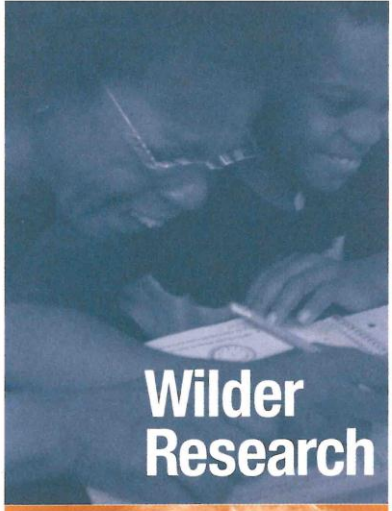

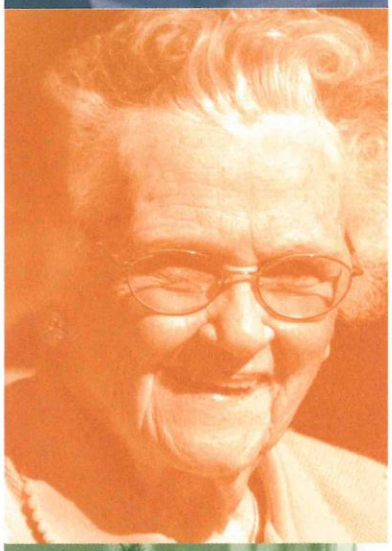

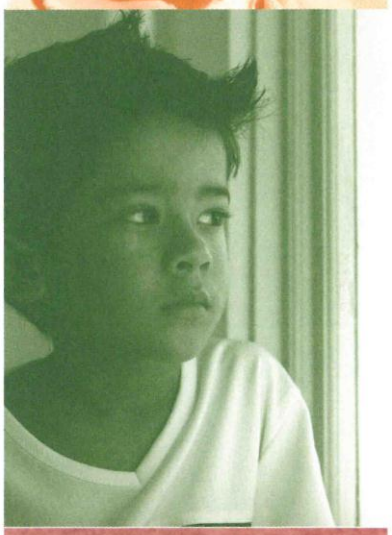

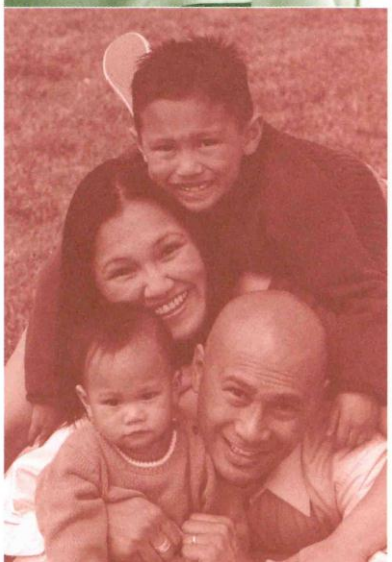

Student demographic and academic achievement

Evaluation of New City Charter School in 2011-12

JANUARY 2012

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Evaluation of New City Charter School in 2011-12

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Prepared by:
Edith Gozali-Lee

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

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Wilder Research contributors included:

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Diane Elwood
Ryan McArdle
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Rebecca Schultz
Dan Swanson

Summary

This report describes New City Charter School student achievement in the 2011-12 school year, the school's ninth operating year. The number of students enrolled in the school was 100, a decrease from 127 students enrolled in the previous year.

The largest group of students in 2011-12 was White/Caucasian (61%), followed by Black/African American (13%), Biracial or Multiracial (9%), Hispanic (7%), American Indian (5%), and Asian (5%). There were more boys than girls. Almost half of the students (48%) were eligible for free or reduced-price lunch. Seven percent of the students had a primary home language other than English and four percent received Special Education services.

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 2010 for the 2010-11 school year and October-November 2011 for the 2011-12 school year.

Reading results

- Average reading scores for first- and second-grade students in 2011-12 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 2010-11 to 2011-12 school year. Students' scores in 2011-12 were compared to their scores in 2010-11. 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 2010-11 to 2011-12 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 7.5 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 seventh graders made accelerated progress in Total Reading from 2010-11 to 2011-12, on average. The sixth-grade students made slower than expected progress and the seventh-grade students made normative progress.

- Reading results for 2011-12 differed by student characteristics. Results show that White/Caucasian students performed better than other students (Black/African American, American Indian, Asian, and Hispanic combined). In first and second grade, students who were not eligible for free or reduced-price lunch also scored significantly higher than those who were eligible. However, this difference was not significant in third through eighth grade. Boys and girls performed similarly in reading (i.e., their scores are not different statistically).

- In terms of students' progress in reading skills, results show that all groups, on average, made accelerated progress in Total Reading from 2010-11 to 2011-12. Students who were eligible for free or reduced-price lunch made higher average gain than students who were ineligible. Boys had higher average gain than girls. The other students (Black/African American, American Indian, Asian, and Hispanic combined) made higher average gain than the White students. However, differences in average gain scores between these groups are not statistically significant. All student groups, regardless of demographic characteristics, scored at or above the national average in reading in both years (i.e., scoring higher than 50 in NCE 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 third-, fifth-, and seventh-grade students in 2011-12 were above the national average (i.e., above the mean of 50 in Normal Curve Equivalent points), while average scores for fourth-, sixth-, and eighth-grade students were below it.

- Compared to same-grade students in the normative sample, students in all grade levels except fourth and fifth grade made accelerated progress from 2010-11 to 2011-12 in Total Language. Fourth-grade students made normative progress, while the fifth-grade students made slower than expected progress, on average. Fifth-grade through seventh-grade students, on average, scored above the national average (i.e., above 50 NCE points) in 2011-12.

- Similar to the reading results, White/Caucasian students performed significantly better than other students in language in 2011-12. The students who were not eligible for free or reduced-price lunch scored significantly higher than those who were eligible. Boys and girls performed similarly (i.e., their average scores are not statistically different).

- Results show that all groups made progress on Total Language from 2010-11 to 2011-12. Students who were not eligible for free or reduced-price lunch made higher average gain than students who were eligible. Boys made slighter higher average gain than girls and White/Caucasian students made slightly higher average gain than the other students (Black/African American, American Indian, Asian, and Hispanic combined). However, none of the differences in average gains between the groups are statistically significant. In 2011-12, all groups except for the other students (Black/African American, American Indian, Asian, and Hispanic combined) scored above the national average.

Math results

- Average math scores for first- and second-grade students in 2011-12 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 seventh-grade students in 2011-12, as measured by Iowa Tests of Basic Skills, were at or above the national average (above the mean of 50 in Normal Curve Equivalent points). However, the average score for eighth-grade students was below it.

- Compared to same-grade students in the normative sample, on average, second-grade students made accelerated progress in Broad Math from 2010-11 to 2011-12, with 3.0 points increase in average standard scores.

- Compared to students in the normative sample, all students made accelerated progress from 2010-11 to 2011-12, except for fifth- and eighth-grade students. The fifth-grade students made slower than expected progress and the eighth-grade students made normative progress from 2010-11 to 2011-12 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. Also, boys scored significantly higher than girls. White/Caucasian students performed better than other students in 2011-12; however, this difference was not statistically significant. Results on ITBS for third- through eighth-grade students show that higher income students (ineligible for free or reduced-price lunch) scored higher than the lower income students (eligible for free

or reduced-price lunch) and White/Caucasian students performed better, on average, than the other group. Boys and girls, however, performed similarly.

