-2.6	(2.6)	114	-3.4	(2.1)	112
Subgroups, 2008-10:									
Disability	-2.4	(4.5)	19	-2.4	(2.8)	15	-2.4	(4.9)	20
ELL	-3.3	(2.2)	33	-7.3	(5.2)	20	3.3	(5.0)	13
Black	-1.9	(3.2)	14	-0.5	(3.7)	11	-0.7	(4.0)	17
Hispanic	*	*	10	-1.9	(6.2)	11	-1.7	(5.5)	6
Low-income	-4.2	(3.4)	34	1.8	(4.5)	24	-2.1	(3.8)	27
780 Thoreau Elementary									
Nov. 2006-Nov. 2008	1.5	(2.6)	115	-1.4	(2.0)	99	-0.3	(1.9)	117
Nov. 2007-Nov. 2009	1.4	(2.2)	116	-1.2	(2.2)	117	-2.2	(1.9)	106
Nov. 2008-Nov. 2010	0.9	(2.2)	114	0.5	(2.6)	117	-3.0	(2.0)	119
Subgroups, 2008-10:									
Disability	2.0	(4.8)	15	0.4	(2.8)	10	-16.1	(5.3)	16
ELL	1.1	(2.3)	23	-1.5	(5.3)	19	0.3	(4.7)	16
Black	-0.1	(2.8)	36	1.7	(3.3)	28	-5.4	(3.5)	29
Hispanic	*	*	17	-0.6	(5.5)	16	0.0	(4.5)	16
Low-income	-0.8	(2.7)	63	2.4	(3.3)	57	-3.4	(2.8)	57

Table A3. Elementary School Math Value Added By Grade

School	Grade 3 Math			Grade 4 Math			Grade 5 Math		
795 Van Hise Elementary	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	-2.6	(2.8)	94	1.6	(2.0)	90	1.5	(2.1)	84
Nov. 2007-Nov. 2009	1.6	(2.2)	116	1.3	(2.3)	104	3.0	(1.9)	95
Nov. 2008-Nov. 2010	3.2	(2.2)	111	2.5	(2.6)	119	4.2	(2.2)	104
Subgroups, 2008-10:									
Disability	7.7	(5.5)	7	2.6	(2.8)	6	-4.9	(6.3)	10
ELL	3.4	(2.3)	20	-2.0	(5.8)	14	0.8	(4.9)	14
Black	*	*	5	3.3	(3.8)	6	4.2	(4.7)	7
Hispanic	*	*	7	-1.1	(7.0)	6	*	*	3
Low-income	5.6	(4.2)	15	4.5	(4.8)	19	4.5	(3.9)	25

Table A4. Middle School Math Value Added By Grade

School	Grade 6 Math			Grade 7 Math		
	VA	Std. Err.	N	VA	Std. Err.	N
690 Black Hawk Middle						
Nov. 2006-Nov. 2008	0.4	(1.5)	215	0.3	(1.4)	214
Nov. 2007-Nov. 2009	3.5	(1.4)	231	1.7	(1.7)	215
Nov. 2008-Nov. 2010	0.9	(1.2)	248	0.5	(1.2)	231
Subgroups, 2008-10:						
Disability	3.9	(3.3)	33	-0.4	(3.2)	38
ELL	*	*	51	-0.7	(3.0)	44
Black	*	*	59	*	*	44
Hispanic	*	*	28	-1.7	(3.2)	28
Low-income	1.1	(1.4)	143	*	*	122
90 Cherokee Heights Middle						
Nov. 2006-Nov. 2008	-1.4	(1.2)	346	1.8	(1.2)	312
Nov. 2007-Nov. 2009	-0.1	(1.2)	318	-0.4	(1.3)	362
Nov. 2008-Nov. 2010	0.4	(1.1)	300	0.4	(1.1)	328
Subgroups, 2008-10:						
Disability	2.2	(2.7)	54	0.7	(2.8)	57
ELL	*	*	55	-4.4	(2.7)	61
Black	*	*	88	*	*	85
Hispanic	*	*	51	-2.6	(2.6)	55
Low-income	0.4	(1.3)	168	*	*	168
810 Hamilton Middle						
Nov. 2006-Nov. 2008	0.3	(1.1)	453	-0.5	(1.1)	469
Nov. 2007-Nov. 2009	-2.4	(1.1)	442	0.8	(1.2)	464
Nov. 2008-Nov. 2010	-1.0	(1.0)	440	1.2	(1.0)	447
Subgroups, 2008-10:						
Disability	-2.3	(3.3)	33	3.5	(3.2)	42
ELL	*	*	40	5.7	(3.4)	32
Black	*	*	27	*	*	25
Hispanic	*	*	27	3.4	(3.7)	16
Low-income	-1.2	(1.5)	76	*	*	78
440 James Wright Middle						
Nov. 2006-Nov. 2008	1.8	(1.7)	165	-1.6	(1.5)	157
Nov. 2007-Nov. 2009	2.4	(1.6)	161	-6.6	(1.9)	154
Nov. 2008-Nov. 2010	2.2	(1.4)	156	-1.5	(1.3)	152
Subgroups, 2008-10:						
Disability	2.5	(3.0)	39	1.9	(3.3)	33
ELL	*	*	67	-2.9	(2.4)	61
Black	*	*	52	*	*	46
Hispanic	*	*	53	-1.1	(2.4)	53
Low-income	2.7	(1.4)	134	*	*	129

Table A4. Middle School Math Value Added By Grade

School	Grade 6 Math			Grade 7 Math		
	VA	Std. Err.	N	VA	Std. Err.	N
370 Jefferson Middle						
Nov. 2006-Nov. 2008	-0.5	(1.4)	250	-1.7	(1.3)	248
Nov. 2007-Nov. 2009	0.3	(1.2)	294	-1.2	(1.6)	246
Nov. 2008-Nov. 2010	0.5	(1.1)	346	1.0	(1.1)	306
Subgroups, 2008-10:						
Disability	2.0	(2.6)	62	4.6	(2.9)	51
ELL	*	*	37	0.7	(3.4)	33
Black	*	*	61	*	*	42
Hispanic	*	*	29	-2.8	(3.5)	20
Low-income	0.1	(1.4)	108	*	*	87
540 O'Keefe Middle						
Nov. 2006-Nov. 2008	4.6	(1.4)	268	-1.4	(1.3)	239
Nov. 2007-Nov. 2009	3.7	(1.3)	269	-0.5	(1.5)	258
Nov. 2008-Nov. 2010	1.1	(1.2)	257	-1.4	(1.2)	266
Subgroups, 2008-10:						
Disability	-8.6	(3.2)	36	-2.7	(3.0)	45
ELL	*	*	24	-1.6	(3.6)	26
Black	*	*	46	*	*	45
Hispanic	*	*	21	-1.7	(3.5)	21
Low-income	0.5	(1.4)	115	*	*	111
665 Sennett Middle						
Nov. 2006-Nov. 2008	-4.5	(1.2)	377	0.2	(1.1)	373
Nov. 2007-Nov. 2009	-0.9	(1.1)	371	2.3	(1.3)	394
Nov. 2008-Nov. 2010	1.4	(1.1)	355	1.0	(1.0)	383
Subgroups, 2008-10:						
Disability	-0.1	(2.5)	69	-3.3	(2.5)	77
ELL	*	*	76	-0.2	(2.5)	75
Black	*	*	84	*	*	83
Hispanic	*	*	69	2.2	(2.3)	76
Low-income	1.4	(1.2)	203	*	*	204
710 Sherman Middle						
Nov. 2006-Nov. 2008	-1.5	(1.4)	238	1.3	(1.3)	281
Nov. 2007-Nov. 2009	-0.4	(1.4)	223	2.9	(1.6)	237
Nov. 2008-Nov. 2010	0.3	(1.2)	229	1.1	(1.2)	212
Subgroups, 2008-10:						
Disability	-6.1	(3.0)	41	3.0	(3.4)	32
ELL	*	*	60	3.6	(2.6)	57
Black	*	*	60	*	*	62
Hispanic	*	*	34	0.7	(3.1)	31
Low-income	0.4	(1.3)	148	*	*	137

