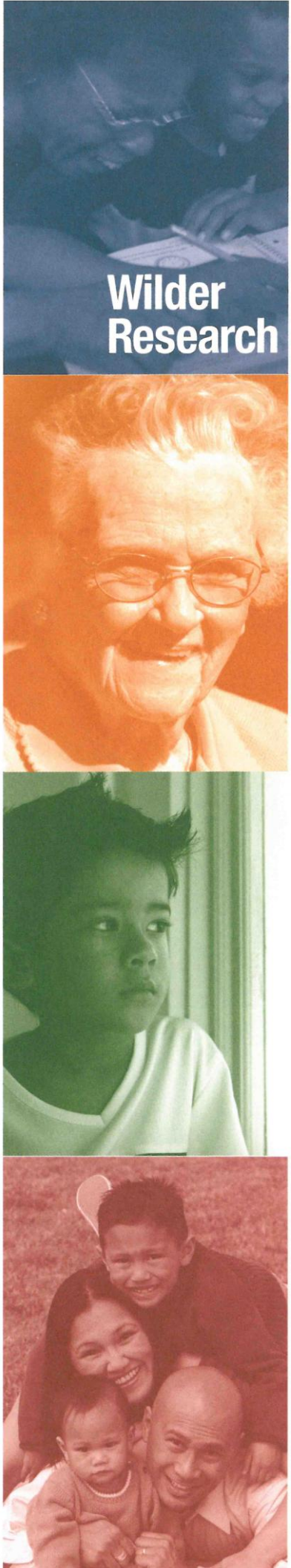


Student demographic and academic achievement

Evaluation of New City Charter School in 2010-11

MARCH 2011

Student demographic and academic achievement

Evaluation of New City Charter School in 2010-11

March 2011

Prepared by:
Edith Gozali-Lee and Dan Mueller

Wilder Research
451 Lexington Parkway North
Saint Paul, Minnesota 55104
www.wilderresearch.org

Contents

Figures

Figures (continued)

Acknowledgments

We would like to extend our gratitude to Jit Kundan, director of the New City Charter School, and his staff who provided descriptive information about the school and allowed Wilder Research staff to conduct assessments with students in the school.

Wilder Research contributors included:

Mark Anton
Phil Cooper
Paul Devereaux
Louann Graham
Leonard Major
Ryan McArdle
Dan Swanson

Summary

This report describes New City Charter School student achievement in the 2010-11 school year, the school's eighth operating year. The number of students enrolled in the school was 127, an increase from 60 students enrolled the first year of the school.

The largest group of students in 2010-11 was White/Caucasian (53%), followed by Black/African American (28%), Hispanic (9%), American Indian (6%) and Asian (4%). There were slightly more boys than girls. Half of the students were eligible for free or reduced-price lunch. One in 10 students received Special Education services. Thirteen percent of the students spoke other languages than English.

Student academic achievement is measured using the Woodcock-Johnson III Tests of Achievement (grades 1 and 2) and the Iowa Tests of Basic Skills (ITBS) (grades 3 and above). Key findings in overall reading, language, and math (Broad Reading and Broad Math for Woodcock-Johnson; Total Reading, Total Language, Total Math, and Science for ITBS) are presented below. Student assessments were conducted in December 2009 for the 2009-10 school year and December 2010 for the 2010-11 school year.

Reading results

- Average reading scores for first- and second-grade students in 2010-11 were well above average compared to same-grade peers nationally (i.e., scoring above the mean of 100 in Woodcock-Johnson standard scores).

- Average reading scores for overall third- through eighth-grade students were above the national average (above the mean of 50 in ITBS Normal Curve Equivalent scores).

- Second-grade students' progress in Broad Reading was assessed over a one-year period from the 2009-10 to the 2010-11 school year. Students' scores in 2010-11 were compared to their scores in 2009-10. Students' scores were also compared to other students in the normative sample. The scores are grade-standardized. This means that no change in standard scores from 2009-10 to 2010-11 indicates normative progress, positive change indicates accelerated progress, and negative change indicates slower than expected progress in comparison to same-grade peers. The results show that, on average, students made accelerated progress in reading, with an increase of 5.1 in standard scores, as compared to their peers nationally.

- Progress in reading for fourth- through eighth-grade students was measured using the Iowa Tests of Basic Skills Total Reading. Compared to students in the normative

sample, all students, except sixth and eighth graders made accelerated progress in Total Reading from 2009-10 to 2010-11, on average. All grade levels, on average, scored above the national average in 2010-11.

- Reading results for 2010-11 differed by student characteristics. Results show that students who were not eligible for free lunch or reduced-price lunch scored higher than those who were eligible. In first and second grade, White/Caucasian students performed better than other students (Black/African American, American Indian, Asian, and Hispanic combined), and boys performed better than girls. However, the differences in average scores between the gender groups and ethnic groups are not statistically significant. In third through eighth grade, White/Caucasian students performed significantly better than other students. Boys and girls performed similarly.

- In terms of students' progress in reading skills, the other students (Black/African American, American Indian, Asian, and Hispanic combined) made a larger average gain than the White/Caucasian students over the one-year period. Their average score increased from below the national average in 2009-10 to at average in 2010-11 in Total Reading. Boys had a slightly higher average gain than girls in Total Reading. However, their average scores were below the girls in both years. Students who were eligible for free or reduced-price lunch made a higher average gain than students who were ineligible. None of the differences in the average gains between the student groups were statistically significant. In 2010-11, students of all backgrounds scored above the national average on reading (i.e., average scores for each group were higher than 50 in Normal Curve Equivalent points).

Language results

- Language results are available only for third- through eighth-grade students who took the Iowa Tests of Basic Skills. Average scores for fourth- through sixth-grade students in 2010-11 were above the national average (i.e., above the mean of 50 in Normal Curve Equivalent points), while average scores for third-, seventh-, and eighth-grade students were below it.

- Compared to same-grade students in the normative sample, students in all grade levels except sixth grade made accelerated progress from 2009-10 to 2010-11 in Total Language. All grade levels scored above the national average (i.e., above 50 NCE points).

- Similar to the reading results, White/Caucasian students performed significantly better than other students in language in 2010-11. Girls performed better than the boys. The students who were not eligible for free or reduced-price lunch scored

higher than those who were eligible. Differences between the income levels and genders are not statistically significant.

- In terms of students' progress in language skills, the other students (Black/African American, American Indian, Asian, and Hispanic combined) made a higher average gain than White/Caucasian students in Total Language. However, White/Caucasian students scored higher than the other students in both years. Boys made a higher average gain than girls. Average Total Language score for the boys improved from below the national average in 2009-10 to above it in 2010-11. Students from lower income levels (eligible for free or reduced-price lunch) made a higher average gain than students from higher income levels (ineligible for free or reduced-price lunch). The average scores of both income groups and gender were higher than the national average in 2010-11. Average gains between the student groups were not statistically different.

Math results

- Average math scores for first- and second-grade students in 2010-11 were well above the national average (i.e., above the mean of 100 in Woodcock-Johnson standard score points).

- Similarly, average math scores for third- through sixth-grade students in 2010-11, as measured by Iowa Tests of Basic Skills, were above the national average (above the mean of 50 in Normal Curve Equivalent points). Average scores for seventh- and eighth-grade students were below it.

- Compared to same-grade students in the normative sample, on average, second-grade students made accelerated progress in Broad Math from 2009-10 to 2010-11.

- Compared to students in the normative sample, fifth-grade students made accelerated progress, sixth-grade students made normative progress, while the fourth-, seventh-, and eighth-grade students made slower progress from 2009-10 to 2010-11 in Total Math.

- In relation to students' characteristics, the math results indicate that first- and second-grade students who were not eligible for free or reduced-price lunch scored significantly higher than those who were eligible. White/Caucasian students performed better than other students in 2010-11. However the difference is not statistically significant. Boys and girls performed similarly, on average. In third- through eighth-grade, White/Caucasian students performed significantly better than other students, and boys performed better than girls. Students from higher income

backgrounds scored higher than students from lower income backgrounds, but the findings are not statistically significant.

- Results show that the other students (Black/African American, American Indian, Asian, and Hispanic combined) made accelerated progress while the White/Caucasian students made slower than expected progress from 2009-10 to 2010-11 in Total Math. In both years, however, White/Caucasian students scored higher than the other students, on average. Boys made higher average gain than girls and their scores were higher than girls in both years. Students from lower income levels (i.e., eligible for free or reduced-price lunch) made accelerated progress while those ineligible made slower progress. The average scores for both income-level groups are above the national average in both years.

Science results

- Science results are available only for third- through eighth-grade students who took the Iowa Tests of Basic Skills. All grade levels, except for third grade, in 2010-11 were above the national average (i.e., above the mean of 50 in Normal Curve Equivalent points).