- In terms of progress in math, on average, girls made higher average gain than boys. Students who were not eligible for free or reduced-price lunch made slightly higher average gain than students who were eligible. Similarly, the other students (Black/ African American, American Indian, Asian, and Hispanic combined) made slightly higher average gain than the White/Caucasian students. However, none of these differences are statistically significant. The average scores for both income-level groups and gender groups are above the national average in both years. White/Caucasian students also scored above the national average in both years. However, the other group (Black/African American, American Indian, Asian, and Hispanic combined) scored below it, on average.

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 sixth and eighth grade, in 2011-12 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, fourth-,fifth-, and seventh-grade students made accelerated progress from 2010-11 to 2011-12 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, except for eighth-grade students in 2011-12 who scored slightly below the national average.

- White/Caucasian students performed significantly better than other students in science in 2011-12. Students who were not eligible for free or reduced-price lunch scored higher than those who were eligible and girls performed better than the boys, but these findings were not statistically significant.

- In terms of students' progress in science, students from lower income levels (eligible for free or reduced-price lunch) made 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 higher average gain than the White/Caucasian students. Girls made higher average gain than boys. However, these differences in average score gains among the groups are not statistically significant. All student groups, regardless of their demographic characteristics, scored above the national average in 2011-12.

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 slightly higher improvement in reading, math, and science than the White/Caucasian students over the one-year period in ITBS. Also, students from lower income backgrounds (i.e., eligible for free or reduced-price lunch) made larger improvements in reading and science 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 with 60 students enrolled in the school. 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 2011-12 school year. One-year student academic progress, from the 2010-11 to 2011-12 school year, is also included for those who stayed in the school and took the same tests. Student assessments were conducted in December 2010 for the 2010-11 school year and October-November 2011 for the 2011-12 school year.

Student characteristics

Characteristics of students enrolled in New City Charter School in the 2011-12 school year are presented in Figure 1. There were a total of 100 students, ranging from kindergarten to eighth grade, down from a total of 127 students in the previous year.

The largest group of students was White/Caucasian (61%), followed by Black/African American (13%), Biracial/Multiracial (9%), Hispanic (7%), American Indian (5%), and Asian (5%). There were more boys (59%) than girls (41%). Almost half of the students (48%) were eligible for free or reduced-price lunch. Seven students (7%) had a primary home language other than English and four students (4%) received Special Education services.

1. Student profile: 2011-12 (n=100)

Grade level	Number	Percent
1	17	17%
2	15	15%
3	14	14%
4	12	12%
5	13	13%
6	6	6%
7	15	15%
8	8	8%
Student race/ethnicity		
American Indian	5	5%
Asian	5	5%
Hispanic	7	7%
Black or African American	13	13%
White/Caucasian	61	61%
Biracial/Multiracial	9	9%
Gender		
Female	41	41%
Male	59	59%
Other student information		
Eligible for free or reduced-price lunch	48	48%
Home language other than English	7	7%
Receiving Special Education	4	4%

Student academic achievement

This section presents student academic achievement results in 2011-12. 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 2010-11 to 2011-12, is described in the next section of the report.

Results for first- and second-grade students

In October-November 2011, 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) on all reading tests. It should be noted that student scores, especially for first grade, varied greatly. First grade scores in Broad Reading, for example, ranged from 63 to 135.

2. Average standard scores in WJ III Broad Reading, 2011-12

Reading test	N	Mean of standard scores	Standard Deviation	Range of standard scores
First grade				
Letter-word identification	17	114.2	19.5	70-136
Reading fluency [a]	7	122.3	10.0	105-134
Passage comprehension	17	109.5	20.8	66-133
Broad Reading	16	112.1	21.9	63-135
Second grade				
Letter-word identification	15	114.0	10.0	94-130
Reading fluency	15	108.6	8.0	94-121
Passage comprehension	15	111.3	8.5	98-125
Broad Reading	15	113.3	9.5	94-129

[a] *Standard score is not available for students whose raw score is 0 or who are tested too early (within the first month) during the school year.*

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-grade (81%) and second-grade (87%) students scored average or above average on Broad Reading.

3. WJ III Broad Reading results, 2011-12

Woodcock-Johnson test	Standard score	% First grade	% Second grade
Letter-word identification			
Average and above	100 or above	77%	93%
Below average	99 and below	24%	7%
Reading fluency			
Average and above	100 or above	100%	80%
Below average	99 and below	0%	20%
Passage comprehension			
Average and above	100 or above	77%	93%
Below average	99 and below	24%	7%
Broad Reading			
Average and above	100 or above	81%	87%
Below average	99 and below	19%	13%

Note: *Percentages may not sum to 100% due to rounding.*

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, on average. The difference in average scores between boys and girls is not statistically significant.

4. WJ III Broad Reading results by student characteristics, 2011-12

Broad reading	N	Average of standard scores
Student race/ethnicity [b]		
White/Caucasian	17	119.5
Other [a]	14	104.4
Gender		
Female	13	109.8
Male	18	114.8
Free or reduced-price lunch status [b]		
Eligible for free lunch or reduced-price lunch	14	101.1
Not eligible	17	122.2

[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. It should be noted that student scores, especially for first grade, varied greatly. First grade scores in Broad Math, for example, ranged from 74 to 137.

5. Average standard scores in WJ III Broad Math, 2011-12

Math test	N	Mean	Standard Deviation	Range
First grade				
Calculation [a]	9	109.2	17.1	84-136
Math fluency [a]	10	94.4	17.5	67-129
Applied problems	17	110.8	16.1	85-137
Broad Math	17	107.4	18.0	74-137
Second grade				
Calculation	15	115.8	8.9	96-128
Math fluency	15	106.5	12.4	86-135
Applied problems	15	118.2	10.7	96-133
Broad Math	15	117.1	9.1	96-131

[a] *Standard score is not available for students whose raw score is 0 or who are tested too early (within the first month) during the school year.*

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 most first-grade students (71%) and almost all second-grade students (93%) scored average or higher on Broad Math. Among the math tests, higher percentages of students scored average or above average on calculation and applied problems than on math fluency.

6. WJ III Broad Math results, 2011-12

Woodcock-Johnson classification	Standard score range	% First grade	% Second grade
Calculation			
Average or above average	100 or above	67%	93%
Below average	99 and below	33%	7%
Math fluency			
Average or above average	100 or above	30%	73%
Below average	99 and below	70%	27%
Applied Problems			
Average or above average	100 or above	77%	93%
Below average	99 and below	24%	7%
Broad Math			
Average or above average	100 or above	71%	93%
Below average	99 and below	29%	7%

Note: *Percentages may not sum to 100% due to rounding.*

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. Boys performed better than girls. A significant difference in average scores between White/Caucasian and the other group was not found.

7. WJ III Broad Math results by student characteristics, 2011-12

Broad Math	N	Average of standard scores
Student race/ethnicity		
White/Caucasian	18	116.1
Other [a]	14	106.6
Gender [b]		
Female	14	103.8
Male	18	118.3
Free or reduced-price lunch status [b]		
Eligible for free lunch or reduced-price lunch	15	102.4
Not eligible	17	120.4

[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. All 68 third- to eighth-grade students 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 (which comprise the Core Battery).

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*

In addition, students took the ITBS Science test.

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 64.9 and 62.9, respectively. Sixth-and eighth-grade students appeared to score lower 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 10 to 99.