Table A4. Middle School Math Value Added By Grade

School	Grade 6 Math			Grade 7 Math		
850 Spring Harbor Middle	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	3.4	(1.6)	168	0.7	(1.5)	172
Nov. 2007-Nov. 2009	4.4	(1.5)	169	2.3	(1.8)	175
Nov. 2008-Nov. 2010	1.2	(1.3)	170	-1.1	(1.3)	170
Subgroups, 2008-10:						
Disability	1.3	(3.7)	23	2.8	(3.7)	23
ELL	*	*	9	-1.7	(4.1)	14
Black	*	*	19	*	*	21
Hispanic	*	*	5	-1.5	(4.0)	9
Low-income	1.4	(1.7)	52	*	*	43
620 Toki Middle	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	3.0	(1.2)	354	-1.9	(1.2)	353
Nov. 2007-Nov. 2009	-2.5	(1.2)	336	-7.1	(1.4)	328
Nov. 2008-Nov. 2010	-3.6	(1.1)	288	-1.3	(1.1)	311
Subgroups, 2008-10:						
Disability	1.6	(2.7)	54	-7.5	(2.5)	73
ELL	*	*	40	6.8	(3.4)	33
Black	*	*	87	*	*	90
Hispanic	*	*	30	4.6	(3.2)	29
Low-income	-4.1	(1.3)	144	*	*	140
315 Whitehorse Middle	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	-2.4	(1.4)	281	2.8	(1.3)	275
Nov. 2007-Nov. 2009	-2.4	(1.3)	289	4.2	(1.5)	283
Nov. 2008-Nov. 2010	-1.6	(1.2)	272	-1.8	(1.1)	284
Subgroups, 2008-10:						
Disability	2.5	(2.9)	47	2.3	(3.0)	48
ELL	*	*	24	-3.3	(3.3)	35
Black	*	*	45	*	*	56
Hispanic	*	*	23	-0.5	(3.1)	33
Low-income	-1.6	(1.4)	115	*	*	129

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
225 Allis Elementary									
Nov. 2006-Nov. 2008	-8.3	(2.5)	123	-2.7	(1.8)	146	-0.5	(1.9)	138
Nov. 2007-Nov. 2009	-4.0	(2.5)	116	-3.2	(1.8)	131	0.1	(1.9)	137
Nov. 2008-Nov. 2010	-3.5	(2.5)	111	-4.0	(2.0)	125	-1.1	(1.8)	124
Subgroups, 2008-10:									
Disability	-11.1	(7.2)	13	-8.5	(4.8)	14	-7.7	(4.4)	23
ELL	*	*	46	-3.5	(2.1)	35	-0.9	(3.2)	43
Black	*	*	20	*	*	33	3.9	(3.7)	30
Hispanic	*	*	34	3.3	(3.7)	29	-0.7	(2.0)	37
Low-income	-4.9	(2.9)	79	-2.7	(2.2)	85	0.0	(2.2)	89
110 Cesar Chavez Elementary									
Nov. 2006-Nov. 2008	0.0	(2.1)	181	0.6	(1.8)	164	-2.7	(1.8)	147
Nov. 2007-Nov. 2009	-2.7	(2.1)	190	-0.1	(1.7)	162	-1.2	(1.9)	141
Nov. 2008-Nov. 2010	-2.3	(2.1)	186	-0.4	(1.8)	175	-0.2	(1.8)	134
Subgroups, 2008-10:									
Disability	-10.4	(8.0)	10	1.3	(5.0)	12	-2.3	(4.9)	18
ELL	*	*	30	-0.3	(1.9)	27	-6.8	(4.5)	16
Black	*	*	11	*	*	18	-1.1	(4.5)	15
Hispanic	*	*	23	-2.9	(4.0)	26	-0.3	(2.1)	18
Low-income	-2.9	(3.8)	41	-0.7	(3.0)	40	-3.5	(3.3)	38
105 Crestwood Elementary									
Nov. 2006-Nov. 2008	-4.1	(2.5)	122	1.8	(2.0)	111	-1.5	(2.1)	98
Nov. 2007-Nov. 2009	-5.8	(2.6)	112	0.6	(1.9)	100	-2.9	(2.1)	89
Nov. 2008-Nov. 2010	-1.3	(2.5)	111	-2.1	(2.1)	111	-2.1	(1.9)	92
Subgroups, 2008-10:									
Disability	8.6	(7.3)	12	-3.3	(4.9)	13	-4.3	(4.7)	18
ELL	*	*	16	-1.9	(2.2)	16	*	*	3
Black	*	*	21	*	*	16	-9.3	(4.4)	15
Hispanic	*	*	13	-2.3	(4.4)	17	-1.9	(2.3)	6
Low-income	0.1	(3.8)	38	-2.3	(2.9)	38	-6.2	(3.6)	26
165 Elvehjem Elementary									
Nov. 2006-Nov. 2008	6.3	(2.5)	112	2.7	(1.9)	122	-0.4	(2.0)	114
Nov. 2007-Nov. 2009	4.5	(2.7)	100	1.4	(1.9)	114	-2.0	(2.0)	117
Nov. 2008-Nov. 2010	1.7	(2.4)	131	-2.2	(2.1)	101	-1.7	(1.9)	106
Subgroups, 2008-10:									
Disability	4.5	(5.7)	24	-6.5	(4.4)	19	-6.1	(5.1)	15
ELL	*	*	12	-1.8	(2.3)	6	*	*	2
Black	*	*	13	*	*	15	-1.2	(4.6)	14
Hispanic	*	*	9	*	*	4	*	*	4
Low-income	0.3	(3.8)	40	-3.1	(3.2)	27	2.3	(3.4)	32