- Compared to same-grade students in the normative sample, only fifth-grade students made accelerated progress from 2009-10 to 2010-11 in science. Other students, on average, made slower than expected progress during the same period. It should be noted that students' average scores in both years were well above the national average.

- Students who were not eligible for free or reduced-price lunch scored significantly higher than those who were eligible in science in 2010-11. White/Caucasian students performed significantly better than other students. Girls performed better than the boys, but the finding is not statistically significant.

- In terms of students' progress in science, students from lower income levels (eligible for free or reduced-price lunch) made a higher average gain than students from higher income levels (ineligible for free or reduced-price lunch). The other students (Black/African American, American Indian, Asian, and Hispanic combined) made a higher average gain than the White/Caucasian students. Boys made a higher average gain than girls. All student groups, regardless of their demographic characteristics, scored above the national average in 2010-11.

It should be noted that caution should be applied when interpreting results between demographic groups and individual grade levels because the number of students in each group is small.

Issues to consider

In conclusion, results indicate generally positive performance for students at the New City Charter School. The findings also suggest that there is still room for improvement. The following issues for consideration can be used to inform the school's future planning efforts.

- More attention should be given to some students who score below average on the tests (i.e., below 100 in Woodcock-Johnson standard score points or below 50 in ITBS Normal Curve Equivalent points). In particular, the ITBS reading, language, math, and science scores vary widely among students.

- There are indications that non-White students (Black/African American, American Indian, Asian, and Hispanic) made higher improvement in reading, language, math, and science than the White/Caucasian students over the one-year period. Also, students from lower income backgrounds (i.e., eligible for free or reduced-price lunch) made larger improvements in all of the subjects than students from higher income backgrounds. These results are promising. The school should continue its efforts to close the achievement gap among ethnic groups and income levels.

- The New City Charter School is rooted in the Responsive Classroom philosophy that promotes the integration between social and academic learning. Another recommendation for evaluation is to examine the relationships between students' social skills and academic achievements.

Background

New City Charter School in Minneapolis, Minnesota, began operating in fall 2003. The school is rooted in the Responsive Classroom philosophy, which emphasizes the integration of social and academic learning. The school's vision statement reflects this philosophy, as follows:

> *"New City School is a supportive community which actively engages students to build knowledge, ask meaningful questions, design creative solutions, open their minds, care for themselves and their community, and become skilled, responsive citizens in the world."*

Aligned with this philosophy, the school teaches social skills, with specific focus on fostering student cooperation, assertion, responsibility, empathy, and self-control. The school promotes parent involvement in children's learning, and positive interactions among staff and between staff and parents as a way to model positive behaviors to students. Students in the New City Charter School stay with the same teacher for two years. According to the school's principal, this practice allows students and teachers to build long-term relationships. Additionally, the school uses multiple academic approaches, including Differentiated Instruction, Arts Infusion, Integrated Thematic Learning, Balanced Literacy, and Inquiry-based Learning.

To assess student achievement progress, the school participates in a rigorous evaluation. The school contracted with Wilder Research to administer the individual assessments with first- and second-grade students, and with the University of Minnesota's Office of Measurement Services and the Minnesota Statewide Testing Program to administer the group assessments with third- through eighth-grade students. Wilder Research uses the Woodcock-Johnson III Tests of Achievement and the University of Minnesota uses the Iowa Tests of Basic Skills. Additionally, every year the school tracks student outcomes in social skills and parent involvement and provides the results in their annual report.

This report describes students' academic achievement in the 2010-11 school year. One-year student academic progress, from the 2009-2010 to the 2010-11 school year, is also included for those who stayed in the school and took the same tests. For both years, student assessments were conducted in December of that school year.

Student characteristics

Characteristics of students enrolled in New City Charter School in the 2010-11 school year are presented in Figure 1. There were a total of 127 students, ranging from kindergarten to eighth-grade, up from a total of 119 students in the previous year.

The largest group of students were White/Caucasian (53%), followed by Black/African American (28%), Hispanic (9%), American Indian (6%), and Asian (4%). There were slightly more boys (54%) than girls (46%). Slightly more than half of the students (51%) were eligible for free or reduced-price lunch and 10 percent received Special Education services. Sixteen students (13%) had a primary home language other than English.

1. Student profile: 2010-11 (n=127)

Grade level	Number	Percent
Kindergarten	19	15%
1	17	13%
2	15	12%
3	10	8%
4	15	12%
5	10	8%
6	22	17%
7	11	9%
8	8	6%
Student race/ethnicity		
American Indian	7	6%
Asian	5	4%
Hispanic	11	9%
Black or African American	36	28%
White or Caucasian	68	53%
Gender		
Female	59	46%
Male	68	54%
Other student information		
Eligible for free or reduced-price lunch	65	51%
Home language other than English	16	13%
Receiving Special Education	13	10%

Student academic achievement

This section presents student academic achievement results in 2010-11. Results are first presented for first- and second-grade students who took the Woodcock-Johnson III Tests of Achievement, followed by results for third- through eighth-grade students who took the Iowa Tests of Basic Skills. One-year progress in student academic achievement, from 2010-10 to 2010-11, is described in the next section of the report.

Results for first- and second-grade students

In December 2010, Wilder Research staff administered Woodcock-Johnson III Tests of Achievement (WJ III) to first- and second-grade New City School students. All 17 first- and 15 second-grade students participated. The assessments were conducted one-on-one in a quiet room in the school building.

The students were assessed in Broad Reading and Broad Math.

Broad Reading consists of the following three tests:

> *Letter-word identification* measures students' ability to identify uppercase and lowercase letters and words.
>
> *Reading fluency* measures students' ability to read and comprehend sentences quickly.
>
> *Passage comprehension* measures students' ability to read and comprehend a passage and to draw a conclusion.

Broad Math consists of the following tests:

> *Calculation* measures students' ability to perform mathematical computations.
>
> *Math fluency* measures students' ability to accurately solve simple math problems quickly.
>
> *Applied problems* measures students' ability to analyze and solve math problems.

Woodcock-Johnson reading results

Woodcock-Johnson results are analyzed using standard scores. Standard scores have an average of 100 (and a standard deviation of 15) in the national normative sample. These scores are also grade-standardized. First- and second-grade results on reading tests are presented below. As shown in Figure 2, average scores of first- and second-grade students were well above the national average (i.e., above the mean of 100). Both first- and second-grade students scored the highest on letter-word identification. It should be noted that student scores, especially for second grade, varied greatly. Second grade scores in Broad Reading, for example, ranged from 87 to 149.

2. Average standard scores in WJ III Broad Reading, 2010-11

Reading test	N	Mean of standard scores	Standard Deviation	Range of standard scores
First grade				
Letter-word identification	17	110.5	8.9	96-127
Reading fluency [a]	16	102.6	8.9	87-118
Passage comprehension	17	103.5	10.2	80-116
Broad Reading	17	105.8	10.6	83-123
Second grade				
Letter-word identification	15	120.0	18.4	86-143
Reading fluency	15	115.0	22.1	87-158
Passage comprehension	15	112.5	15.8	87-129
Broad Reading	15	118.7	20.1	87-149

[a] *Standard score is not available for students whose raw score is 0.*

Figure 3 shows the percentage of students who scored average or above average (i.e., scoring 100 or above in standard scores) and below average in reading tests. Most first- and second-grade students (76-88%) scored average or above average on letter-word identification and Broad Reading overall. Additionally, most second-grade students (73%) scored average or above average on reading fluency and passage comprehension. Fewer, but still the majority of first-grade students scored average or above average on reading fluency (62%) and passage comprehension (65%).

3. WJ III Broad Reading results, 2010-11

Woodcock-Johnson test	Standard score	% First grade	% Second grade
Letter-word identification			
Average and above	100 or above	88%	80%
Below average	99 and below	12%	20%
Reading fluency			
Average and above	100 or above	62%	73%
Below average	99 and below	38%	27%
Passage comprehension			
Average and above	100 or above	65%	73%
Below average	99 and below	35%	27%
Broad Reading			
Average and above	100 or above	76%	80%
Below average	99 and below	24%	20%

Figure 4 shows Broad Reading average standard scores by student characteristics. Because of the small number, the results are reported for both grades combined. Also, due to the small numbers of Black/African American, Asian, American Indian, and Hispanic, their data are reported as one group (i.e., other group). As shown in Figure 4, on average, the students who were eligible for free or reduced-price lunch scored significantly lower than students who were not eligible. White/Caucasian students performed better than the other students and boys performed better than girls, on average. Differences in scores between gender (boys and girls) and ethnic groups (White/Caucasian and other) are not statistically different.