8. Average ITBS Total Reading NCE scores, 2011-12

Subject	Grade	N	Average NCE	Standard Deviation	Range
Vocabulary	3	14	69.2	28.0	19-99
	4	12	61.3	15.0	40-78
	5	13	73.5	27.9	15-99
	6	6	47.8	29.5	16-94
	7	15	73.1	21.7	41-99
	8	8	46.5	25.8	21-88
	Overall	68	64.9	25.8	15-99
Comprehension	3	14	70.9	21.9	26-99
	4	12	58.3	20.1	25-99
	5	13	68.7	24.1	19-99
	6	6	48.5	30.4	13-93
	7	15	67.2	18.1	42-99
	8	8	49.6	27.3	12-90
	Overall	68	62.9	23.3	12-99
Total Reading	3	14	72.1	26.2	25-99
	4	12	60.9	18.0	34-95
	5	13	73.2	27.9	17-99
	6	6	48.3	31.8	10-88
	7	15	71.5	20.0	42-99
	8	8	48.5	26.9	21-92
	Overall	68	65.3	25.6	10-99

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 third-, fifth- and seventh-grade students (73-85%) scored average or above average on vocabulary, comprehension, and Total Reading. Sixth- and eighth-grade students scored the lowest, with 33 percent and 38 percent of students, respectively, scoring average or above average on all the reading tests.

9. ITBS Total Reading results, 2011-12: students scoring average or above average

Subject	Grade	N	Percent scoring average or above average [a]
Vocabulary	3	14	79%
	4	12	67%
	5	13	85%
	6	6	33%
	7	15	73%
	8	8	38%
	Overall	68	68%
Comprehension	3	14	79%
	4	12	67%
	5	13	85%
	6	6	33%
	7	15	80%
	8	8	38%
	Overall	68	69%
Total Reading	3	14	79%
	4	12	67%
	5	13	85%
	6	6	33%
	7	15	80%
	8	8	38%
	Overall	68	69%

[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. Students who were not eligible for free or reduced-price lunch scored higher than those who were eligible and girls scored higher than boys, on average. However, the differences between the income level groups and the gender groups are not statistically significant. All groups, regardless of their demographic characteristics, scored above the national average on Total Reading.

10. ITBS Total Reading results by student characteristics, 2011-12

Total Reading	N	Average NCE
Student race/ethnicity [a]		
White/Caucasian	43	72.3
Other [b]	25	53.3
Gender		
Female	27	69.0
Male	41	62.9
Free or reduced-price lunch status		
Eligible for free lunch or reduced-price lunch	33	59.1
Not eligible	35	71.2

[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 56.7 NCE points. Looking at individual tests, student scored higher on usage and expression (67.7 NCE points) than on spelling (54.4 NCE points), punctuation (52.3 NCE points), and capitalization (45.2 NCE points), on average. The results also show that students' scores vary widely. As shown in Figure 11, students' scores on Total Language overall range from 8 to 99.

11. Average ITBS Total Language NCE scores, 2011-12

Subject	Grade	N	Average NCE	Standard Deviation	Range
Spelling	3	14	64.1	28.8	1-99
	4	12	43.2	19.9	14-81
	5	13	60.9	17.5	33-84
	6	6	45.2	19.2	27-81
	7	15	60.9	20.1	31-99
	8	8	38.1	24.0	14-91
	Overall	68	54.4	23.5	1-99
Capitalization	3	14	50.2	21.5	17-99
	4	12	33.1	19.8	1-66
	5	13	47.7	18.1	16-84
	6	6	26.5	24.9	9-74
	7	15	58.1	23.7	9-88
	8	8	40.4	27.5	12-99
	Overall	68	45.2	23.6	1-99
Punctuation	3	14	58.1	15.3	23-76
	4	11	41.0	17.8	1-66
	5	13	56.1	26.5	10-92
	6	5	49.8	29.9	27-99
	7	15	58.9	24.0	14-99
	8	8	40.9	19.5	12-81
	Overall	66	52.3	22.4	1-99
Usage and Expression	3	14	77.5	29.3	21-99
	4	12	63.8	23.3	29-99
	5	13	72.5	24.6	24-99
	6	6	50.7	33.7	14-95
	7	15	71.9	19.5	41-99
	8	8	53.4	19.1	23-88
	Overall	68	67.7	25.5	14-99
Total Language	3	14	63.6	24.9	8-99
	4	11	46.3	18.7	19-77
	5	13	60.3	20.2	28-95
	6	5	45.4	29.5	17-92
	7	15	65.3	23.9	25-99
	8	8	43.8	24.5	15-99
	Overall	66	56.7	23.9	8-99

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, almost 60 percent of the students (59%) scored average or above average on Total Language. Three-quarters of the students (75%) scored average or above average on usage and expression and slightly over half scored average or above average on spelling (54%) and punctuation (53%). Fewer than 40 percent (37%) scored average or above average on capitalization. The results also show that the proportion of students scoring average or above average varies across grade levels and language skill areas. For example, 75 percent of fourth-grade students scored average or above average on usage and expression. Fewer than half (25-42%) of the fourth graders scored average or higher on spelling, capitalization, punctuation, and Total Language. In contrast, the majority of seventh-grade students (60-80%) 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, 2011-12: students scoring average or above average

Subject	Grade	N	Percent scoring average or above average[a]
Spelling	3	14	71%
	4	12	42%
	5	13	69%
	6	6	17%
	7	15	73%
	8	8	13%
	Overall	68	54%
Capitalization	3	14	43%
	4	12	25%
	5	13	23%
	6	6	17%
	7	15	67%
	8	8	25%
	Overall	68	37%

[a] Scoring 50 or above in NCE scores.

12. ITBS Total Language results, 2011-12: students scoring average or above average (continued)

Subject	Grade	N	Percent scoring average or above average[a]
Punctuation	3	14	79%
	4	11	36%
	5	13	62%
	6	5	40%
	7	15	60%
	8	8	13%
	Overall	66	53%
Usage and Expression	3	14	79%
	4	12	75%
	5	13	85%
	6	6	50%
	7	15	80%
	8	8	63%
	Overall	68	75%
Total Language	3	14	79%
	4	11	36%
	5	13	77%
	6	5	40%
	7	15	73%
	8	8	13%
	Overall	66	59%

[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 significantly higher than those who were eligible. Difference in average score between girls and boys is not statistically significant.

13. ITBS Total Language results by student characteristics, 2011-12

Characteristics	N	Average of NCE
Student race/ethnicity [a]		
White/Caucasian	43	61.2
Other [b]	23	48.1
Gender		
Female	26	61.9
Male	40	53.3
Free or reduced-price lunch status [a]		
Eligible for free lunch or reduced-price lunch	32	48.8
Not eligible	34	64.1

[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 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 it was below average on computation. Similar to reading and language test results, students' math scores vary widely, ranging from 1 to 99 on concepts and estimation and computation, 13 to 99 on problem solving and data interpretation, and 20 to 99 on Total Math.