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
180 Emerson Elementary									
Nov. 2006-Nov. 2008	-3.6	(2.8)	83	1.4	(2.1)	89	1.5	(2.2)	82
Nov. 2007-Nov. 2009	3.6	(2.8)	86	2.5	(2.0)	96	0.4	(2.1)	86
Nov. 2008-Nov. 2010	2.4	(2.8)	84	-2.1	(2.2)	81	-3.0	(2.0)	89
Subgroups, 2008-10:									
Disability	13.4	(6.4)	17	-1.8	(4.5)	16	-3.0	(4.6)	20
ELL	*	*	16	-1.9	(2.3)	12	-1.4	(5.1)	8
Black	*	*	21	*	*	17	-6.1	(3.8)	23
Hispanic	*	*	11	-0.8	(4.8)	10	-3.1	(2.2)	8
Low-income	3.5	(3.1)	59	-1.8	(2.4)	57	-4.6	(2.5)	57
210 Falk Elementary									
Nov. 2006-Nov. 2008	2.4	(2.8)	88	-2.2	(2.1)	88	-2.3	(2.1)	89
Nov. 2007-Nov. 2009	-1.7	(2.9)	78	-3.9	(2.0)	80	0.9	(2.2)	78
Nov. 2008-Nov. 2010	-3.0	(2.8)	81	0.5	(2.3)	77	0.7	(2.0)	74
Subgroups, 2008-10:									
Disability	-7.0	(6.7)	15	4.2	(5.1)	10	1.6	(5.0)	15
ELL	*	*	13	0.8	(2.3)	13	-3.6	(4.9)	9
Black	*	*	33	*	*	23	3.2	(3.5)	27
Hispanic	*	*	7	0.3	(5.2)	6	0.3	(2.3)	8
Low-income	-3.8	(3.3)	52	0.3	(2.5)	48	1.6	(2.6)	48
255 Glendale Elementary									
Nov. 2006-Nov. 2008	3.8	(2.6)	103	3.0	(2.1)	85	-2.1	(2.1)	101
Nov. 2007-Nov. 2009	3.2	(2.6)	112	0.2	(1.9)	105	-1.5	(2.1)	94
Nov. 2008-Nov. 2010	3.5	(2.5)	119	-1.8	(2.1)	112	-2.8	(1.9)	111
Subgroups, 2008-10:									
Disability	4.4	(6.7)	16	3.4	(4.8)	14	-0.1	(4.0)	30
ELL	*	*	51	-1.7	(2.1)	40	-2.4	(3.2)	39
Black	*	*	27	*	*	29	0.1	(3.3)	37
Hispanic	*	*	39	4.2	(3.6)	31	-2.7	(2.1)	30
Low-income	2.6	(2.6)	95	-1.6	(2.1)	94	-2.3	(2.1)	92
675 Gompers Elementary									
Nov. 2006-Nov. 2008	0.2	(2.9)	76	-0.5	(2.1)	92	3.1	(2.2)	82
Nov. 2007-Nov. 2009	0.0	(3.3)	51	-0.4	(2.0)	76	3.2	(2.1)	88
Nov. 2008-Nov. 2010	-1.2	(3.0)	65	-1.9	(2.4)	54	3.6	(2.0)	73
Subgroups, 2008-10:									
Disability	4.1	(8.1)	9	1.4	(5.5)	6	10.3	(6.1)	7
ELL	*	*	14	-1.6	(2.5)	8	2.4	(4.9)	9
Black	*	*	18	*	*	14	6.5	(4.3)	15
Hispanic	*	*	6	*	*	4	3.5	(2.3)	6
Low-income	-3.3	(4.0)	28	-2.2	(3.3)	18	4.5	(3.4)	28

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
48 Hawthorne Elementary									
Nov. 2006-Nov. 2008	-0.7	(2.6)	103	-0.3	(2.1)	92	-3.3	(2.1)	87
Nov. 2007-Nov. 2009	-0.7	(2.7)	96	-0.2	(1.9)	102	-0.8	(2.1)	99
Nov. 2008-Nov. 2010	-0.7	(2.6)	101	1.5	(2.2)	96	-0.8	(1.9)	101
Subgroups, 2008-10:									
Disability	7.9	(7.3)	12	1.4	(5.1)	11	-8.2	(5.1)	15
ELL	*	*	28	1.5	(2.2)	28	2.7	(3.5)	31
Black	*	*	30	*	*	30	-2.1	(3.8)	25
Hispanic	*	*	15	2.9	(4.5)	15	-0.9	(2.1)	19
Low-income	-1.1	(3.0)	67	1.7	(2.4)	62	-2.0	(2.4)	68
660 Huegel Elementary									
Nov. 2006-Nov. 2008	-1.2	(2.4)	131	0.9	(1.9)	138	-2.3	(1.9)	127
Nov. 2007-Nov. 2009	-1.9	(2.5)	129	-1.1	(1.8)	129	-4.0	(2.0)	123
Nov. 2008-Nov. 2010	2.5	(2.4)	129	-3.8	(2.0)	127	-0.3	(1.8)	119
Subgroups, 2008-10:									
Disability	12.5	(6.3)	19	-3.1	(4.2)	24	-10.6	(5.1)	16
ELL	*	*	19	-3.3	(2.1)	12	-3.5	(4.4)	17
Black	*	*	28	*	*	27	1.0	(4.0)	22
Hispanic	*	*	15	-0.3	(4.7)	13	-0.4	(2.1)	15
Low-income	7.7	(3.3)	59	-2.9	(2.6)	54	0.6	(2.9)	51
375 Kennedy Elementary									
Nov. 2006-Nov. 2008	2.7	(2.3)	151	-4.2	(1.8)	151	1.0	(1.8)	164
Nov. 2007-Nov. 2009	-2.8	(2.3)	161	-1.7	(1.8)	140	0.9	(1.8)	158
Nov. 2008-Nov. 2010	-5.2	(2.2)	172	-0.6	(1.8)	164	1.2	(1.8)	142
Subgroups, 2008-10:									
Disability	-13.5	(5.8)	22	-1.7	(4.2)	24	2.6	(4.6)	22
ELL	*	*	5	*	*	2	*	*	4
Black	*	*	14	*	*	26	0.5	(4.3)	18
Hispanic	*	*	1	*	*	4	*	*	4
Low-income	-8.8	(3.9)	38	-0.1	(2.9)	44	-1.4	(3.5)	35
435 Lake View Elementary									
Nov. 2006-Nov. 2008	-4.9	(2.9)	76	0.1	(2.2)	72	1.3	(2.2)	73
Nov. 2007-Nov. 2009	3.7	(2.9)	80	0.1	(2.1)	70	0.7	(2.3)	65
Nov. 2008-Nov. 2010	7.7	(2.8)	84	-0.3	(2.3)	75	0.9	(2.1)	63
Subgroups, 2008-10:									
Disability	12.1	(7.3)	12	0.0	(5.0)	11	-3.5	(5.5)	10
ELL	*	*	23	-0.2	(2.3)	17	5.3	(4.0)	18
Black	*	*	20	*	*	22	0.2	(3.9)	19
Hispanic	*	*	10	-2.3	(5.0)	8	1.0	(2.3)	10
Low-income	7.5	(3.2)	57	0.2	(2.6)	47	2.4	(2.7)	40