4. WJ III Broad Reading results by student characteristics, 2010-11

Broad reading	N	Average of standard scores
Student race/ethnicity		
White/Caucasian	18	115.9
Other [a]	14	106.6
Gender		
Female	12	107.6
Male	20	118.9
Free or reduced-price lunch status [b]		
Eligible for free lunch or reduced-price lunch	13	101.4
Not eligible	19	119.0

[a] *Due to small numbers, Black/African American, Asian, American Indian, and Hispanic groups are combined.*

[b] *Significant difference between groups.*

Woodcock-Johnson math results

The average standard scores for Broad Math are presented in Figure 5. On average, first- and second-grade students scored well above the national average (i.e., above the mean of 100) on all the math tests, except for first-grade students on math fluency. Students in both grades scored the highest in applied problems and the lowest on math fluency, on average.

5. Average standard scores in WJ III Broad Math, 2010-11

Math test	N	Mean	Standard Deviation	Range
First grade				
Calculation	17	110.5	13.9	93-132
Math fluency	17	99.3	10.5	85-128
Applied problems	17	121.9	9.0	102-139
Broad Math	17	114.7	9.4	95-133
Second grade				
Calculation	15	112.9	13.3	97-136
Math fluency	15	109.8	12.0	87-134
Applied problems	15	121.1	14.2	94-144
Broad Math	15	118.5	13.7	95-142

Figure 6 shows the percentage of students who scored average or above average (scoring 100 or above) and below average in math tests. The results indicate that almost all of the second-grade students (87% to 93%) scored average or higher on all of the math tests. In addition, all or almost all of the first-grade students scored average or higher on applied problems and Broad Math, and almost 60 percent (59%) scored average or higher on calculation. Fewer than half (41%) of first-grade students scored average or higher on math fluency.

6. WJ III Broad Math results, 2010-11

Woodcock-Johnson classification	Standard score range	% First grade	% Second grade
Calculation			
Average or above average	100 or above	59%	93%
Below average	99 and below	41%	7%
Math fluency			
Average or above average	100 or above	41%	87%
Below average	99 and below	59%	13%
Applied Problems			
Average or above average	100 or above	100%	93%
Below average	99 and below	0%	7%
Broad Math			
Average or above average	100 or above	94%	93%
Below average	99 and below	6%	7%

Figure 7 shows Broad Math average standard scores by student characteristics. Because of the small numbers, the results are reported for first and second grades combined. Similar to the reading results, on average, the students who were eligible for free or reduced-price lunch scored significantly lower than students who were not eligible. White/Caucasian students performed slightly better than the other students. Boys and girls had similar average scores. Differences in scores between ethnic groups are not statistically significant.

7. WJ III Broad Math results by student characteristics, 2010-11

Broad Math	N	Average of standard scores
Student race/ethnicity		
White/Caucasian	18	119.2
Other [a]	14	112.9
Gender		
Female	12	116.3
Male	20	116.5
Free or reduced-price lunch status [b]		
Eligible for free lunch or reduced-price lunch	13	109.9
Not eligible	19	121.0

[a] *Due to small numbers, Black/African American, Asian, American Indian, and Hispanic groups are combined.*

[b] *Significant difference between groups.*

Results for third- to eighth-grade students

Around the same time as the first- and second-grade students took the Woodcock-Johnson assessments, students in third through eighth grades took the Iowa Tests of Basic Skills (ITBS). The ITBS was administered by the University of Minnesota's Office of Measurement Services and the Minnesota Statewide Testing Program. A total of 73 out of 76 third- to eighth-grade students (96%) participated. The ITBS was administered in a group setting, using a paper and pencil format. On each question on the tests, the students are asked to select the correct answer out of multiple choices.

The students were assessed on Total Reading, Total Language, and Total Math.

Total Reading consists of the following tests:

- *Vocabulary*
- *Reading comprehension*

Total Language consists of the following tests:

- *Spelling*
- *Capitalization*
- *Punctuation*
- *Usage and expression*

Total Math consists of the following tests:

- *Concepts and estimation*
- *Problem solving and data interpretation*
- *Computation*

Iowa Tests of Basic Skills reading results

Results of the Iowa Tests of Basic Skills are analyzed using the Normal Curve Equivalent (NCE). NCE scores range from 1 to 99, with an average of 50 (and a standard deviation of 21) in the national normative sample. These scores are grade-standardized.

Figure 8 shows that students' average scores were above the national average (i.e., above the mean of 50 in NCE) on vocabulary, comprehension, and Total Reading overall. Students scored similarly on vocabulary and comprehension, with average NCE scores of

55.8 and 56.5, respectively. Sixth-grade students appeared to score higher than the other students on all the reading tests. The results also show that students' scores vary widely. As shown in Figure 8, students' scores on Total Reading range from 2 to 99.

8. Average ITBS Total Reading NCE scores, 2010-11

Subject	Grade	N	Average NCE	Standard Deviation	Range
Vocabulary	3	10	47.6	19.4	19-72
	4	14	58.6	20.8	25-91
	5	8	61.5	23.9	28-95
	6	21	64.3	22.1	29-99
	7	11	47.5	23.7	9-90
	8	8	44.6	34.5	1-89
	Overall	72	55.8	24.0	1-99
Comprehension	3	10	50.6	29.0	3-93
	4	14	59.6	17.1	22-84
	5	8	57.6	20.3	29-95
	6	21	64.3	18.5	38-99
	7	11	45.6	20.2	10-80
	8	8	51.6	30.6	17-99
	Overall	72	56.5	22.2	3-99
Total Reading	3	10	49.5	23.0	18-85
	4	14	59.9	18.2	26-80
	5	8	59.9	22.2	28-97
	6	21	65.2	20.3	35-99
	7	11	46.0	23.5	2-88
	8	8	48.1	33.7	15-96
	Overall	72	56.6	23.2	2-99

The proportions of students who scored average or above average (i.e., scoring 50 or above in NCE points) in reading skills by grade are shown in Figure 9. Among grade levels, higher percentages of fourth- and sixth-grade students (71-76%) scored average or above average on vocabulary, comprehension, and Total Reading. Seventh-grade students scored the lowest, with 36 to 38 percent of students scoring average or above average on the reading tests.

9. ITBS Total Reading results, 2010-11: students scoring average or above average

Subject	Grade	N	Percent scoring average or above average [a]
Vocabulary	3	10	50%
	4	14	71%
	5	8	63%
	6	21	76%
	7	11	46%
	8	8	38%
	Overall	72	61%
Comprehension	3	10	60%
	4	14	71%
	5	8	63%
	6	21	76%
	7	11	36%
	8	8	50%
	Overall	72	63%
Total Reading	3	10	50%
	4	14	71%
	5	8	63%
	6	21	76%
	7	11	36%
	8	8	50%
	Overall	72	61%

[a] *Scoring 50 or above in NCE scores.*

Figure 10 presents the Total Reading results by students' characteristics. On average, White/Caucasian students performed significantly better than the other students. While the White/Caucasian students scored above average (i.e., above the mean of 50 NCE points), the other students scored below it. Also, students who were not eligible for free or reduced-price lunch scored significantly higher than those who were eligible. Girls and boys scored similarly, on average.

10. ITBS Total Reading results by student characteristics, 2010-11

Total Reading	N	Average NCE
Student race/ethnicity [a]		
White/Caucasian	40	65.4
Other [b]	32	45.6
Gender		
Female	35	57.5
Male	37	55.7
Free or reduced-price lunch status [a]		
Eligible for free lunch or reduced-price lunch	41	51.2
Not eligible	31	63.7

[a] *Significant difference between groups.*

[b] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Iowa Tests of Basic Skills language results

Students' performance in language skills is presented by grade in Figure 11. Students scored slightly above the national average (i.e., above the mean of 50 in NCE) on Total Language, with the average of 51.1 NCE points. Looking at individual tests, student scored higher on usage and expression (59.4 NCE points) and punctuation (51.3 NCE points) than on spelling (46.1 NCE points) and capitalization(44.5 NCE points), on average. The results also show that students' scores vary widely. As shown in Figure 11, students' scores on Total Language range from 10 to 93.