14. Average ITBS Total Math NCE scores, 2011-12

Subject	Grade	Number of students	Average NCE	Standard Deviation	Range
Concepts and Estimation	3	14	65.1	21.5	32-99
	4	12	62.1	26.2	1-99
	5	13	69.8	18.4	39-99
	6	6	51.8	28.0	20-93
	7	15	62.7	15.3	38-89
	8	8	47.3	17.0	27-82
	Overall	68	61.7	21.2	1-99
Problem Solving and Data Interpretation	3	14	70.7	28.4	15-99
	4	12	68.9	18.4	44-99
	5	13	65.5	25.5	13-99
	6	6	60.8	27.2	27-94
	7	15	66.5	15.5	44-99
	8	8	41.5	13.7	24-67
	Overall	68	64.2	23.0	13-99
Computation	3	14	59.4	17.2	23-99
	4	11	47.4	18.0	17-74
	5	13	44.9	28.8	1-99
	6	6	34.3	23.3	5-64
	7	15	45.6	20.5	1-75
	8	8	34.0	15.5	10-55
	Overall	67	46.2	21.9	1-99
Total Math	3	14	67.4	22.8	22-99
	4	11	65.6	17.9	36-99
	5	13	61.8	22.1	26-99
	6	6	50.0	26.4	20-88
	7	15	60.3	18.0	29-98
	8	8	39.8	14.5	20-70
	Overall	67	59.6	21.4	20-99

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 (71%), problem solving and data interpretation (71%), and Total Math (64%). Fewer students scored average or above average on computation (42%). The results also show that the proportion of students scoring average or above average varies across grade levels and math skill areas. For example, most

third-grade students (71-79%) scored average or above average on all math tests. Most fifth-grade students (69-85%) also scored average or above average on all math tests, except on computation. Only 31 percent of fifth-grade students scored average or higher on computation. Again, results should be interpreted with caution because the number of students in each grade level is small.

15. ITBS Total Math results, 2011-12: students scoring average or above average

Subject	Grade	Number of students	Percent scoring average or above average[a]
Concepts and Estimation	3	14	71%
	4	12	75%
	5	13	85%
	6	6	50%
	7	15	80%
	8	8	38%
	Overall	68	71%
Problem Solving and Data Interpretation	3	14	79%
	4	12	75%
	5	13	77%
	6	6	50%
	7	15	87%
	8	8	25%
	Overall	68	71%
Computation	3	14	79%
	4	11	46%
	5	13	31%
	6	6	17%
	7	15	40%
	8	8	13%
	Overall	67	42%
Total Math	3	14	79%
	4	11	82%
	5	13	69%
	6	6	50%
	7	15	67%
	8	8	13%
	Overall	67	64%

[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. Students who were ineligible for free lunch or reduced-price lunch scored higher than those who were eligible. Boys and girls performed similarly, on average.

16. ITBS Total Math results by student characteristics, 2011-12

Characteristics	N	Average of NCE
Student race/ethnicity [a]		
White/Caucasian	43	66.7
Other [b]	24	46.9
Gender		
Female	26	58.9
Male	41	60.0
Free or reduced-price lunch status [a]		
Eligible for free lunch or reduced-price lunch	32	53.0
Not eligible	35	65.6

[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 all students, except eighth-grade students, were above the national average on ITBS. Their average scores range from 51.2 to 70.3 in NCE points. Eighth-grade students scored 43.5 NCE points, on average. More than three-quarters (77-80%) of the third-, fifth-, and seventh-grade students and almost two-thirds (64%) of the fourth-grade students scored average or above average (i.e., scoring 50 or above in NCE) on the Core Battery. Fewer sixth- and eighth-grade students (40% and 25%, respectively) scored average or above average. It should be noted that the number of students in these grade levels is small.

17. ITBS Core Battery results, 2011-12

Grade	N	NCE Average	Standard Deviation	Range	Percent scoring average or above
3	14	70.3	26.1	17-99	79%
4	11	57.8	16.5	33-83	64%
5	13	65.7	22.1	22-99	77%
6	5	51.2	28.9	20-92	40%
7	15	67.1	21.4	35-99	80%
8	8	43.5	20.9	22-90	25%
Overall	66	61.9	23.3	17-99	67%

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. All groups, regardless of their demographic characteristics, scored at or above the national average (Figure 18).

18. ITBS Core Battery results by student characteristics, 2011-12

Characteristics	N	Average NCE
Student race/ethnicity [a]		
White/Caucasian	43	67.8
Other [b]	23	50.7
Gender		
Female	26	64.5
Male	40	60.2
Free or reduced-price lunch status [a]		
Eligible for free lunch or reduced-price lunch	32	53.7
Not eligible	34	69.6

[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 sixth and eighth grade, were above the national average on ITBS. The average score for sixth- and eighth-grade students was slightly below the national average (slightly below 50 in NCE points). Overall, three-quarters of students (75%) scored average or above average in science. Most or all students (75-100%) in third, fourth, fifth, and seventh grade scored average or above average in science. Fewer sixth- and eighth-grade students (33 and 38 percent, respectively) scored average or above average in science. Again, the number of students in these grade levels is small.

19. ITBS Science results, 2011-12

Grade	N	NCE Average	Standard Deviation	Range	Percent scoring average or above
3	14	69.4	21.2	29-99	79%
4	12	65.8	21.9	27-99	75%
5	13	71.2	24.6	29-99	85%
6	6	49.0	30.9	12-87	33%
7	15	75.1	17.0	50-99	100%
8	8	48.6	25.8	21-99	38%
Overall	68	66.1	23.7	12-99	75%

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 higher than those who were eligible, and girls scored higher than boys, on average. However, the differences in average scores between the income level groups and gender groups are not statistically significant. Regardless of their characteristics, all groups scored above the national average in science (Figure 20).

20. ITBS Science results by student characteristics, 2011-12

Characteristics	N	Average NCE
Student race/ethnicity[a]		
White/Caucasian	43	73.2
Other [b]	25	54.0
Gender		
Female	27	68.1
Male	41	64.8
Free or reduced-price lunch status		
Eligible for free lunch or reduced-price lunch	33	60.4
Not eligible	35	71.5

[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 2010-11 to the 2011-12 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 2010-11 to the 2011-12 and took the same tests. Data are available for 13 second-grade students in 2011-12 who took the Woodcock-Johnson tests when they were in first-grade in 2010-11. Data are also available for 45 fourth- through eighth-grade students in 2011-12 who took the Iowa Tests of Basic Skills when they were in third- through seventh-grade in 2010-11.

Academic progress of second-grade students

Figure 21 shows, on average, that children made academic progress in reading and math from 2010-11 to the 2011-12. 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 had an average gain of 39.5, and Broad Math overall had an average gain of 15.4. Among the reading skills, students, on average, made the biggest gain in letter-word identification (46.9 in W scores). Students made the biggest gain in calculation (22.5 in W scores) among the math skills.

21. Average WJ III W scores in 2010-11 and 2011-12

		Average of W scores		
Woodcock-Johnson tests	**N**	**2010-11**	**2011-12**	**Difference**
Letter-word identification	13	426.8	473.7	+46.9
Reading fluency	12	436.5	467.7	+31.2
Passage comprehension	13	450.5	487.9	+37.4
Broad Reading	13	437.1	476.6	+39.5
Calculation	13	458.7	481.2	+22.5
Math fluency	13	483.7	490.2	+6.5
Applied problems	13	473.1	489.4	+16.3
Broad Math	13	471.7	487.1	+15.4

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.