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
475 Leopold Elementary									
Nov. 2006-Nov. 2008	-3.9	(2.1)	168	1.2	(1.7)	178	-1.0	(1.7)	187
Nov. 2007-Nov. 2009	2.3	(2.1)	195	1.5	(1.7)	176	1.1	(1.8)	166
Nov. 2008-Nov. 2010	-0.2	(1.9)	229	2.5	(1.7)	192	2.4	(1.7)	161
Subgroups, 2008-10:									
Disability	-7.4	(5.8)	23	5.6	(4.2)	24	7.8	(4.5)	23
ELL	*	*	76	2.2	(1.8)	67	5.9	(3.3)	44
Black	*	*	73	*	*	55	-0.4	(3.2)	47
Hispanic	*	*	62	-0.4	(2.9)	60	2.9	(1.9)	41
Low-income	1.5	(2.2)	155	2.0	(1.9)	136	3.3	(2.2)	104
15 Lincoln Elementary									
Nov. 2006-Nov. 2008	4.9	(2.0)	205	3.2	(1.7)	192	-1.5	(1.7)	179
Nov. 2007-Nov. 2009	-1.3	(2.1)	189	1.7	(1.6)	197	-0.8	(1.7)	184
Nov. 2008-Nov. 2010	-3.7	(2.0)	203	4.2	(1.7)	192	-0.2	(1.6)	201
Subgroups, 2008-10:									
Disability	0.2	(6.2)	20	6.9	(4.0)	28	4.1	(4.4)	26
ELL	*	*	99	3.9	(1.8)	85	-0.1	(2.7)	71
Black	*	*	34	*	*	37	1.0	(3.2)	49
Hispanic	*	*	61	5.2	(2.9)	63	0.1	(1.8)	58
Low-income	-5.7	(2.3)	139	3.7	(1.9)	136	1.2	(2.0)	133
65 Lindbergh Elementary									
Nov. 2006-Nov. 2008	2.1	(3.0)	72	-1.7	(2.2)	73	0.8	(2.2)	83
Nov. 2007-Nov. 2009	3.5	(3.0)	71	-0.6	(2.1)	70	-0.8	(2.2)	76
Nov. 2008-Nov. 2010	4.3	(2.9)	69	-1.0	(2.4)	66	-0.6	(2.1)	69
Subgroups, 2008-10:									
Disability	*	*	5	-3.0	(5.2)	9	1.8	(6.0)	8
ELL	*	*	27	-1.2	(2.4)	25	-1.5	(3.6)	25
Black	*	*	16	*	*	7	-0.1	(4.4)	13
Hispanic	*	*	11	-3.1	(5.1)	7	-0.6	(2.3)	7
Low-income	3.6	(3.1)	56	-0.8	(2.4)	51	-2.2	(2.6)	46
495 Lowell Elementary									
Nov. 2006-Nov. 2008	-7.9	(3.0)	73	-2.8	(2.2)	64	-2.2	(2.3)	63
Nov. 2007-Nov. 2009	-5.4	(3.0)	70	-1.7	(2.1)	64	-3.1	(2.3)	59
Nov. 2008-Nov. 2010	-4.6	(2.9)	72	-1.5	(2.3)	73	-0.5	(2.1)	64
Subgroups, 2008-10:									
Disability	-5.8	(8.2)	8	4.5	(4.9)	12	0.5	(5.7)	9
ELL	*	*	7	-1.2	(2.4)	15	-3.5	(4.6)	11
Black	*	*	23	*	*	20	-1.1	(4.0)	17
Hispanic	*	*	7	-1.9	(4.8)	10	-0.5	(2.3)	8
Low-income	-5.7	(3.6)	39	-1.1	(2.8)	38	-1.1	(2.9)	37

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
525 Marquette Elementary									
Nov. 2006-Nov. 2008	-0.2	(2.5)	123	0.4	(1.9)	125	1.3	(1.9)	150
Nov. 2007-Nov. 2009	-3.7	(2.4)	133	3.0	(1.8)	129	2.2	(1.9)	129
Nov. 2008-Nov. 2010	-3.2	(2.3)	151	4.3	(1.9)	141	-0.5	(1.8)	142
Subgroups, 2008-10:									
Disability	8.3	(6.5)	17	4.2	(4.2)	24	5.1	(4.2)	27
ELL	*	*	8	*	*	4	*	*	4
Black	*	*	13	*	*	14	0.7	(4.5)	16
Hispanic	*	*	9	*	*	5	*	*	5
Low-income	-1.8	(3.9)	36	6.3	(3.2)	29	-0.5	(3.2)	42
555 Mendota Elementary									
Nov. 2006-Nov. 2008	-3.7	(2.9)	81	-0.4	(2.2)	70	2.8	(2.4)	50
Nov. 2007-Nov. 2009	-2.2	(3.0)	70	-1.0	(2.1)	68	-0.9	(2.3)	61
Nov. 2008-Nov. 2010	-0.1	(2.9)	72	-2.2	(2.3)	70	1.0	(2.0)	71
Subgroups, 2008-10:									
Disability	10.8	(6.5)	16	-6.6	(4.7)	14	1.2	(4.9)	15
ELL	*	*	5	*	*	4	*	*	5
Black	*	*	38	*	*	36	2.8	(3.1)	33
Hispanic	*	*	6	*	*	4	0.8	(2.3)	6
Low-income	0.9	(3.2)	52	-1.5	(2.5)	46	1.6	(2.5)	50
390 Muir Elementary									
Nov. 2006-Nov. 2008	4.4	(2.5)	120	1.4	(1.9)	131	-2.4	(2.0)	125
Nov. 2007-Nov. 2009	3.5	(2.5)	125	-0.2	(1.8)	127	-2.3	(1.9)	130
Nov. 2008-Nov. 2010	3.9	(2.4)	128	-0.5	(2.0)	124	0.9	(1.8)	120
Subgroups, 2008-10:									
Disability	13.0	(6.7)	16	-0.6	(4.3)	22	3.6	(4.0)	30
ELL	*	*	17	-0.2	(2.1)	17	0.7	(4.2)	20
Black	*	*	15	*	*	23	0.6	(4.4)	17
Hispanic	*	*	11	2.4	(5.1)	8	0.6	(2.1)	15
Low-income	5.9	(3.5)	50	-0.5	(2.8)	44	-0.6	(3.2)	39
125 Nuestro Mundo Community									
Nov. 2006-Nov. 2008	8.1	(3.6)	40						
Nov. 2007-Nov. 2009	5.7	(2.9)	82	0.1	(2.3)	40			
Nov. 2008-Nov. 2010	4.0	(2.8)	82	2.5	(2.2)	84	-2.0	(2.2)	40
Subgroups, 2008-10:									
Disability	*	*	1	*	*	3	*	*	1
ELL	*	*	47	2.3	(2.3)	40	-5.5	(4.2)	12
Black	*	*	8	*	*	9	-0.7	(4.7)	8
Hispanic	*	*	45	3.2	(3.2)	39	-2.1	(2.4)	12
Low-income	5.0	(3.4)	47	2.6	(2.8)	41	-4.4	(3.3)	20