11. Average ITBS Total Language NCE scores, 2010-11

Subject	Grade	N	Average NCE	Standard Deviation	Range
Spelling	3	10	29.3	20.2	2-64
	4	14	56.4	18.2	27-82
	5	9	51.3	20.4	25-91
	6	21	51.7	17.0	27-84
	7	11	35.5	22.3	8-77
	8	8	43.0	20.5	17-80
	Overall	73	46.1	20.9	2-91
Capitalization	3	10	37.9	11.5	24-58
	4	14	51.6	14.2	22-73
	5	9	41.8	20.4	17-70
	6	21	45.7	21.3	5-88
	7	11	38.9	28.9	1-96
	8	8	48.3	32.4	9-94
	Overall	73	44.5	21.6	1-96
Punctuation	3	10	43.6	14.6	25-76
	4	14	58.1	17.5	32-94
	5	9	52.2	23.1	29-99
	6	21	49.4	17.8	9-71
	7	11	50.1	20.9	30-88
	8	8	54.4	23.2	17-83
	Overall	73	51.3	19.0	9-99
Usage and Expression	3	10	51.4	22.4	9-81
	4	14	64.6	18.1	27-99
	5	9	59.7	22.5	15-82
	6	21	65.1	17.3	32-96
	7	11	53.4	16.5	34-77
	8	8	53.9	24.2	15-85
	Overall	73	59.4	19.7	9-99
Total Language	3	10	39.5	17.6	10-70
	4	14	58.9	14.6	35-90
	5	9	52.0	23.7	17-93
	6	21	54.0	15.3	30-76
	7	11	45.5	21.4	22-87
	8	8	31.3	25.8	23-90
	Overall	73	51.1	19.3	10-93

Figure 12 shows the proportion of students who scored average or above average (i.e., scoring 50 or above in NCE) by grade. The results show that, overall, slightly more than two-thirds (69%) and half (52%) of the students scored average or above average on usage and expression and punctuation, respectively. Fewer than half (40-48%) of the students scored average or above average on spelling, capitalization, and Total Language. The results also show that the proportion of students scoring average or above average varies across grade levels and language skill areas. For example, between 52 and 62 percent of sixth-grade students scored average or above average on spelling, punctuation, and Total Language. Nearly all of the sixth-grade students (91%) scored average or above average on usage and expression and only 38 percent scored average or above average on capitalization. The majority of fourth-grade students (64-86%) scored average or above average on all of the language tests. Because the number of students in each grade level is small, the results should be interpreted with caution.

12. ITBS Total Language results, 2010-11: students scoring average or above average

Subject	Grade	N	Percent scoring average or above average[a]
Spelling	3	10	10%
	4	14	64%
	5	9	44%
	6	21	52%
	7	11	27%
	8	8	38%
	Overall	73	43%
Capitalization	3	10	20%
	4	14	64%
	5	9	33%
	6	21	38%
	7	11	27%
	8	8	50%
	Overall	73	40%

[a] *Scoring 50 or above in NCE scores.*

12. ITBS Total Language results, 2010-11: students scoring average or above average (continued)

Subject	Grade	N	Percent scoring average or above average[a]
Punctuation	3	10	30%
	4	14	64%
	5	9	33%
	6	21	62%
	7	11	55%
	8	8	50%
	Overall	73	52%
Usage and Expression	3	10	50%
	4	14	86%
	5	9	67%
	6	21	91%
	7	11	36%
	8	8	50%
	Overall	73	69%
Total Language	3	10	20%
	4	14	71%
	5	9	44%
	6	21	52%
	7	11	36%
	8	8	50%
	Overall	73	48%

[a] *Scoring 50 or above in NCE scores.*

Results of Total Language average NCE scores by students' characteristics are presented below. The results are reported for third- through eighth-grade students combined. Figure 13 shows that, on average, White/Caucasian students performed significantly better than the other group. On average, students who were ineligible for free lunch or reduced-price lunch scored higher than those who were eligible, and girls performed better than the boys, but the difference between the income level groups (eligible and ineligible for free or reduced-price lunch) and gender (girls and boys) are not statistically significant.

13. ITBS Total Language results by student characteristics, 2010-11

Characteristics	N	Average of NCE
Student race/ethnicity [a]		
White/Caucasian	41	56.6
Other [b]	32	44.1
Gender		
Female	35	54.6
Male	38	47.9
Free or reduced-price lunch status		
Eligible for free lunch or reduced-price lunch	42	47.6
Not eligible	31	55.9

[a] *Significant difference between groups.*

[b] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Iowa Tests of Basic Skills math results

Next, the average NCE scores for math are presented in Figure 14. In general, students' average scores were above the national average (i.e., above the mean of 50 in NCE) on concepts and estimation, problem solving and data interpretation, and Total Math, but were below average on computation. Similar to reading and language test results, students' math scores vary widely, ranging from 1 to 90 on computation, 5 to 99 on problem solving and data interpretation and Total Math, and 12 to 99 on concepts and estimation.

14. Average ITBS Total Math NCE scores, 2010-11

Subject	Grade	Number of students	Average NCE	Standard Deviation	Range
Concepts and Estimation	3	10	57.3	25.6	12-98
	4	13	67.2	22.0	27-95
	5	9	61.9	20.9	27-99
	6	21	60.1	17.4	28-96
	7	10	42.7	17.3	17-77
	8	8	37.4	15.9	14-63
	Overall	71	56.2	21.6	12-99
Problem solving and Data Interpretation	3	9	54.1	28.9	5-98
	4	14	64.6	20.5	25-96
	5	9	59.3	22.7	30-99
	6	21	58.2	17.6	32-88
	7	11	48.2	16.9	30-89
	8	8	43.8	24.5	5-84
	Overall	72	56.0	21.4	5-99
Computation	3	9	49.0	21.6	16-78
	4	14	44.1	21.8	1-79
	5	9	36.8	21.2	13-90
	6	20	37.9	18.6	8-77
	7	11	26.3	12.4	1-43
	8	8	31.8	21.9	1-60
	Overall	71	37.9	20.2	1-90
Total Math	3	9	52.8	27.5	5-96
	4	13	61.5	21.3	29-92
	5	9	54.0	22.1	21-99
	6	20	54.3	16.3	33-90
	7	10	38.8	15.4	16-68
	8	8	37.0	14.6	17-64
	Overall	69	51.2	20.6	5-99

Figure 15 shows the proportion of students who scored average or above average (i.e., scoring 50 or above in NCE points) by grade. The results show that, overall, the majority of students scored average or above average on concepts and estimation (63%) and problem solving and data interpretation (60%). Fewer students scored average or above average on computation (23%) and Total Math (45%). The results also show that the proportion of students scoring average or above average varies across grade levels and math skill areas. For example, higher percentages of fifth graders scored average or above

average than eighth graders on concepts and estimation, problem solving and data interpretation, and Total Math (67-78% vs. 13-38%). On computation, about an equal number of students in fifth and eighth grade scored average or above average (11% and 13%, respectively). Again, results should be interpreted with caution because the number of students in each grade level is small.

15. ITBS Total Math results, 2010-11: students scoring average or above average

Subject	Grade	Number of students	Percent scoring average or above average[a]
Concepts and Estimation	3	10	60%
	4	13	77%
	5	9	78%
	6	21	76%
	7	10	40%
	8	8	25%
	Overall	71	63%
Problem solving and Data Interpretation	3	9	56%
	4	14	79%
	5	9	67%
	6	21	62%
	7	11	46%
	8	8	38%
	Overall	72	60%
Computation	3	9	56%
	4	14	36%
	5	9	11%
	6	20	20%
	7	11	0%
	8	8	13%
	Overall	71	23%
Total Math	3	9	56%
	4	13	69%
	5	9	67%
	6	20	40%
	7	10	20%
	8	8	13%
	Overall	69	45%

[a] *Scoring 50 or above in NCE scores.*

Results of Total Math by students' characteristics are presented in Figure 16. The results are reported for third- through eighth-grade students. On average, White/Caucasian students performed significantly better than the other group. Boys performed significantly better than the girls. Students who were ineligible for free lunch or reduced-price lunch scored higher than those who were eligible, but the finding is not statistically significant.

16. ITBS Total Math results by student characteristics, 2010-11

Characteristics	N	Average of NCE
Student race/ethnicity [a]		
White/Caucasian	39	58.6
Other [b]	30	41.5
Gender [a]		
Female	34	45.8
Male	35	56.4
Free or reduced-price lunch status		
Eligible for free lunch or reduced-price lunch	40	48.3
Not eligible	29	55.1

[a] *Significant difference between groups.*

[b] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Iowa Tests of Basic Skills Core Battery results

Figure 17 shows the results of the ITBS Core Battery, which is a combination of the reading, language, and math tests. The results show that average scores of fourth-, fifth-, and sixth-grade students were above the national average on ITBS. Their average scores range from 57.3 to 61.9 in NCE points. Third-, seventh-, and eighth-grade students scored below average, with an average score range from 43.8 to 45.9 in NCE points. Fourth-grade students had the highest average score. Almost 70 percent of the fourth graders scored average or above average (i.e., scoring 50 or above in NCE) on the Core Battery.

17. ITBS Core Battery results, 2010-11

Grade	N	NCE Average	Standard Deviation	Range	Percent scoring average or above
3	9	45.9	23.9	8-88	44%
4	13	61.9	16.8	31-85	69%
5	8	57.3	21.4	30-99	63%
6	20	59.1	16.1	38-94	65%
7	10	43.8	20.3	15-85	30%
8	8	45.0	24.2	20-83	50%
Overall	68	53.7	20.3	8-99	56%

Results of Core Battery average NCE scores by students' characteristics are presented below. Consistent with the findings in Total Reading, Total Language, and Total Math, the Core Battery results show that White/Caucasian students performed significantly better than the other group. Also, students who were ineligible for free lunch or reduced-price lunch scored significantly higher than those who were eligible. Girls and boys scored similarly, on average (Figure 18).