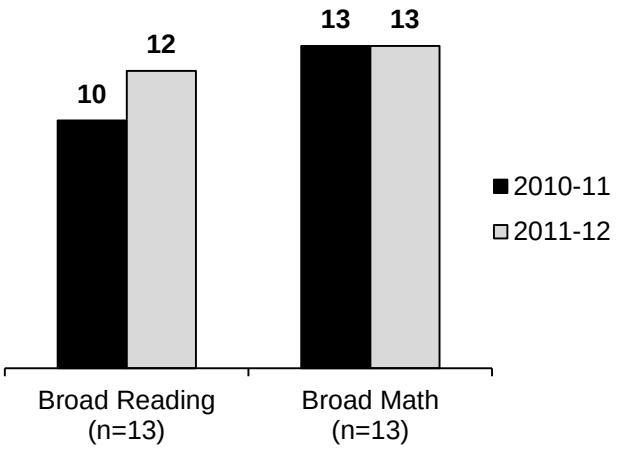
As shown in Figure 22, on average, students made accelerated progress compared to peers nationally in overall reading and math, with an increase of 7.5 in Broad Reading and 3.0 in Broad Math. Looking at individual tests, students made accelerated progress on all the tests, except on applied problems. Students' average score declined 2.5 in applied problems, indicating that they made slower progress than their peers nationally; however, the average students' scores were well above the average score of 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 passage comprehension from 2010-11 to the 2011-12, on average.

22. Change in WJ III average standard scores, 2010-11 to 2011-12

Woodcock-Johnson tests	N	Average standard scores 2010-11	Average standard scores 2011-12	Difference
Reading				
Letter-word identification	13	111.8	114.8	+3.0
Reading fluency	12	103.8	109.7	+5.9
Passage comprehension	13	104.7	113.0	+8.3
Broad Reading	13	107.2	114.8	+7.5
Math				
Calculation	13	112.5	118.2	+5.7
Math fluency	13	101.8	107.7	+5.8
Applied problems	13	123.7	121.2	-2.5
Broad Math	13	116.8	119.8	+3.0

Figure 23 shows the number of students who scored at or above average in 2010-11 and 2011-12 (scoring at or above 100 in standard score) in Broad Reading and Broad Math. Compared to 2010-11, two more students scored at or above average in Broad Reading in 2011-12. The number of students scored at or above average in Broad Math stayed the same for both years.

23. Number of students at or above average in Broad Reading and Broad Math, 2010-11 and 2011-12



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 44 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 17.6 and 19.2 points, respectively.

24. Change in ITBS Total Reading standard scores: 2010-11 to 2011-12

Subject	Grade (in 2011-12)	Number of students	Average developmental standard scores		
			2010-11	2011-12	Difference
Vocabulary	4	8	184.4	202.3	+17.9
	5	10	213.5	234.9	+21.4
	6	3	239.7	244.0	+4.3
	7	15	250.0	263.4	+13.4
	8	8	224.3	236.0	+11.8
	Overall	44	224.4	239.5	+15.1
Comprehension	4	8	187.1	204.0	+16.9
	5	10	220.6	236.8	+16.2
	6	3	246.0	254.0	+8.0
	7	15	257.1	262.5	+5.4
	8	8	220.5	240.1	+19.6
	Overall	44	228.7	241.4	+12.7
Total Reading	4	8	185.5	203.1	+17.6
	5	10	217.0	236.2	+19.2
	6	3	243.0	249.0	+6.0
	7	15	253.6	262.9	+9.3
	8	8	222.3	238.0	+15.8
	Overall	44	226.5	240.5	+14.0

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 in all the reading tests, with an overall average gain of 4.0 points on vocabulary, 2.0 points on comprehension, and 3.8 points on Total Reading. However, looking at individual grade levels, sixth-grade students made slower progress in all reading tests, with average declines of 6.7 NCE points on vocabulary, 2.0 NCE points on comprehension, and 3.3 NCE points on Total Reading. It should be noted that the data are available for three students. Seventh-grade students also made slower progress on comprehension, with an average decline of 2.8

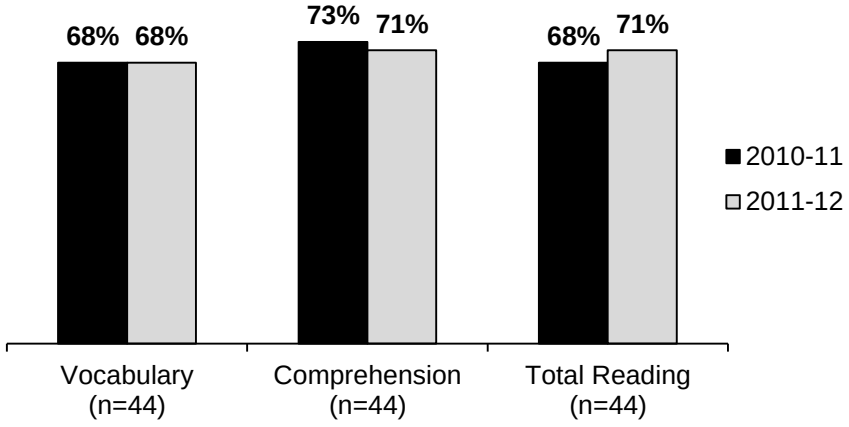
NCE points. However, they also made accelerated progress on vocabulary and normative progress on Total Reading (an increase of 2.6 and a slight increase of 0.1 NCE points, respectively). Students in other grade levels made accelerated progress from 2010-11 to 2011-12, on average.

25. Change in ITBS Total Reading NCE scores: 2010-11 to 2011-12

Subject	Grade (in 2011-12)	Number of students	Average NCE scores 2010-11	2011-12	Difference
Vocabulary	4	8	54.4	60.6	+6.3
	5	10	66.6	74.6	+8.0
	6	3	76.3	69.7	-6.7
	7	15	70.5	73.1	+2.6
	8	8	43.3	46.5	+3.3
	Overall	44	62.1	66.1	+4.0
Comprehension	4	8	52.5	57.9	+5.4
	5	10	66.4	69.9	+3.5
	6	3	73.3	71.3	-2.0
	7	15	70.0	67.2	-2.8
	8	8	42.2	49.6	+7.4
	Overall	44	61.2	63.2	+2.0
Total Reading	4	8	54.1	60.6	+6.5
	5	10	67.4	74.7	+7.3
	6	3	75.7	72.3	-3.3
	7	15	71.4	71.5	+0.1
	8	8	42.0	48.5	+6.5
	Overall	44	62.3	66.1	+3.8

Figure 26 shows the percentages of students who scored at or above average in 2010-11 and 2011-12 (scoring above the mean of 50 NCE points). In 2011-12, 68 percent of students on vocabulary, 71 percent on comprehension, and 71 percent on Total Reading scored at or above the national average. The number of students scoring at or above average in reading stayed about the same for both years, with one more student scoring at or above average on Total Reading in 2011-12 than in 2010-11.

26. Percent scoring at or above average in reading, 2010-11 and 2011-12



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 2010-11 and 2011-12 Iowa Tests of Basic Skills data, their data are reported as one group (i.e., other group). Results show that all groups, on average, made accelerated progress in Total Reading from 2010-11 to 2011-12. Students who were eligible for free or reduced-price lunch made higher average gain than students who were ineligible. Boys had higher average gain than girls. Students in the other group made higher average gain than the White/Caucasian students. However, differences in average gain scores between these groups are not statistically significant. It should be noted that all student groups, regardless of demographic characteristics, scored above the national average in reading in both years (i.e., scoring higher than 50 in NCE points).