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
140 Olson Elementary									
Nov. 2007-Nov. 2009	-4.4	(3.7)	33	-0.3	(2.2)	43	0.3	(2.8)	11
Nov. 2008-Nov. 2010	-1.3	(3.0)	69	2.5	(2.3)	77	1.2	(2.2)	42
Subgroups, 2008-10:									
Disability	*	*	2	1.8	(5.3)	9	*	*	1
ELL	*	*	4	*	*	3	*	*	4
Black	*	*	16	*	*	21	2.6	(4.3)	11
Hispanic	*	*	2	*	*	3	*	*	5
Low-income	0.8	(4.1)	27	2.1	(3.1)	27	2.7	(3.9)	14
615 Orchard Ridge Elementary									
Nov. 2006-Nov. 2008	0.2	(2.9)	75	0.1	(2.1)	84	-2.0	(2.2)	84
Nov. 2007-Nov. 2009	3.2	(3.0)	67	-3.1	(2.0)	76	-2.8	(2.1)	86
Nov. 2008-Nov. 2010	2.6	(2.9)	75	-3.7	(2.4)	64	1.5	(2.0)	76
Subgroups, 2008-10:									
Disability	-17.7	(7.8)	10	-3.7	(4.7)	13	2.3	(4.9)	15
ELL	*	*	8	*	*	3	2.2	(5.3)	6
Black	*	*	23	*	*	24	-1.5	(3.3)	31
Hispanic	*	*	6	*	*	3	1.5	(2.3)	8
Low-income	4.5	(3.7)	38	-3.1	(2.7)	36	0.2	(2.7)	46
645 Randall Elementary									
Nov. 2006-Nov. 2008	5.7	(2.0)	193	-0.8	(1.7)	195	5.2	(1.6)	218
Nov. 2007-Nov. 2009	6.4	(2.0)	219	1.0	(1.6)	205	3.7	(1.7)	207
Nov. 2008-Nov. 2010	7.4	(1.9)	229	0.9	(1.6)	227	0.7	(1.6)	205
Subgroups, 2008-10:									
Disability	3.8	(5.9)	23	7.2	(4.0)	29	0.5	(4.1)	31
ELL	*	*	38	1.1	(1.8)	30	-1.1	(4.1)	24
Black	*	*	24	*	*	22	-1.6	(4.1)	23
Hispanic	*	*	14	-0.3	(4.4)	18	0.9	(1.9)	19
Low-income	7.0	(3.2)	66	1.7	(2.7)	59	-2.5	(3.2)	47
40 Sandburg Elementary									
Nov. 2006-Nov. 2008	-1.4	(2.7)	92	0.0	(2.1)	92	-1.3	(2.2)	78
Nov. 2007-Nov. 2009	-2.6	(2.9)	83	-0.5	(2.0)	91	-3.3	(2.2)	75
Nov. 2008-Nov. 2010	-0.7	(2.6)	101	-0.5	(2.2)	81	-1.4	(2.0)	78
Subgroups, 2008-10:									
Disability	-2.8	(6.5)	16	-3.4	(5.1)	10	0.2	(6.3)	6
ELL	*	*	39	-0.7	(2.3)	35	-1.2	(3.6)	26
Black	*	*	16	*	*	9	-1.3	(3.9)	20
Hispanic	*	*	30	-1.5	(3.6)	28	-1.2	(2.2)	24
Low-income	-1.7	(3.3)	56	-0.5	(2.5)	51	-1.1	(2.5)	54

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
300 Schenk Elementary									
Nov. 2006-Nov. 2008	-2.5	(2.7)	93	-0.9	(2.0)	106	-0.7	(2.1)	103
Nov. 2007-Nov. 2009	-5.9	(2.7)	98	0.3	(1.9)	105	2.1	(2.1)	103
Nov. 2008-Nov. 2010	-3.8	(2.5)	119	-2.3	(2.1)	103	1.6	(1.9)	107
Subgroups, 2008-10:									
Disability	-19.5	(7.1)	13	-6.2	(4.3)	20	-1.0	(4.6)	21
ELL	*	*	36	-2.0	(2.2)	21	4.6	(4.6)	13
Black	*	*	35	*	*	29	-0.4	(3.4)	34
Hispanic	*	*	23	-5.4	(4.6)	13	1.7	(2.2)	10
Low-income	-2.0	(2.9)	77	-3.6	(2.3)	68	2.1	(2.4)	71
735 Shorewood Hills Elementary									
Nov. 2006-Nov. 2008	8.6	(2.8)	84	2.9	(2.1)	100	0.6	(2.1)	108
Nov. 2007-Nov. 2009	6.7	(2.8)	94	1.2	(2.0)	87	1.5	(2.1)	101
Nov. 2008-Nov. 2010	2.8	(2.7)	95	-0.4	(2.2)	94	1.3	(2.0)	84
Subgroups, 2008-10:									
Disability	4.4	(8.2)	9	1.0	(4.8)	14	4.4	(5.5)	11
ELL	*	*	25	-0.1	(2.3)	21	4.8	(4.3)	16
Black	*	*	6	*	*	10	*	*	4
Hispanic	*	*	3	*	*	2	*	*	4
Low-income	1.1	(4.3)	26	2.5	(3.3)	22	3.1	(4.0)	19
270 Stephens Elementary									
Nov. 2006-Nov. 2008	-3.6	(2.3)	144	-4.5	(1.9)	144	3.5	(2.0)	125
Nov. 2007-Nov. 2009	-2.2	(2.4)	131	-3.2	(1.8)	125	3.7	(1.9)	132
Nov. 2008-Nov. 2010	-2.0	(2.4)	134	-1.0	(2.1)	114	2.4	(1.9)	112
Subgroups, 2008-10:									
Disability	-18.3	(6.2)	19	-1.7	(4.8)	15	10.0	(4.7)	20
ELL	*	*	33	-1.0	(2.2)	20	-0.8	(4.7)	13
Black	*	*	14	*	*	11	9.1	(4.3)	17
Hispanic	*	*	10	-2.8	(4.8)	11	2.5	(2.2)	6
Low-income	-5.7	(4.0)	34	0.6	(3.3)	24	5.6	(3.7)	27
780 Thoreau Elementary									
Nov. 2006-Nov. 2008	-1.4	(2.5)	115	-0.1	(2.0)	99	2.5	(2.0)	117
Nov. 2007-Nov. 2009	-1.0	(2.5)	116	0.8	(1.9)	117	0.3	(2.0)	106
Nov. 2008-Nov. 2010	-6.1	(2.5)	114	1.9	(2.0)	117	-1.9	(1.8)	119
Subgroups, 2008-10:									
Disability	-15.2	(6.8)	15	-6.3	(5.2)	10	-8.7	(5.0)	16
ELL	*	*	23	1.9	(2.1)	19	3.6	(4.4)	16
Black	*	*	36	*	*	28	-5.4	(3.7)	29
Hispanic	*	*	17	-1.7	(4.4)	16	-1.6	(2.1)	16
Low-income	-6.2	(3.1)	63	-0.8	(2.6)	57	-0.4	(2.7)	57

Table A5. Elementary School Reading Value Added By Grade

School	Grade 3 Reading			Grade 4 Reading			Grade 5 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N	VA	Std. Err.	N
795 Van Hise Elementary									
Nov. 2006-Nov. 2008	-5.5	(2.7)	94	0.2	(2.1)	89	-1.2	(2.2)	84
Nov. 2007-Nov. 2009	-1.1	(2.6)	116	1.7	(1.9)	104	-1.0	(2.1)	95
Nov. 2008-Nov. 2010	3.4	(2.6)	110	1.8	(2.0)	119	-1.4	(1.9)	104
Subgroups, 2008-10:									
Disability	11.8	(8.7)	7	2.8	(5.7)	6	-6.2	(5.8)	10
ELL	*	*	19	2.0	(2.2)	14	-2.2	(4.6)	14
Black	*	*	5	*	*	6	-1.5	(5.1)	7
Hispanic	*	*	7	-1.0	(5.3)	6	*	*	3
Low-income	2.1	(5.0)	14	4.8	(3.5)	19	-4.1	(3.7)	25