18. ITBS Core Battery results by student characteristics, 2010-11

Characteristics	N	Average NCE
Student race/ethnicity [a]		
White/Caucasian	38	61.9
Other [b]	30	43.4
Gender		
Female	34	53.4
Male	34	54.1
Free or reduced-price lunch status [a]		
Eligible for free lunch or reduced-price lunch	39	49.5
Not eligible	29	59.4

[a] *Significant difference between groups.*

[b] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Iowa Tests of Basic Skills science results

Figure 19 shows the results of the ITBS science test. Average scores for all grade levels, except for third grade, were above the national average on ITBS. The average score for third grade students was slightly below the national average. Overall, two-third of students (67%) scored average or above average in science.

19. ITBS Science results, 2010-11

Grade	N	NCE Average	Standard Deviation	Range	Percent scoring average or above
3	9	48.0	22.6	16-80	44%
4	14	64.4	21.0	28-99	71%
5	9	58.7	17.2	32-86	67%
6	20	63.9	13.7	36-91	85%
7	11	53.0	22.7	3-99	55%
8	7	54.7	24.1	20-94	57%
Overall	70	58.7	19.7	3-99	67%

Results of science average NCE scores by students' characteristics are presented below. On average, White/Caucasian students performed significantly better than the other group. Also, students who were ineligible for free lunch or reduced-price lunch scored significantly higher than those who were eligible. Boys and girls scored similarly, on average (Figure 20).

20. ITBS Science results by student characteristics, 2010-11

Characteristics	N	Average NCE
Student race/ethnicity[a]		
White/Caucasian	40	66.3
Other[b]	30	48.4
Gender		
Female	33	59.1
Male	37	58.3
Free or reduced-price lunch status[a]		
Eligible for free lunch or reduced-price lunch	40	54.3
Not eligible	30	64.4

[a] *Significant difference between groups.*

[b] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

One-year progress in student academic achievement

This section of the report describes students' academic progress over a one-year period, from the 2009-10 to the 2010-11 school year. Results for second-grade students are presented first, followed by results for fourth- through eighth-grade students. Academic progress was measured using the Woodcock-Johnson III Tests of Achievement (WJ III) and the Iowa Tests of Basic Skills (ITBS) for students who stayed in the school from 2009-10 to 2010-11 and took the same tests. Data are available for 15 second-grade students in 2010-11 who took the Woodcock-Johnson tests when they were in first-grade in 2009-10. Data are also available for 52 fourth- through eighth-grade students in 2010-11 who took the Iowa Tests of Basic Skills when they were in third- through seventh-grade in 2009-10.

Academic progress of second-grade students

Figure 21 shows, on average, that children made academic progress in reading and math from 2009-10 to the 2010-11. The results here are presented using W scores. The W score is not grade- or age-standardized. The score is useful for measuring performance over time in a subject area, such as year-to-year growth of individual students or groups of students.

As shown in Figure 21, on average, students made more improvement in reading than math. Broad Reading overall has an average gain of 33.9, and Broad Math overall had an average gain of 15.8. Among the reading skills, students, on average, made the biggest gain in letter-word identification (41.7 in W scores). Students made the biggest gain in applied problems (24.8 in W scores) among the math skills.

21. Average WJ III W scores in 2009-10 and 2010-11

		Average of W scores		
Woodcock-Johnson tests	**N**	**2009-10**	**2010-11**	**Difference**
Letter-word identification	15	449.1	490.7	+41.7
Reading fluency	11	461.0	491.7	+30.7
Passage comprehension	15	460.3	488.1	+27.8
Broad Reading	15	452.0	485.9	+33.9
Calculation	15	465.8	480.2	+14.4
Math fluency	14	484.1	492.1	+8.0
Applied problems	15	467.2	492.0	+24.8
Broad Math	15	472.2	488.0	+15.8

Changes in students' reading and math results are also presented in terms of standard scores. In this case, students are compared to same-grade peers in a national normative sample. This means that no change in standard scores from one year to the next indicates normative progress (one year of progress), positive change indicates accelerated progress (more than one year of progress), and negative change indicates slower progress (less than one year of progress) in comparison to one's peers.

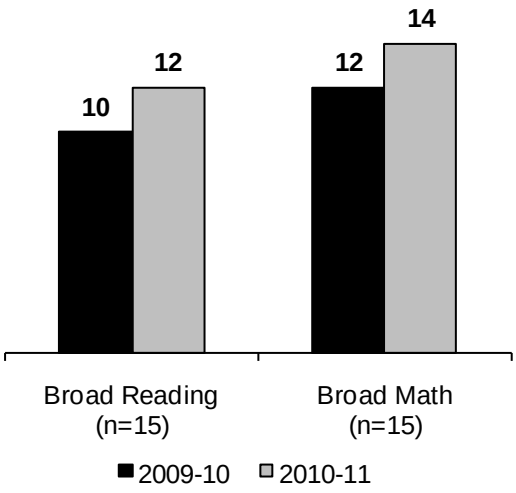
As shown in Figure 22, on average, students made accelerated progress compared to peers nationally in overall reading and math, with an increase of 5.1 in Broad Reading and 3.2 in Broad Math. Looking at individual tests, students made accelerated progress on all the tests, except on calculation. Students' average score declined 4.7 on calculation, indicating that they made slower progress than their peers nationally; however, the average students' scores were still higher than the average score in the normative sample (i.e., above 100 in standard scores) in both years. Student average scores on all tests were above the national average score in both years. Students made the largest gain in math fluency from 2009-10 to 2010-11, on average.

22. Change in WJ III average standard scores, 2009-10 to 2010-11

Woodcock-Johnson tests	Average standard scores 2009-10	2010-11	Difference
Reading			
Letter-word identification	119.1	119.9	+0.8
Reading fluency	118.2	123.3	+5.1
Passage comprehension	109.5	112.5	+3.0
Broad Reading	113.6	118.7	+5.1
Math			
Calculation	117.7	112.9	-4.7
Math fluency	102.6	110.4	+7.9
Applied problems	116.7	121.1	+4.4
Broad Math	115.3	118.5	+3.2

Figure 23 shows the number of students who scored at or above average in 2009-10 and 2010-11 (scoring at or above 100 in standard score) in Broad Reading and Broad Math. Compared to 2009-10, two more students scored at or above average in Broad Reading and Broad Math in 2010-11.

23. Number of students at or above average in Broad Reading and Broad Math, 2009-10 and 2010-11



Due to the small number of students, changes in students' reading and math results are not analyzed by their characteristics.

Academic progress of fourth- through eighth-grade students

Reading progress

Figure 24 shows changes in students' reading performance on the Iowa Tests of Basic Skills in developmental standard scores by grade. The developmental standard scores used in ITBS are similar to the W scores in Woodcock-Johnson. The scores are used to show students' year-to-year academic growth.

A total of 50 fourth- through eighth-grade students who took the tests in both years are included in the analyses. Figure 24 shows the one-year change in students' reading scores. The results show that students made improvements in vocabulary, comprehension, and Total Reading. Overall, fourth- and fifth-grade students made the largest one-year improvements in Total Reading, with average scores of 23.8 and 20.3 points, respectively.

24. Change in ITBS Total Reading standard scores: 2009-10 to 2010-11

Subject	Grade (in 2010-11)	Number of students	Average developmental standard scores		
			2009-10	2010-11	Difference
Vocabulary	4	12	183.4	207.6	+23.2
	5	8	200.6	223.0	+22.4
	6	17	232.9	243.8	+10.9
	7	7	215.3	242.4	+27.1
	8	6	232.3	246.2	+13.8
	Overall	50	213.3	231.6	+18.3
Comprehension	4	12	186.8	211.3	+24.5
	5	8	204.3	222.1	+17.9
	6	17	236.4	249.0	+12.7
	7	7	231.6	239.9	+8.3
	8	6	260.3	261.3	+1.0
	Overall	50	221.5	235.9	+14.3
Total Reading	4	12	185.1	208.9	+23.8
	5	8	202.4	222.6	+20.3
	6	17	234.7	246.4	+11.8
	7	7	223.6	241.0	+17.4
	8	6	246.5	253.7	+7.2
	Overall	50	217.4	233.7	+16.3