27. Change in ITBS Total Reading results by student characteristics, 2010-11 to 2011-12

Characteristics	N	Average of NCE scores 2010-11	2011-12	Difference
Student race/ethnicity				
White/Caucasian	28	68.6	71.9	+3.2
Other[a]	16	51.2	56.1	+4.9
Gender				
Female	16	67.4	68.3	+0.9
Male	28	59.4	64.9	+5.5
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	22	59.0	64.1	+5.1
Not eligible	22	65.6	68.2	+2.5

[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 by grade in Figure 28. The results show that, on average, students made developmental gains from 2010-11 to 2011-12 in all language skills. Students made higher average gain in usage and expression than in other language tests. Looking at the Total Language score, seventh-grade students made the largest average gain of 20.2 points. Eighth-grade students made the lowest average gain of 9.9 points.

28. Change in ITBS Total Language developmental standard scores, 2010-11 to 2011-12

Subject	Grade (in 2011-12)	Number of students	Average developmental standard scores		
			2010-11	2011-12	Difference
Spelling	4	8	164.9	178.4	+13.5
	5	10	212.8	221.6	+8.8
	6	4	212.8	223.3	+10.5
	7	15	234.8	250.9	+16.1
	8	8	211.3	223.9	+12.6
	Overall	45	211.3	224.2	+12.9
Capitalization	4	8	166.6	168.0	+1.4
	5	10	200.7	213.7	+13.0
	6	4	187.8	193.8	+6.0
	7	15	230.3	254.1	+23.7
	8	8	206.3	221.4	+15.1
	Overall	45	204.4	218.6	+14.3
Punctuation	4	8	176.6	178.5	+1.9
	5	10	219.6	219.2	-0.4
	6	4	218.0	228.8	+10.8
	7	15	231.5	256.4	+24.9
	8	8	225.5	223.1	-2.4
	Overall	45	216.8	225.9	+9.1
Usage and Expression	4	8	191.3	219.8	+28.5
	5	10	230.4	255.3	+24.9
	6	4	221.5	256	+34.5
	7	15	266.7	283.6	+16.9
	8	8	237.1	252.0	+14.9
	Overall	45	236.0	257.9	+21.9
Total Language	4	8	174.6	186.1	+11.5
	5	10	215.8	227.3	+11.5
	6	4	210.0	225.5	+15.5
	7	15	240.9	261.1	+20.2
	8	8	220.0	229.9	+9.9
	Overall	45	217.1	231.6	+14.5

Figure 29 presents the average change in NCE scores from 2010-11 to 2011-12. Overall, students made accelerated progress on spelling, capitalization, usage and expression, and Total Language and made normative progress on punctuation, as compared to their peers in the normative sample, with the highest average gain on usage and expression (5.8 in NCE point). Looking at individual grade levels, all students made improvement from 2010-11 to 2011-12 on Total Language, except for the fifth-grade students. Despite the decline, the average score of fifth-grade students along with the scores of the sixth- and seventh-grade students were above the national average (higher than 50 NCE points) on Total Language in 2011-12. Average scores of fourth- and eighth-grade students were below the national average.

29. Change in ITBS Total Language NCE scores, 2010-11 to 2011-12

Subject	Grade (in 2011-12)	Number of students	Average NCE scores		
			2010-11	2011-12	Difference
Spelling	4	8	32.9	37.5	+4.6
	5	10	63.6	60.8	-2.8
	6	4	49.3	51.3	+2.0
	7	15	56.2	60.9	+4.7
	8	8	33.0	38.1	+5.1
	Overall	45	49.0	51.8	+2.8
Capitalization	4	8	39.1	32.9	-6.3
	5	10	52.6	52.8	+0.2
	6	4	35.5	33.5	-2.0
	7	15	50.7	58.1	+7.4
	8	8	34.6	40.4	+5.8
	Overall	45	44.9	47.1	+2.2
Punctuation	4	8	45.5	38.8	-6.8
	5	10	62.2	54.9	-7.3
	6	4	51.0	54.8	+3.8
	7	15	51.7	58.9	+7.2
	8	8	44.1	40.9	-3.2
	Overall	45	51.5	50.8	-0.7

29. Change in ITBS Total Language NCE scores, 2010-11 to 2011-12 (continued)

Subject	Grade (in 2011-12)	Number of students	Average NCE scores 2010-11	2011-12	Difference
Usage and Expression	4	8	57.0	66.1	+9.1
	5	10	68.6	74.6	+6.0
	6	4	52.5	67.3	+14.8
	7	15	68.9	71.9	+2.9
	8	8	50.1	53.4	+3.3
	Overall	45	61.9	67.8	+5.8
Total Language	4	8	43.4	43.6	+0.3
	5	10	63.5	62.3	-1.2
	6	4	47.8	52.5	+4.8
	7	15	58.1	65.3	+7.2
	8	8	41.3	43.8	+2.5
	Overall	45	52.8	55.8	+3.0

Figure 30 shows the percentages of students who scored at or above average in 2010-11 and 2011-12 (scoring above the mean of 50 NCE points). In 2011-12, 51 percent of students on spelling, 40 percent on capitalization, 47 percent on punctuation, 78 percent on usage and expression, and 56 percent on Total Language scored at or above the national average. Overall, two more students scored average or above average in 2011-12 than in 2010-11.

30. Percent scoring at or above average in language, 2010-11 and 2011-12

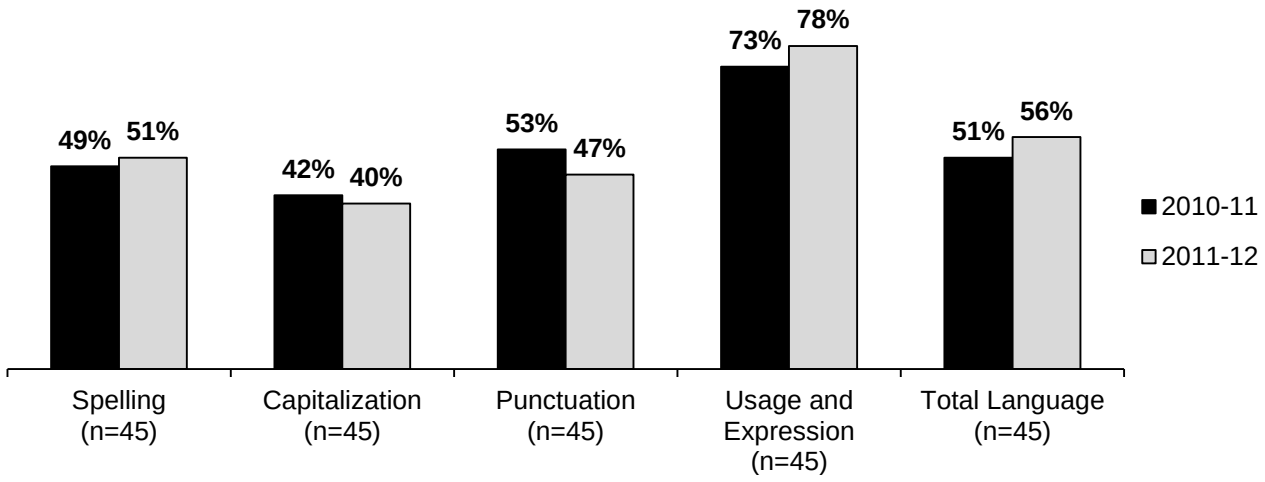


Figure 31 shows the one-year change in Total Language NCE scores by student characteristics. Results show that all groups made progress on Total Language from 2010-11 to 2011-12. Students who were not eligible for free or reduced-price lunch made higher average gain score than students who were eligible. Boys made slighter higher average gain score than girls and White/Caucasian students made slightly higher average gain score than the other students (Black/African American, American Indian, Asian, and Hispanic combined). However, none of the differences between the groups are statistically significant. In 2011-12, all groups except for the other students (Black/African American, American Indian, Asian, and Hispanic combined) scored above the national average (above 50 NCE points). 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, 2010-11 and 2011-12

		Average of NCE scores		
Characteristics	**N**	**2010-11**	**2011-12**	**Difference**
Student race/ethnicity				
White/Caucasian	29	57.2	60.7	+3.5
Other[a]	16	44.8	46.9	+2.2
Gender				
Female	16	58.4	61.0	+2.6
Male	29	49.7	53.0	+3.3
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	23	51.7	52.7	+1.0
Not eligible	22	53.9	59.0	+5.1

[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 2010-11 to 2011-12 in math. Results in Figure 32 show that, on average, students gained 13.0 points on concepts and estimation, 12.9 points on problem solving and data interpretation, 12.6 points on Total Math, and 11.5 points on computation. On Total Math, the seven fourth-grade students made the highest average gain of 16.9.