Table A6. Middle School Reading Value Added By Grade

School	Grade 6 Reading			Grade 7 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
690 Black Hawk Middle						
Nov. 2006-Nov. 2008	1.0	(1.0)	215	0.2	(1.9)	212
Nov. 2007-Nov. 2009	0.5	(1.1)	231	-0.9	(1.5)	213
Nov. 2008-Nov. 2010	-0.8	(1.3)	248	-2.6	(1.4)	230
Subgroups, 2008-10:						
Disability	-2.6	(2.7)	33	-3.9	(3.0)	38
ELL	*	*	51	*	*	43
Black	*	*	59	-2.3	(2.6)	44
Hispanic	*	*	28	*	*	27
Low-income	*	*	143	*	*	121
90 Cherokee Heights Middle						
Nov. 2006-Nov. 2008	0.2	(0.9)	345	-2.9	(1.6)	313
Nov. 2007-Nov. 2009	-0.8	(1.0)	314	-1.8	(1.3)	359
Nov. 2008-Nov. 2010	1.5	(1.2)	297	0.8	(1.2)	326
Subgroups, 2008-10:						
Disability	2.7	(2.4)	54	0.8	(2.7)	57
ELL	*	*	52	*	*	59
Black	*	*	87	0.0	(2.1)	85
Hispanic	*	*	49	*	*	53
Low-income	*	*	166	*	*	166
810 Hamilton Middle						
Nov. 2006-Nov. 2008	-0.8	(0.9)	449	6.6	(1.3)	467
Nov. 2007-Nov. 2009	0.3	(0.9)	439	3.1	(1.2)	463
Nov. 2008-Nov. 2010	0.2	(1.1)	438	-0.5	(1.1)	447
Subgroups, 2008-10:						
Disability	0.7	(2.7)	33	0.6	(3.0)	42
ELL	*	*	37	*	*	32
Black	*	*	27	1.6	(2.9)	25
Hispanic	*	*	27	*	*	17
Low-income	*	*	76	*	*	79
440 James Wright Middle						
Nov. 2006-Nov. 2008	-0.9	(1.0)	159	3.7	(2.1)	150
Nov. 2007-Nov. 2009	-0.8	(1.2)	161	-0.1	(1.7)	147
Nov. 2008-Nov. 2010	-1.5	(1.5)	156	-0.1	(1.6)	152
Subgroups, 2008-10:						
Disability	-2.5	(2.6)	39	3.5	(3.0)	33
ELL	*	*	67	*	*	61
Black	*	*	52	2.1	(2.5)	46
Hispanic	*	*	53	*	*	53
Low-income	*	*	134	*	*	129

Table A6. Middle School Reading Value Added By Grade

School	Grade 6 Reading			Grade 7 Reading		
	VA	Std. Err.	N	VA	Std. Err.	N
370 Jefferson Middle						
Nov. 2006-Nov. 2008	0.5	(1.0)	249	-0.2	(1.8)	248
Nov. 2007-Nov. 2009	1.8	(1.0)	291	-0.6	(1.4)	246
Nov. 2008-Nov. 2010	1.4	(1.2)	343	-1.9	(1.3)	306
Subgroups, 2008-10:						
Disability	0.5	(2.3)	62	-1.7	(2.8)	51
ELL	*	*	34	*	*	33
Black	*	*	61	-3.6	(2.6)	42
Hispanic	*	*	29	*	*	20
Low-income	*	*	107	*	*	87
540 O'Keefe Middle						
Nov. 2006-Nov. 2008	-0.6	(1.0)	268	-2.9	(1.8)	238
Nov. 2007-Nov. 2009	0.1	(1.1)	268	0.8	(1.4)	258
Nov. 2008-Nov. 2010	0.2	(1.3)	255	2.2	(1.3)	267
Subgroups, 2008-10:						
Disability	2.3	(2.7)	36	-1.1	(2.9)	46
ELL	*	*	22	*	*	26
Black	*	*	46	2.3	(2.6)	45
Hispanic	*	*	21	*	*	21
Low-income	*	*	114	*	*	112
665 Sennett Middle						
Nov. 2006-Nov. 2008	-0.4	(0.9)	372	-2.2	(1.5)	372
Nov. 2007-Nov. 2009	-1.3	(1.0)	368	-1.0	(1.2)	393
Nov. 2008-Nov. 2010	-2.8	(1.2)	355	-0.5	(1.2)	382
Subgroups, 2008-10:						
Disability	-1.7	(2.3)	69	-3.2	(2.4)	78
ELL	*	*	76	*	*	74
Black	*	*	84	-1.9	(2.2)	82
Hispanic	*	*	69	*	*	76
Low-income	*	*	203	*	*	202
710 Sherman Middle						
Nov. 2006-Nov. 2008	0.7	(1.0)	238	0.1	(1.7)	279
Nov. 2007-Nov. 2009	0.3	(1.1)	223	0.9	(1.5)	236
Nov. 2008-Nov. 2010	-1.3	(1.3)	229	1.5	(1.4)	212
Subgroups, 2008-10:						
Disability	-3.8	(2.6)	41	1.3	(3.2)	32
ELL	*	*	60	*	*	57
Black	*	*	60	0.2	(2.3)	62
Hispanic	*	*	34	*	*	31
Low-income	*	*	148	*	*	137

Table A6. Middle School Reading Value Added By Grade

School	Grade 6 Reading			Grade 7 Reading		
850 Spring Harbor Middle	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	-0.1	(1.0)	167	2.0	(2.0)	171
Nov. 2007-Nov. 2009	0.5	(1.1)	168	1.6	(1.6)	174
Nov. 2008-Nov. 2010	1.0	(1.5)	169	-1.4	(1.5)	171
Subgroups, 2008-10:						
Disability	-0.9	(2.9)	23	-1.3	(3.3)	24
ELL	*	*	8	*	*	14
Black	*	*	19	-2.2	(3.0)	21
Hispanic	*	*	5	*	*	9
Low-income	*	*	52	*	*	44
620 Toki Middle	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	0.7	(0.9)	350	-4.2	(1.5)	353
Nov. 2007-Nov. 2009	0.7	(1.0)	334	-3.0	(1.3)	325
Nov. 2008-Nov. 2010	2.7	(1.3)	287	2.5	(1.3)	308
Subgroups, 2008-10:						
Disability	4.6	(2.4)	54	1.7	(2.5)	71
ELL	*	*	39	*	*	32
Black	*	*	86	2.4	(2.1)	89
Hispanic	*	*	30	*	*	28
Low-income	*	*	143	*	*	138
315 Whitehorse Middle	VA	Std. Err.	N	VA	Std. Err.	N
Nov. 2006-Nov. 2008	0.0	(1.0)	281	-0.2	(1.7)	275
Nov. 2007-Nov. 2009	-1.1	(1.0)	290	0.8	(1.4)	283
Nov. 2008-Nov. 2010	-1.1	(1.3)	272	-0.3	(1.3)	284
Subgroups, 2008-10:						
Disability	0.0	(2.5)	47	4.3	(2.8)	48
ELL	*	*	24	*	*	35
Black	*	*	45	2.0	(2.4)	56
Hispanic	*	*	23	*	*	33
Low-income	*	*	115	*	*	129

Appendix Tables A7, A8, A9, and A10: Value-Added Coefficients from the MMSD Model

Tables A7, A8, A9, and A10 present the coefficients used to make adjustments for pretest scores and student characteristics when measuring value added in Madison. These coefficients come from a statistical analysis that compares students in the same schools with each other. The result is a district-wide measure of intra-school differences across students of different demographic groups, controlling for all other measurable characteristics.

The coefficients on student characteristics measure the statistical relationship between test score improvement and student characteristics within MMSD. Often, these are relative to an omitted student characteristic. For example, the race characteristics are listed as Asian, black, Hispanic, Native American, and biracial, with white as the omitted. Note that the coefficient in Table A7 on black for elementary grades in math for November 2008 to November 2010 is -4.4. This implies that black elementary school students gained about 4 points less on the WKCE than observationally similar white students across MMSD.