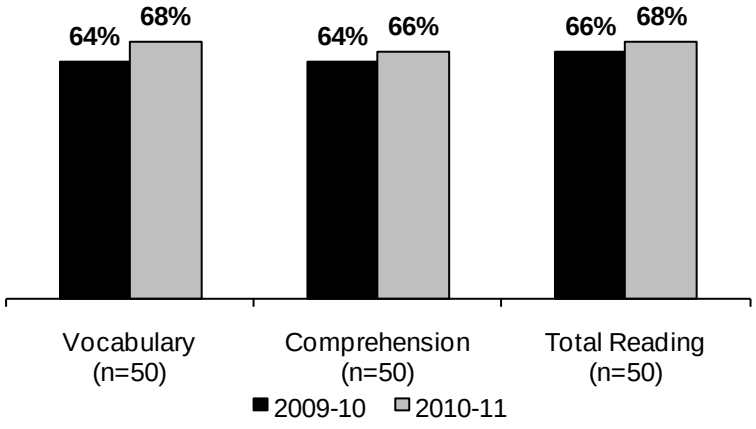
One-year change in students' scores is also analyzed using Normal Curve Equivalent (NCE) scores. Similar to standard scores in Woodcock-Johnson, no change in NCE scores from one year to the next indicates normative progress (one year of progress), positive change indicates accelerated progress (more than one year of progress), and negative change indicates slower progress (less than one year of progress) in comparison to same-grade peers. Results in Figure 25 show that, on average, students made accelerated progress on all the reading tests, with an overall average gain of 3.7 points on vocabulary, 1.0 point on comprehension, and 2.4 points on Total Reading. However, looking at individual grade levels, sixth-grade students made slower progress in both vocabulary and Total Reading, with average declines of 3.0 and 1.7 in NCE points, respectively, and normative progress in comprehension, with a slight decline of 0.5 NCE point. Seventh-and eighth-grade students also made slower progress in comprehension, with an average decline of 2.4 and 3.0 NCE points, respectively. Eighth-grade students made normative progress in Total Reading (a slight decline of 0.7 point). Students in other grade levels made accelerated progress from 2009-10 to 2010-11, on average.

25. Change in ITBS Total Reading NCE scores: 2009-10 to 2010-11

Subject	Grade (in 2010-11)	Number of students	Average NCE scores 2009-10	2010-11	Difference
Vocabulary	4	12	53.4	60.2	+6.8
	5	8	55.0	61.5	+6.5
	6	17	68.6	65.6	-3.0
	7	7	44.9	56.1	+11.3
	8	6	52.0	56.0	+4.0
	Overall	50	57.5	61.2	+3.7
Comprehension	4	12	53.2	59.8	+6.6
	5	8	55.5	57.6	+2.1
	6	17	65.6	65.1	-0.5
	7	7	55.3	52.9	-2.4
	8	6	63.3	60.3	-3.0
	Overall	50	59.3	60.3	+1.0
Total Reading	4	12	53.4	60.7	+7.3
	5	8	55.3	59.9	+4.6
	6	17	67.9	66.2	-1.7
	7	7	50.3	54.6	+4.3
	8	6	59.5	58.8	-0.7
	Overall	50	58.9	61.3	+2.4

Figure 26 shows the percentages of students who scored at or above average in 2009-10 and 2010-11 (scoring above the mean of 50 NCE points). In 2010-11, 68 percent of students in vocabulary, 66 percent in comprehension, and 68 percent in Total Reading scored at or above the national average, an increase ranging from 2 to 4 percentage points from 2009-10.

26. Percent scoring at or above average in reading, 2009-10 and 2010-11



Next, Figure 27 shows the change in Total Reading results by student characteristics. Because of the small numbers of Black/African American, American Indian, Asian, and Hispanic students who had both the 2009-10 and 2010-11 Iowa Tests of Basic Skills data, their data are reported as one group (i.e., other group). Results show that, on average, White/Caucasian students made normative progress, with a slight increase of 0.9 NCE points from 2009-10 to 2010-11. In comparison, the other group made large progress with an increase of 4.1 NCE points, scoring below the national average in 2009-10 to at average in 2010-11. Boys had a slightly higher average gain than girls in Total Reading. However, their average scores were below the girls in both years. Students who were eligible for free or reduced-price lunch made a higher average gain than students who were ineligible. It should be noted that all students groups, regardless of demographic characteristics, scored at or above the national average on reading in 2010-11 (i.e., scoring higher than 50 in NCE points). None of the differences in the average gains between the student groups were statistically significant.

27. Change in ITBS Total Reading results by student characteristics, 2009-10 to 2010-11

		Average of NCE scores		
Characteristics	**N**	**2009-10**	**2010-11**	**Difference**
Student race/ethnicity				
White/Caucasian	26	70.8	71.7	+0.9
Other[a]	24	46.0	50.1	+4.1
Gender				
Female	26	61.2	63.1	+1.9
Male	24	56.5	59.5	+3.0
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	28	54.0	57.7	+3.6
Not eligible	22	65.1	66.0	+0.9

[a] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Language progress

One-year change in language developmental standard scores is shown in Figure 28 by grade. The results show that, on average, students made developmental gains from 2009-10 to 2010-11 in all language skills. Students made higher gains in punctuation and usage and expression than in capitalization and spelling. Looking at the Total Language score, fourth- and fifth-grade students made the largest average gains of 29.3 and 21.4 points, respectively. Sixth-grade students made the lowest average gain of 11.4 points.

28. Change in ITBS Total Language developmental standard scores, 2009-10 to 2010-11

Subject	Grade (in 2010-11)	Number of students	Average developmental standard scores		
			2009-10	2010-11	Difference
Spelling	4	12	173.8	204.3	+30.5
	5	9	193.0	214.0	+21.0
	6	17	219.1	228.4	+9.4
	7	7	205.0	217.7	+12.7
	8	6	230.2	237.0	+6.8
	Overall	51	203.2	219.8	+16.5
Capitalization	4	12	169.3	195.8	+26.5
	5	9	181.7	198.3	+16.7
	6	17	221.8	226.5	+4.6
	7	7	221.7	238.0	+16.3
	8	6	240.2	258.5	+18.3
	Overall	51	204.5	219.7	+15.1
Punctuation	4	13	169.8	207.3	+37.5
	5	9	192.2	219.3	+27.1
	6	17	230.7	236.9	+6.2
	7	7	230.3	260.9	+30.6
	8	6	252.5	266.7	+14.2
	Overall	52	211.3	233.2	+21.9
Usage and Expression	4	13	192.4	218.6	+26.2
	5	9	213.8	234.0	+20.2
	6	17	237.1	262.8	+25.7
	7	7	253.6	262.3	+8.7
	8	6	259.2	270.5	+11.3
	Overall	52	226.6	247.5	+20.9
Total Language	4	12	177.1	206.4	+29.3
	5	9	195.0	216.4	+21.4
	6	17	227.2	238.7	+11.4
	7	7	227.6	244.7	+17.1
	8	6	245.7	258.3	+12.7
	Overall	51	212.0	230.3	+18.3

Figure 29 presents the average change in NCE scores from 2009-10 to 2010-11. Overall, students made accelerated progress on all language tests, as compared to their peers in the normative sample, with the highest average gain in punctuation (5.9 in NCE point). Looking at individual grade levels, all students made improvement from 2009-10 to 2010-11 except for sixth-grade students in spelling, capitalization, punctuation, and Total Language and seventh-grade students in usage and expression. Despite the declines, average scores for these students were at or above the national average (50 NCE points or higher) on those measures in 2010-11.

In 2010-11, the Total Language average scores were above the national average for all grade levels. Fourth- and fifth-grade students made improvement from scoring below the national average (below 50 NCE point) in 2009-10 to above it in 2010-11.

29. Change in ITBS Total Language NCE scores, 2009-10 to 2010-11

Subject	Grade (in 2010-11)	Number of students	Average NCE scores		
			2009-10	2010-11	Difference
Spelling	4	12	42.8	56.7	+13.9
	5	9	45.2	51.3	+6.1
	6	17	55.2	52.0	-3.2
	7	7	35.6	37.9	+2.3
	8	6	45.8	46.7	+0.8
	Overall	51	46.7	50.4	+3.7
Capitalization	4	12	41.2	49.5	+8.3
	5	9	38.1	41.8	+3.7
	6	17	54.5	50.0	-4.5
	7	7	46.7	49.9	+3.1
	8	6	50.7	56.3	+5.7
	Overall	51	47.0	49.2	+2.2
Punctuation	4	13	39.8	55.4	+15.6
	5	9	43.4	52.2	+8.8
	6	17	58.6	54.5	-4.1
	7	7	51.6	58.7	+7.1
	8	6	52.5	59.7	+7.2
	Overall	52	49.6	55.5	+5.9

29. Change in ITBS Total Language NCE scores, 2009-10 to 2010-11 (continued)

Subject	Grade (in 2010-11)	Number of students	Average NCE scores 2009-10	2010-11	Difference
Usage and Expression	4	13	57.1	61.9	+4.8
	5	9	57.6	59.7	+2.1
	6	17	62.2	67.3	+5.1
	7	7	63.4	60.1	-3.3
	8	6	58.5	59.0	+0.5
	Overall	52	59.9	62.7	+2.8
Total Language	4	12	45.6	56.5	+10.9
	5	9	44.7	52.0	+7.3
	6	17	58.8	57.0	-1.8
	7	7	50.4	53.7	+3.3
	8	6	53.0	57.3	+4.3
	Overall	51	51.4	55.6	+4.2

Figure 30 shows the percentages of students who scored at or above average in 2009-10 and 2010-11 (scoring above the mean of 50 NCE points). In 2010-11, 51 percent of students in spelling, 47 percent in capitalization, 64 percent in punctuation, 79 percent in usage and expression, and 59 percent in Total Language scored at or above the national average, an increase ranging from 2 to 12 percentage points from 2009-10.