32. Change in ITBS Total Math developmental standard scores, 2010-11 to 2011-12

Subject	Grade (in 2011-12)	Number of students	Average developmental standard scores		
			2010-11	2011-12	Difference
Concepts and Estimation	4	8	194.8	212.4	+17.6
	5	10	219.9	238.4	+18.5
	6	4	236.0	237.5	+1.5
	7	15	240.7	249.5	+8.9
	8	7	223.6	238.7	+15.1
	Overall	44	224.5	237.4	+13.0
Problem solving and Data Interpretation	4	7	195.7	221.6	+25.9
	5	10	227.1	236.8	+9.7
	6	4	235.0	253.0	+18.0
	7	15	245.9	264.3	+18.5
	8	8	233.5	226.1	-7.4
	Overall	44	230.4	243.3	+12.9
Computation	4	7	182.6	186.4	+3.9
	5	10	197.5	208.4	+10.9
	6	4	207.0	216.0	+9.0
	7	15	211.5	225.7	+14.2
	8	8	201.6	216.6	+15.0
	Overall	44	201.5	213.0	+11.5
Total Math	4	7	190.3	207.1	+16.9
	5	10	214.8	227.8	+13.0
	6	4	226.0	235.8	+9.8
	7	15	232.8	246.5	+13.7
	8	7	221.0	227.9	+6.9
	Overall	43	219.1	231.7	+12.6

The average changes in math NCE scores from 2010-11 to 2011-12 are presented in Figure 33 by grade. Overall, New City Charter School students showed accelerated progress from 2010-11 to 2011-12 on all math tests, with an average gain of 2.0 NCE points on problem solving and data interpretation and Total Math, 1.8 points on concepts and estimation, and 1.3 points on computation. Results in student math progress vary by grade levels and subject areas. Overall, fourth-, seventh-, and sixth -grade students made accelerated progress, with an average gain of 5.3, 3.3, and 1.8 NCE points, respectively, and eighth-grade students made normative progress, with a slight average gain of 0.4 NCE point. However, fifth-grade students made slower than expected progress on Total Math, with a decline in average gain of 1.2 in NCE point.

33. Change in ITBS Total Math NCE scores, 2010-11 to 2011-12

Subject	Grade (in 2011-12)	Number of students	Average NCE scores		
			2010-11	2011-12	Difference
Concepts and Estimation	4	8	65.9	70.4	+4.5
	5	10	73.1	75.2	+2.1
	6	4	67.8	64.0	-3.8
	7	15	62.8	62.7	-0.1
	8	7	42.1	47.6	+5.4
	Overall	44	62.9	64.6	+1.8
Problem solving and Data Interpretation	4	7	62.4	71.6	+9.1
	5	10	71.6	70.2	-1.4
	6	4	64.0	71.5	+7.5
	7	15	62.2	66.5	+4.3
	8	8	48.7	41.5	-7.2
	Overall	44	62.1	64.0	+2.0
Computation	4	7	55.7	47.6	-8.1
	5	10	53.4	52.3	-1.1
	6	4	47.3	48.0	+0.8
	7	15	40.8	45.6	+4.8
	8	8	28.0	34.0	+6.0
	Overall	44	44.3	45.5	+1.3
Total Math	4	7	61.9	67.1	+5.3
	5	10	69.1	67.9	-1.2
	6	4	61.3	63.0	+1.8
	7	15	57.0	60.3	+3.3
	8	7	39.7	40.1	+0.4
	Overall	43	58.2	60.2	+2.0

Figure 34 shows the percentages of students who scored at or above average in 2010-11 and 2011-12 (scoring above the mean of 50 NCE points) in math indicators. In 2011-12, the percentages of students who scored at or above the national average on concepts and estimation and computation stayed at the same level, with 77 percent of students and 34 percent scoring at or above average on concepts and estimation and computation in both years, respectively. The percentages of students scoring at or above the national average on problem solving and data interpretation increased from 68 percent in 2010-11 to 71 percent in 2011-12. Also, the percentage of students scoring at or above the national average on Total Math during the same period increased from 58 percent to 65 percent (i.e., three more students).

34. Percent scoring at or above average in math, 2010-11 and 2011-12

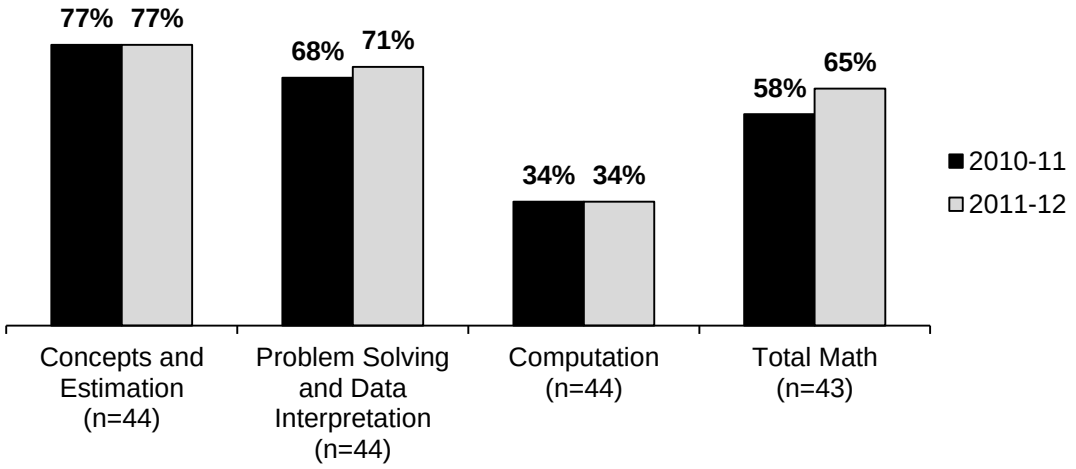


Figure 35 shows one-year change in math NCE results by student characteristics. Results show that all groups made accelerated or normative progress from 2010-11 to 2011-12. On average, girls made higher average gain than boys. Students who were not eligible for free or reduced-price lunch made slightly higher average gain than students who were eligible. Similarly, the other students (Black/African American, American Indian, Asian, and Hispanic combined) made slightly higher average gain than the White/Caucasian students. However, none of the differences in the average gain scores between the groups are statistically significant. The average scores for both income-level groups and gender groups are above the national average in both years. White/Caucasian students also scored above the national average in both years. However, the other group (Black/African American, American Indian, Asian, and Hispanic combined) scored below it. Caution should be applied because the number of students in each group is small.