The omitted student characteristics are:

- Male (coefficient on female measured relative to male);
- White (coefficient on black, Hispanic, etc. measured relative to white);
- Without disability (coefficients on disability measured relative to without disability);
- Not ELL (coefficients on ELL measured relative to non-ELL);
- No free or reduced-price lunch (coefficients on FRL measured relative to non-FRL);
- Parent with high school diploma (coefficients on parent education measured relative to parent with high school diploma);
- Not full academic year (coefficients on FAY measured relative to non-FAY)

The choice of omitted student characteristic has no intrinsic or statistical value; the results of the value-added model would not change were, for example, female rather than male the omitted.

The pretest score coefficients measure the relationship between test scores from one year to the next from one grade to the next. For example, in Table A7, the coefficient on 2008 third-grade pretest score in the model of math value added from November 2008 to November 2010 is 0.85. This implies that third-graders who scored one point higher on the 2008 math WKCE scored 0.85 points higher on the 2009 math WKCE as fourth graders on average. Note that, in some cases, these coefficients are measured twice. For example, the coefficient on 2008 third-grade pretest score is also measured in the model of math value added from November 2007 to November 2009. It is also equal to 0.85 in that case, but it does not necessarily have to be the same (although it should be close). The coefficients are measured twice because the value-added model is measured separately for each overlapping period. Since the periods overlap, the same parameter is measured twice, and since different data are covered each time, the estimate of that parameter may be slightly different. The pretest coefficients are important for properly measuring improvement on the WKCE from one test to the next. In particular, they adjust for the possibility of it being easier or more difficult to gain points on the WKCE from one year to the next from a higher or lower initial score.

It is important to note that these coefficients measure gaps that control for differences across the other student characteristics. For example, the black-white gap mentioned above does not include the effects of differences between black students and white students in pretest scores, special education status, low-income status, parents' education, or other student characteristics listed in the table. These effects are controlled for and taken out of the gap. They also do not include differences in the quality of schools attended by black students and white students. For these reasons, these coefficients are often called *partial* coefficients, in the sense that they are the part of differences between students of different groups that cannot be explained with differences across the groups in other measurable variables.

Table A7. Coefficients from Elementary School Math Value-Added Model

Variable	Nov. 2006-Nov. 2008		Nov. 2007-Nov. 2009		Nov. 2008-Nov. 2010	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Female	0.4	(0.5)	0.0	(0.5)	-0.9	(0.5)
S. E. Asian	0.9	(1.7)	1.4	(1.7)	-0.6	(1.7)
Other Asian	3.6	(1.3)	5.6	(1.3)	7.4	(1.2)
Black	-4.1	(0.9)	-4.3	(0.9)	-4.4	(0.9)
Hispanic	-2.1	(1.3)	-1.1	(1.3)	-3.2	(1.3)
Native American	0.9	(4.1)	-1.2	(3.9)	-3.5	(4.0)
Biracial	-2.7	(1.0)	0.0	(1.0)	0.9	(1.0)
Disability (L.D.)	-14.2	(1.4)	-11.1	(1.5)	-12.9	(1.5)
Disability (Speech)	-3.1	(1.2)	-4.4	(1.2)	-3.5	(1.2)
Disability (Other)	-12.3	(1.1)	-15.0	(1.2)	-14.5	(1.2)
ELL (Beg./Int.)	-3.7	(1.2)	-2.9	(1.2)	-1.0	(1.1)
ELL (Adv.)	2.0	(1.8)	1.1	(2.0)	2.1	(2.4)
Free Lunch	-1.9	(0.8)	-2.9	(0.8)	-3.6	(0.8)
Reduced-Price Lunch	0.2	(1.2)	-1.7	(1.2)	-2.7	(1.2)
Free or R.-P. Lunch	-1.1	(2.6)	5.2	(5.4)	14.8	(4.8)
Parent w/College Degree	2.4	(1.0)	1.4	(1.0)	1.6	(1.1)
Parent w/Graduate Degree	4.5	(1.0)	2.4	(1.0)	2.7	(1.1)
Parent w/o H.S. Diploma	0.0	(1.1)	-0.9	(1.2)	0.6	(1.3)
Parent w/Vocational Degree	1.5	(0.9)	-0.5	(0.9)	0.1	(1.0)
Parent Education Unknown	3.8	(1.0)	2.1	(1.0)	1.2	(0.9)
Full Academic Year	-0.5	(1.3)	2.0	(1.3)	4.3	(1.3)
Grade 3 Score (Nov. 2006)	0.85	(0.02)				
Grade 4 Score (Nov. 2006)	0.92	(0.02)				
Grade 5 Score (Nov. 2006)	0.93	(0.02)				
Grade 3 Score (Nov. 2007)	0.81	(0.02)	0.81	(0.02)		
Grade 4 Score (Nov. 2007)	0.89	(0.02)	0.88	(0.02)		
Grade 5 Score (Nov. 2007)	0.83	(0.02)	0.83	(0.02)		
Grade 3 Score (Nov. 2008)			0.85	(0.02)	0.85	(0.02)
Grade 4 Score (Nov. 2008)			0.95	(0.02)	0.94	(0.02)
Grade 5 Score (Nov. 2008)			0.85	(0.02)	0.84	(0.02)
Grade 3 Score (Nov. 2009)					0.78	(0.02)
Grade 4 Score (Nov. 2009)					0.90	(0.02)
Grade 5 Score (Nov. 2009)					0.89	(0.02)

Table A8. Coefficients from Middle School Math Value-Added Model

Variable	Nov. 2006-Nov. 2008		Nov. 2007-Nov. 2009		Nov. 2008-Nov. 2010	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Female	-0.7	(0.6)	-2.3	(0.6)	-4.4	(0.6)
S. E. Asian	-0.7	(2.0)	-0.6	(1.9)	-3.2	(1.9)
Other Asian	6.0	(1.5)	4.5	(1.5)	2.1	(1.4)
Black	-3.9	(1.1)	-4.2	(1.0)	-7.0	(1.0)
Hispanic	-2.8	(1.6)	-1.9	(1.5)	-1.6	(1.4)
Native American	0.9	(5.1)	-5.3	(5.5)	-3.8	(4.5)
Biracial	-0.7	(1.2)	-3.0	(1.2)	-3.3	(1.1)
Disability (L.D.)	-9.3	(1.4)	-4.8	(1.3)	-1.4	(1.3)
Disability (Speech)	-4.8	(1.8)	-3.0	(1.7)	-4.7	(1.6)
Disability (Other)	-7.7	(1.2)	-7.0	(1.2)	-7.2	(1.2)
ELL (Beg./Int.)	-2.1	(1.5)	-0.8	(1.4)	1.5	(1.3)
ELL (Adv.)	4.5	(2.0)	0.6	(2.3)	1.1	(2.6)
Free Lunch	-3.0	(1.0)	-1.6	(1.0)	-2.1	(0.9)
Reduced-Price Lunch	-2.6	(1.4)	0.0	(1.4)	-0.1	(1.3)
Free or R.-P. Lunch	2.5	(2.6)	7.7	(5.7)	6.3	(5.4)
Parent w/College Degree	2.6	(1.2)	1.6	(1.2)	2.0	(1.1)
Parent w/Graduate Degree	4.8	(1.2)	4.9	(1.2)	4.6	(1.1)
Parent w/o H.S. Diploma	1.8	(1.4)	0.7	(1.3)	0.4	(1.3)
Parent w/Vocational Degree	1.0	(1.1)	0.2	(1.1)	1.1	(1.0)
Parent Education Unknown	1.2	(1.3)	0.8	(1.2)	3.0	(1.1)
Full Academic Year	7.2	(1.4)	3.4	(1.4)	2.1	(1.4)
Grade 6 Score (Nov. 2006)	0.83	(0.02)				
Grade 7 Score (Nov. 2006)	0.98	(0.02)				
Grade 6 Score (Nov. 2007)	0.82	(0.02)	0.84	(0.02)		
Grade 7 Score (Nov. 2007)	0.89	(0.02)	0.91	(0.02)		
Grade 6 Score (Nov. 2008)			0.81	(0.02)	0.82	(0.02)
Grade 7 Score (Nov. 2008)			0.89	(0.02)	0.89	(0.02)
Grade 6 Score (Nov. 2009)					0.84	(0.02)
Grade 7 Score (Nov. 2009)					1.10	(0.02)