30. Percent scoring at or above average in language, 2009-10 and 2010-11

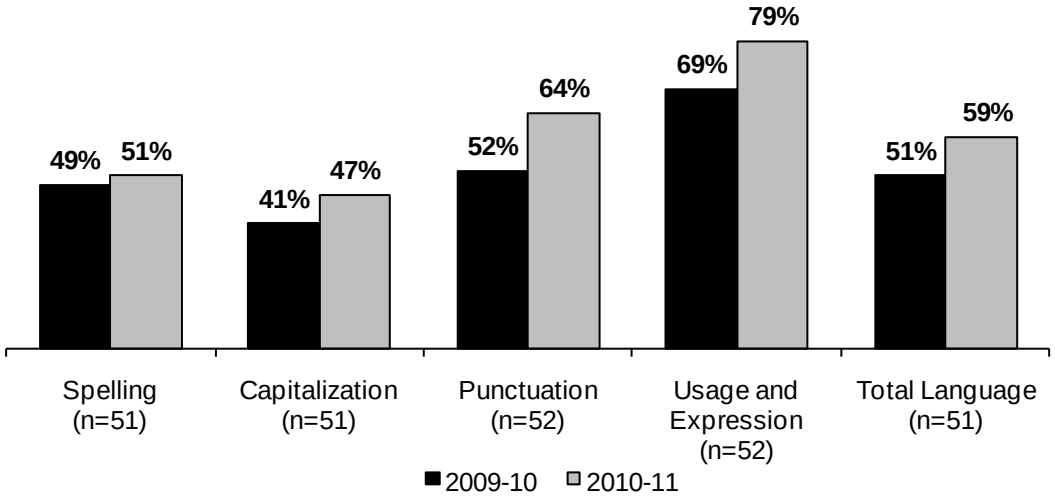


Figure 31 shows the one-year change in Total Language NCE scores by student characteristics. Results show that the other students (Black/African American, American Indian, Asian, and Hispanic combined) made a higher average gain than the White/ Caucasian students, with gains of 5.0 NCE points for White/Caucasian students and 3.6 NCE points for the other students. The average scores for White/Caucasian students in both years are higher than the other students.

Boys made a higher average gain than girls in Total Language. They made improvement from scoring below average in 2009-10 to above it in 2010-11. However, girls scored higher on average than boys in both years. Students from lower income levels (eligible for free or reduced-price lunch) made a higher average gain than students from higher income levels (ineligible for free or reduced-price lunch) and their scores improved from below the national average in 2009-10 to above it in 2010-11. Average scores of all student groups, except for the other group (Black/African American, American Indian, Asian, and Hispanic combined), were higher than the national average in 2010-11. Differences in average gains between the student groups were not statistically significant. Caution should be applied when interpreting the results, due to the small number of students in each group.

31. Change in ITBS Total Language results by student characteristics, 2009-10 and 2010-11

		Average of NCE scores		
Characteristics	**N**	**2009-10**	**2010-11**	**Difference**
Student race/ethnicity				
White/Caucasian	27	58.7	62.3	+3.6
Other[a]	24	43.1	48.1	+5.0
Gender				
Female	26	56.4	59.7	+3.4
Male	25	46.1	51.3	+5.2
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	29	48.2	53.5	+5.3
Not eligible	22	55.5	58.3	+2.9

[a] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Math progress

Similar to results in reading and language, students made developmental progress from 2009-10 to 2010-11 in math. Results in Figure 32 show that, on average, students gained more on concepts and estimation and problem solving and data interpretation than on computation. The average standard score gains on concepts and estimation and problem solving and data interpretation were 16.3 and 12.1, respectively. In comparison, the average gain on computation was 7.5. On Total Math, fourth- through seventh-grade students made improvement from 2009-10 to 2010-11. Scores of eighth-grade students in Total Math, however, declined during the same period, with a decrease of 6.2 in W points.

32. Change in ITBS Total Math developmental standard scores, 2009-10 to 2010-11

Subject	Grade (in 2010-11)	Number of students	Average developmental standard scores		
			2009-10	2010-11	Difference
Concepts and Estimation	4	11	191.4	214.3	+22.9
	5	9	202.1	226.0	+23.9
	6	17	220.5	236.6	+16,1
	7	6	219.5	230.8	+11.3
	8	6	228.3	226.5	-1.8
	Overall	49	211.4	227.7	+16.3
Problem solving and Data Interpretation	4	12	200.1	216.8	+16.8
	5	9	208.6	227.0	+18.4
	6	17	223.6	237.9	+14.3
	7	7	229.0	239.9	+10.9
	8	6	248,5	237.3	-11.2
	Overall	51	219.1	231.2	+12.1
Computation	4	13	175.6	186.8	+11.2
	5	9	182.7	195.2	+12.6
	6	16	192.9	207.3	+14.4
	7	7	207.9	196.7	-11.1
	8	6	210.3	205.3	-5.0
	Overall	51	190.8	198.2	+7.5
Total Math	4	10	194.4	210.2	+15.8
	5	9	197.8	216.1	+18.3
	6	16	214.0	228.9	+14.9
	7	6	216.8	224.2	+7.3
	8	6	229.2	223.0	-6.2
	Overall	47	209.0	221.1	+12.1

The average changes in math NCE scores from 2009-10 to 2010-11 are presented in Figure 33 by grade. In general, New City Charter School students showed accelerated progress from 2009-10 to 2010-11 in concepts and estimation, normative progress in Total Math, and slower than expected progress in problem solving and data interpretation and computation. Results in student math progress vary by grade levels and subject areas. Overall, fifth- and sixth-grade students made accelerated and normative progress on Total math, with an average gain of 1.7, and 0.8 NCE points, respectively. However, fourth-, seventh- and eighth-grade students made slower than expected progress on Total Math, with a decline in average gain of 2.1, 2.5, and 5.8 in NCE points, respectively.

33. Change in ITBS Total Math NCE scores, 2009-10 to 2010-11

Subject	Grade (in 2010-11)	Number of students	Average NCE scores		
			2009-10	2010-11	Difference
Concepts and Estimation	4	11	62.9	67.9	+5.0
	5	9	56.9	61.9	+5.0
	6	17	58.9	59.8	+0.9
	7	6	47.3	47.2	-0.1
	8	6	44.3	42.0	-2.3
	Overall	49	56.2	58.3	+2.1
Problem solving and Data Interpretation	4	12	65.7	64.3	-1.3
	5	9	58.6	59.3	+0.8
	6	17	58.2	57.9	-0.2
	7	7	52.7	52.4	-0.2
	8	6	56.8	45.8	-11.0
	Overall	51	59.1	57.5	-1.6
Computation	4	13	45.6	41.5	-4.2
	5	9	37.4	36.8	-0.7
	6	16	35.6	37.6	+2.0
	7	7	37.7	24.0	-13.7
	8	6	33.7	29.8	-3.8
	Overall	51	38.6	35.7	-2.9
Total Math	4	10	66.4	64.3	-2.1
	5	9	52.3	54.0	+1.7
	6	16	53.4	54.2	+0.8
	7	6	44.7	42.2	-2.5
	8	6	44.8	39.0	-5.8
	Overall	47	53.7	52.8	-0.9

Figure 34 shows the percentages of students who scored at or above average in 2009-10 and 2010-11 (scoring above the mean of 50 NCE points) in math indicators. In 2010-11, 69 percent of students in concepts and estimation and 63 percent in problem solving and data interpretation scored at or above the national average, up from 61 percent and 57 percent in 2009-10, respectively. However, the percentage of students scoring at or above the national average declined from 27 percent in 2009-10 to 18 percent in 2010-11 in computation. Also, the percentage of students scoring at or above the national average declined from 53 percent to 49 percent in Total Math during the same period.