35. Change in ITBS Total Math results by student characteristics, 2010-11 to 2011-12

Characteristics	N	Average of NCE scores 2010-11	2011-12	Difference
Student race/ethnicity				
White/Caucasian	27	67.0	68.7	+1.7
Other [a]	16	43.3	45.7	+2.4
Gender				
Female	16	53.6	58.4	+4.9
Male	27	60.9	61.2	+0.3
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	23	54.5	56.3	+1.8
Not eligible	20	62.4	64.5	+2.1

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

Core Battery results

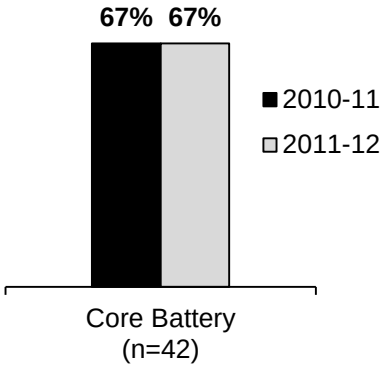
All grade levels, on average, made improvements on the Iowa Tests of Basic Skills Core Battery (Figure 36). The Core Battery results are a combination of the reading, language, and math tests. Students made average developmental gains, ranging from 9.0 points in sixth grade to 14.6 points in fourth grade. In terms of NCE scores, all grade-level students, except for sixth-grade students, made accelerated gains from 2010-11 to 2011-12, with an average gain ranging from 1.6 to 4.3. The three sixth-grade students made normative progress, with a slight decline of 0.3 during the same period, on average.

36. Change in ITBS Core Battery scores, 2010-11 to 2011-12

Grade (in 2011-12)	Number of students	Average developmental standard scores 2010-11	2011-12	Difference
4	7	182.7	197.3	+14.6
5	10	216.0	230.4	+14.4
6	3	234.3	243.3	+9.0
7	15	242.5	256.8	+14.3
8	7	222.3	234.0	+11.7
Overall	42	222.3	235.8	+13.6
		Average NCE scores		
4	7	52.4	55.0	+2.6
5	10	67.5	69.1	+1.6
6	3	67.3	67.0	-0.3
7	15	62.8	67.1	+4.3
8	7	40.9	44.9	+4.0
Overall	42	58.9	61.8	+3.0

Figure 37 shows that the percentage of students scoring at or above the national average in Core Battery in 2010-11 and 2011-12 stayed at 67 percent.

37. Percent scoring at or above average in ITBS Core Battery, 2010-11 and 2011-12



Students' progress on the ITBS Core Battery is also analyzed by their characteristics (Figure 38). Results show that all groups made accelerated progress from 2010-11 to 2011-12. Students who were not eligible for free or reduced-price lunch made slightly higher average gain than those students who were eligible. The other students (Black/African American, American Indian, Asian, and Hispanic combined) also made slightly higher average gain than the White students. Boys and girls made similar average gain score. The differences between the groups are not statistically significant. Similar to the Total Language and Total Math results, the average scores for both the income-level and gender groups are above the national average in both years. White/Caucasian students also scored above the national average in both years. However, the other group (Black/African American, American Indian, Asian, and Hispanic combined) scored below it, on average.

38. Change in ITBS Core Battery results by student characteristics, 2010-11 to 2011-12

		Average of NCE scores		
Characteristics	**N**	**2010-11**	**2011-12**	**Difference**
Student race/ethnicity				
White/Caucasian	29	67.0	69.5	+2.5
Other[a]	16	45.7	49.4	+3.8
Gender				
Female	16	60.4	63.3	+2.9
Male	29	57.9	61.0	+3.0
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	23	55.8	58.2	+2.4
Not eligible	22	62.3	65.9	+3.6

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

Science progress

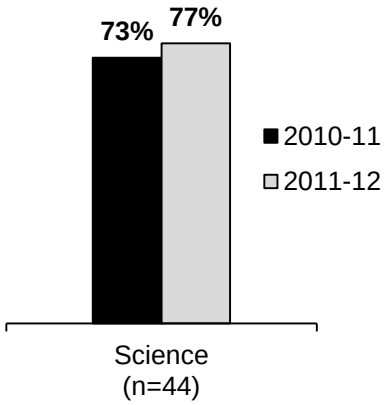
All grade levels, except for the eighth-grade, made developmental gains in the Iowa Tests of Basic Skills Science, ranging from 2.0 points in sixth grade to 24.4 points in seventh grade, on average (Figure 39). In terms of NCE scores, fourth-, seventh-, and fifth grade students made accelerated gains of 8.9, 8.9, and 3.6 points, respectively. Students in sixth and eighth grade made slower than expected progress, with declines of 6.3 and 3.8 in NCE points, respectively. It should be noted that students' average scores in both years were well above the national average, except for the eighth-grade students in 2011-12. Their average NCE score was 48.6 (slightly below the national average of 50 NCE points).

39. Change in Science scores, 2010-11 to 2011-12

Grade (in 2011-12)	Number of students	Average developmental standard scores 2010-11	2011-12	Difference
4	7	187.6	210.1	+22.6
5	10	226.6	245.6	+19.0
6	4	232.0	234.0	+2.0
7	15	254.9	279.3	+24.4
8	8	243.4	240.6	-2.7
Overall	44	233.6	249.5	+15.9
		Average NCE scores		
4	7	54.7	63.6	+8.9
5	10	69.6	73.2	+3.6
6	4	61.8	55.5	-6.3
7	15	66.3	75.1	+8.9
8	8	52.4	48.6	-3.8
Overall	44	62.2	66.2	+4.0

Figure 40 shows that the percentage of students scoring at or above the national average in science. In 2011-12, 77 percent of students scored at or above the national average (i.e., at or above 50 NCE points) in science, an increase from 73 percent in 2010-11 (i.e., there were two more students who scored at or above the national average in 2011-12 than in 2010-11).

40. Percent scoring at or above average in science, 2010-11 and 2011-12



Students' progress on the ITBS Science is also analyzed by their characteristics (Figure 41). The other students (Black/African American, American Indian, Asian, and Hispanic students combined) made accelerated progress, scoring below the national average in 2010-11 to above it in 2011-12. White/Caucasian students also made accelerated progress during the same time, but their average gain score was lower than the other group. Despite the lower average gain score, the White/Caucasian students scored above the other group and well above the national average in both years.

Boys and girls made accelerated progress from 2010-11 to 2011-12. Average scores for both groups were above the national average in both years. Students from both income level groups (i.e., eligible and ineligible for free or reduced-price lunch) also made accelerated progress. Students who were eligible for free or reduced-price lunch had higher average gain than students who were not eligible. However, their average scores in both years were lower than students from the higher income levels (those who were ineligible for free or reduced-price lunch). All student groups, regardless of their demographic characteristics, scored above average in 2011-12.

41. Change in ITBS Science results by student characteristics, 2010-11 to 2011-12

		Average of NCE scores		
Characteristics	**N**	**2010-11**	**2011-12**	**Difference**
Student race/ethnicity				
White/Caucasian	29	69.6	71.7	+2.1
Other[a]	16	49.3	56.7	+7.4
Gender				
Female	16	64.2	69.6	+5.4
Male	29	61.1	64.3	+3.2
Free or reduced-price lunch status				
Eligible for free or reduced-price lunch	23	57.4	63.5	+6.1
Not eligible	22	67.5	69.2	+1.7

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