Table A9. Coefficients from Elementary School Reading Value-Added Model

Variable	Nov. 2006-Nov. 2008		Nov. 2007-Nov. 2009		Nov. 2008-Nov. 2010	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Female	1.0	(0.6)	1.7	(0.6)	1.6	(0.5)
S. E. Asian	-2.2	(1.9)	-2.9	(1.8)	-5.0	(1.8)
Other Asian	-0.6	(1.3)	1.6	(1.3)	1.0	(1.3)
Black	-7.2	(1.0)	-4.9	(1.0)	-5.9	(0.9)
Hispanic	-2.1	(1.4)	-1.9	(1.3)	-2.8	(1.3)
Native American	2.6	(4.3)	-5.3	(4.2)	-3.9	(4.1)
Biracial	-4.7	(1.1)	-2.1	(1.1)	-0.7	(1.0)
Disability (L.D.)	-10.6	(1.5)	-5.5	(1.6)	-8.5	(1.6)
Disability (Speech)	-5.9	(1.3)	-3.6	(1.3)	-2.4	(1.3)
Disability (Other)	-7.8	(1.2)	-7.7	(1.2)	-11.4	(1.2)
ELL (Beg./Int.)	-1.1	(1.3)	-1.4	(1.3)	-1.3	(1.2)
ELL (Adv.)	1.3	(1.9)	1.6	(2.1)	2.6	(2.6)
Free Lunch	-2.8	(0.9)	-2.6	(0.9)	-3.7	(0.9)
Reduced-Price Lunch	-0.4	(1.3)	-1.9	(1.3)	-2.7	(1.3)
Free or R.-P. Lunch	-1.2	(2.7)	11.9	(6.1)	10.1	(5.3)
Parent w/College Degree	4.1	(1.1)	1.8	(1.1)	0.7	(1.1)
Parent w/Graduate Degree	6.4	(1.1)	4.9	(1.1)	1.2	(1.1)
Parent w/o H.S. Diploma	0.9	(1.2)	-1.5	(1.3)	-1.6	(1.3)
Parent w/Vocational Degree	1.9	(1.0)	0.2	(1.0)	-1.5	(1.0)
Parent Education Unknown	4.5	(1.1)	1.7	(1.0)	-0.7	(1.0)
Full Academic Year	2.0	(1.3)	2.8	(1.3)	2.9	(1.3)
Grade 3 Score (Nov. 2006)	0.99	(0.02)				
Grade 4 Score (Nov. 2006)	0.91	(0.02)				
Grade 5 Score (Nov. 2006)	0.82	(0.02)				
Grade 3 Score (Nov. 2007)	1.01	(0.02)	1.02	(0.02)		
Grade 4 Score (Nov. 2007)	0.92	(0.02)	0.93	(0.02)		
Grade 5 Score (Nov. 2007)	0.89	(0.02)	0.91	(0.02)		
Grade 3 Score (Nov. 2008)			1.00	(0.02)	1.00	(0.02)
Grade 4 Score (Nov. 2008)			0.88	(0.02)	0.88	(0.02)
Grade 5 Score (Nov. 2008)			0.85	(0.02)	0.85	(0.02)
Grade 3 Score (Nov. 2009)					1.07	(0.02)
Grade 4 Score (Nov. 2009)					0.83	(0.02)
Grade 5 Score (Nov. 2009)					0.88	(0.02)

Table A10. Coefficients from Middle School Reading Value-Added Model

Variable	Nov. 2006-Nov. 2008		Nov. 2007-Nov. 2009		Nov. 2008-Nov. 2010	
	Coeff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.
Female	1.2	(0.7)	1.4	(0.6)	-0.4	(0.6)
S. E. Asian	-0.8	(2.2)	0.0	(2.1)	-0.1	(2.0)
Other Asian	3.2	(1.7)	1.0	(1.6)	0.2	(1.5)
Black	-4.7	(1.2)	-3.9	(1.1)	-4.5	(1.1)
Hispanic	-2.5	(1.7)	-0.5	(1.6)	0.2	(1.5)
Native American	-12.7	(5.6)	-5.6	(6.2)	7.5	(4.8)
Biracial	-0.5	(1.4)	-1.1	(1.3)	-1.3	(1.2)
Disability (L.D.)	-6.3	(1.5)	-1.7	(1.4)	-4.4	(1.3)
Disability (Speech)	-1.8	(2.0)	-3.4	(1.8)	-3.3	(1.8)
Disability (Other)	-5.5	(1.4)	-1.0	(1.3)	-5.4	(1.3)
ELL (Beg./Int.)	-0.2	(1.7)	0.4	(1.5)	1.3	(1.5)
ELL (Adv.)	0.1	(2.2)	-0.6	(2.6)	0.4	(2.9)
Free Lunch	-0.7	(1.1)	-1.2	(1.0)	-0.6	(1.0)
Reduced-Price Lunch	-0.5	(1.6)	-0.8	(1.5)	-0.7	(1.5)
Free or R.-P. Lunch	-3.6	(3.1)	-3.5	(6.7)	3.7	(6.3)
Parent w/College Degree	2.2	(1.3)	1.2	(1.3)	2.7	(1.2)
Parent w/Graduate Degree	5.4	(1.3)	4.4	(1.3)	4.5	(1.2)
Parent w/o H.S. Diploma	0.7	(1.5)	-0.6	(1.4)	0.0	(1.4)
Parent w/Vocational Degree	2.1	(1.2)	-0.7	(1.1)	0.2	(1.1)
Parent Education Unknown	4.8	(1.5)	0.3	(1.3)	0.7	(1.2)
Full Academic Year	3.2	(1.6)	1.4	(1.5)	3.6	(1.5)
Grade 6 Score (Nov. 2006)	0.85	(0.02)				
Grade 7 Score (Nov. 2006)	0.96	(0.02)				
Grade 6 Score (Nov. 2007)	0.91	(0.02)	0.93	(0.02)		
Grade 7 Score (Nov. 2007)	0.87	(0.02)	0.88	(0.02)		
Grade 6 Score (Nov. 2008)			0.84	(0.02)	0.83	(0.02)
Grade 7 Score (Nov. 2008)			0.91	(0.02)	0.90	(0.02)
Grade 6 Score (Nov. 2009)					0.86	(0.02)
Grade 7 Score (Nov. 2009)					0.98	(0.02)