34. Percent scoring at or above average in math, 2009-10 and 2010-11

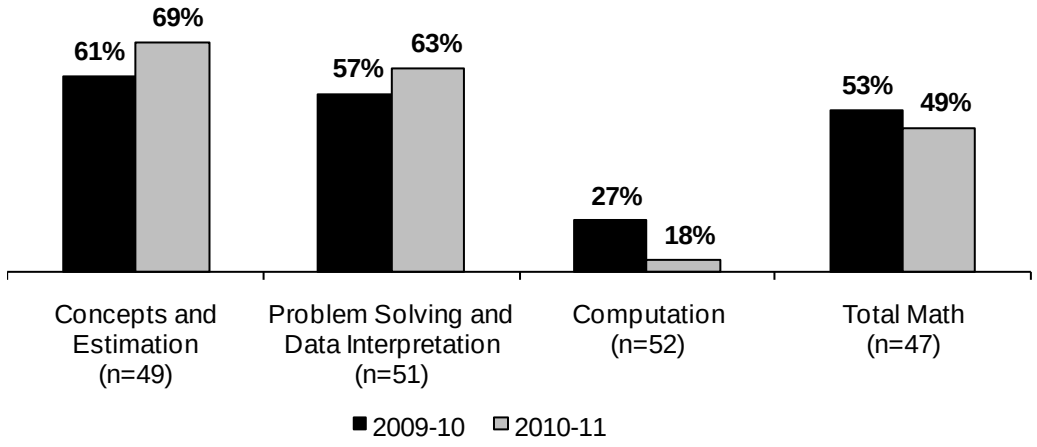


Figure 35 shows one-year change in math NCE results by student characteristics. Results show that the other students (Black/African American, American Indian, Asian, and Hispanic combined) made accelerated progress while the White/Caucasian students made slower than expected progress from 2009-10 to 2010-11. In both years, however, White/ Caucasian students scored higher than the other students, on average. Boys made higher average gain than girls and their scores were higher than girls in both years. Students from lower income levels (i.e., eligible for free or reduced-price lunch) made accelerated progress while those ineligible made slower progress. The average scores for both income-level groups are above the national average in both years.

35. Change in ITBS Total Math results by student characteristics, 2009-10 to 2010-11

Characteristics	N	Average of NCE scores 2009-10	2010-11	Difference
Student race/ethnicity [a]				
White/Caucasian	26	64.4	59.6	-4.9
Other [b]	21	40.5	44.5	+4.0
Gender				
Female	24	50.2	47.6	-2.6
Male	23	57.4	58.3	+0.9
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	26	51.8	53.5	+1.7
Not eligible	21	56.2	52.0	-4.2

[a] *Significant difference in average gain score between groups.*

[b] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Core Battery results

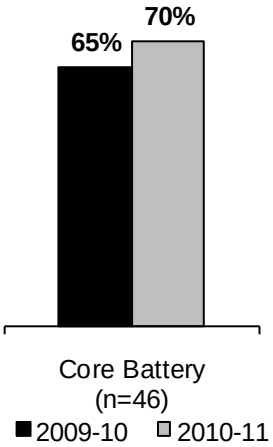
All grade levels, on average, made improvements on the Iowa Tests of Basic Skills Core Battery (Figure 36). The Core Battery results are a combination of the reading, language, and math tests. Students made average developmental gains, ranging from 4.5 points in eighth grade to 22.5 points in fourth grade. In terms of NCE scores, fourth-, fifth-, and seventh-grade students made accelerated gains from 2009-10 to 2010-11, with an average gain ranging from 2.5 to 3.8. Sixth- and eighth-grade students made slower than expected progress, with a slight decline of 1.7 and 1.0 points, respectively.

36. Change in ITBS Core Battery scores, 2009-10 to 2010-11

Grade (in 2010-11)	Number of students	Average developmental standard scores 2009-10	2010-11	Difference
4	10	189.2	211.7	+22.5
5	8	200.9	221.1	+20.3
6	16	227.1	239.9	+12.8
7	6	225.5	240.5	+15.0
8	6	240.3	244.8	+4.5
Overall	46	215.8	231.24	+15.4
		Average NCE scores		
4	10	59.7	63.5	+3.8
5	8	53.5	57.3	+3.8
6	16	62.7	61.1	-1.7
7	6	50.3	52.8	+2.5
8	6	52.8	51.8	-1.0
Overall	46	57.6	58.7	+1.1

Figure 37 shows that the percentage of students scoring at or above the national average from 2009-10 to 2010-11 increased from 65 percent to 70 percent in Core Battery.

37. Percent scoring at or above average in ITBS Core Battery, 2009-10 and 2010-11



Students' progress on the ITBS Core Battery is also analyzed by their characteristics (Figure 38). Results show that the other students (Black/African American, American Indian, Asian, and Hispanic combined) made accelerated progress while the White/ Caucasian students made normative progress from 2009-10 to 2010-11. However, the average scores for White/Caucasian students in both years are higher than the other students and well above the national average (above the mean of 50 NCE points).

Similarly, students from lower income levels (i.e., eligible for free or reduced-price lunch) made accelerated progress while those ineligible made normative progress. The average scores for both groups are well above the national average. Boys made a higher average gain than girls and both groups scored above the national average in both years. None of the differences in the average gains between the student groups were statistically significant.

38. Change in ITBS Core Battery results by student characteristics, 2009-10 to 2010-11

		Average of NCE scores		
Characteristics	**N**	**2009-10**	**2010-11**	**Difference**
Student race/ethnicity				
White/Caucasian	25	68.1	67.4	-0.7
Other[a]	21	45.0	48.2	+3.2
Gender				
Female	24	58.6	58.7	+0.1
Male	22	56.4	58.6	+2.2
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	25	55.2	57.3	+2.1
Not eligible	21	60.4	60.3	-0.1

[a] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

Science progress

All grade levels made developmental gains in the Iowa Tests of Basic Skills Science, ranging from 1.5 points in eighth-grade to 19.2 points in fifth grade, on average (Figure 39). In terms of NCE scores, only fifth grade students made accelerated gains from 56.0 in 2009-10 to 58.7 in 2010-11. Students in the other grades made slower than expected progress from 2009-10 to 2010-11, with slight declines ranging from 1.1 to 3.7 in NCE

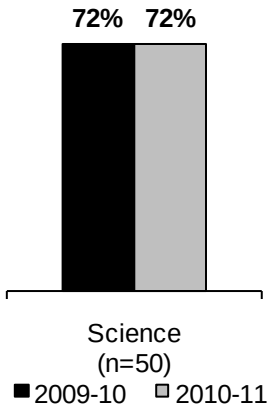
points. It should be noted that students' average scores in both years were well above the national average.

39. Change in Science scores, 2009-10 to 2010-11

Grade (in 2010-11)	Number of students	Average developmental standard scores		
		2009-10	2010-11	Difference
4	12	201.8	216.0	+14.2
5	9	207.3	226.6	+19.2
6	16	235.4	246.9	+11.4
7	7	245.4	256.6	+11.1
8	6	252.8	254.3	+1.5
Overall	50	225.8	238.1	+12.3
		Average NCE scores		
4	12	66.2	62.5	-3.7
5	9	56.0	58.7	+2.7
6	16	64.4	61.8	-2.7
7	7	61.7	60.6	-1.1
8	6	57.8	56.0	-1.8
Overall	50	62.2	60.5	-1.6

Figure 40 shows that the percentage of students scoring at or above the national average in science stayed at the same level. In both 2009-10 and 2010-11, 72 percent of students scored at or above the national average (i.e., at or above 50 NCE points) in science.

40. Percent scoring at or above average in science, 2009-10 and 2010-11



Students' progress on the ITBS Science is also analyzed by their characteristics (Figure 41). Other students (Black/African American, American Indian, Asian, and Hispanic students combined) made accelerated progress, scoring below the national average in 2009-10 to at average in 2010-11. White/Caucasian students made slower than expected progress during the same time, with a decline in average score of 5.3 NCE points. However, the White/Caucasian students scored well above the national average in both years.

Boys made accelerated progress while girls made slower progress than expected from 2009-10 to 2010-11. Average scores for both groups were above the national average in both years. Students from lower income levels (i.e., eligible for free or reduced-price lunch) also made accelerate progress while those from higher income levels (ineligible for free or reduced-price lunch) made slower progress. However, their average scores in both years were lower than students from the higher income levels. All student groups, regardless of their demographic characteristics, scored average or above average in 2010-11.

41. Change in ITBS Science results by student characteristics, 2009-10 to 2010-11

		Average of NCE scores		
Characteristics	**N**	**2009-10**	**2010-11**	**Difference**
Student race/ethnicity				
White/Caucasian	27	74.6	69.2	-5.3
Other[a]	23	47.6	50.3	+2.7
Gender				
Female	25	65.5	60.7	-4.8
Male	25	58.8	60.3	+1.5
Free or reduced-price lunch status [b]				
Eligible for free or reduced-price lunch	28	56.1	58.6	+2.5
Not eligible	22	69.9	63.0	-6.9

[a] *Due to the small number of students, Black/African American, American Indian, Asian, and Hispanic groups are combined.*

[b] *Significant difference in average gain score between groups.*