



---

# ICCSD Academic Achievement Report

April 2016

Prepared by Amy Kortemeyer and Matt Degner, Assistant Superintendents

---

## BACKGROUND

Federal, State and District policies provide direction regarding what academic achievement data are reported. Federally, No Child Left Behind (NCLB) requires data be reported regarding the percent of students proficient in grades three through eight and eleven for reading and mathematics. Iowa, through Chapter 12 School Rules of Iowa, requires multiple measures be reported in reading, math and science. Locally, Board policy requires data be reported related to academic achievement goals in reading, mathematics, writing, science and social studies.

During October 2015, the *Iowa Assessments* were administered to students in grades three through eleven. The five major curricular areas measured on the *Iowa Assessment* include: reading, written expression, mathematics, social studies and science. The *Iowa Assessments* are aligned with the Iowa Core and Common Core State Standards.

The *Iowa Assessments* serve multiple purposes including standards-based interpretation, accountability, measuring academic growth, predicting college readiness, and making relative comparisons.

### *Standards-Based Interpretations*

By analyzing data, the district is able to

- determine which standards have been mastered by the student, classroom or school,
- determine which standards need additional focus, and
- compare progress among students.

### *Accountability*

The accountability requirements for No Child Left Behind (NCLB), are met by identifying and reporting proficiency data from the *Iowa Assessments*.

### *Measuring Academic Growth*

An analysis of data permits the district to

- determine expected growth for all students,
- set goals for a student based on any starting place, and
- measure student growth using vertically articulated standards.

### *College Readiness*

As a result of research conducted by the Iowa Testing Program and ACT, data are available from the *Iowa Assessments* that

- predict college readiness indicators,
- help students plan the appropriate coursework, and
- identify students that are “on track” for college.

### *Relative Comparisons*

Comparisons can be drawn from the metrics of the *Iowa Assessments*. Such comparisons help to

- determine student strengths with respect to the school, district, state and nation, and
- evaluate programs, set expectations and determine interventions.

## Executive Summary

### **NORM REFERENCED**

#### *The District Compared to the Nation*

A comparison of the two groups indicates student achievement in ICCSD exceeds the nation. This holds true for all subject areas tested. The majority of students in the District are in the top quarter of national performance.

#### *Growth Over Time*

When analyzing achievement of grade level groups over a five-year period, achievement increases in a variety of ways. It increases:

- grade level to grade level,
- at a rate greater than the nation, progressing from third to 11<sup>th</sup> grade, and
- in all subject areas tested.

### **CRITERION REFERENCED**

#### *The District Compared to a Criterion: Common Core State Standards*

Because the *Iowa Assessments* are aligned to the Common Core State Standards (Reading, Language and Writing, and Mathematics), it is possible to report student performance related to a criterion, in this case, the percent of correctly answered items. ICCSD students correctly answered between 54 and 69 percent of the questions correctly, considering all grades and all subject areas. The District outperforms the nation in terms of correctly answered questions at all grade levels and all subject areas.

### **GENERAL STRENGTHS and AREAS FOR GROWTH**

Academic achievement of ICCSD students as measured by the *Iowa Assessments* indicates high levels of performance. The performance is above the national average and student achievement increases from grade three to eleven.

**NORM REFERENCED**

*The District Compared to the Nation*

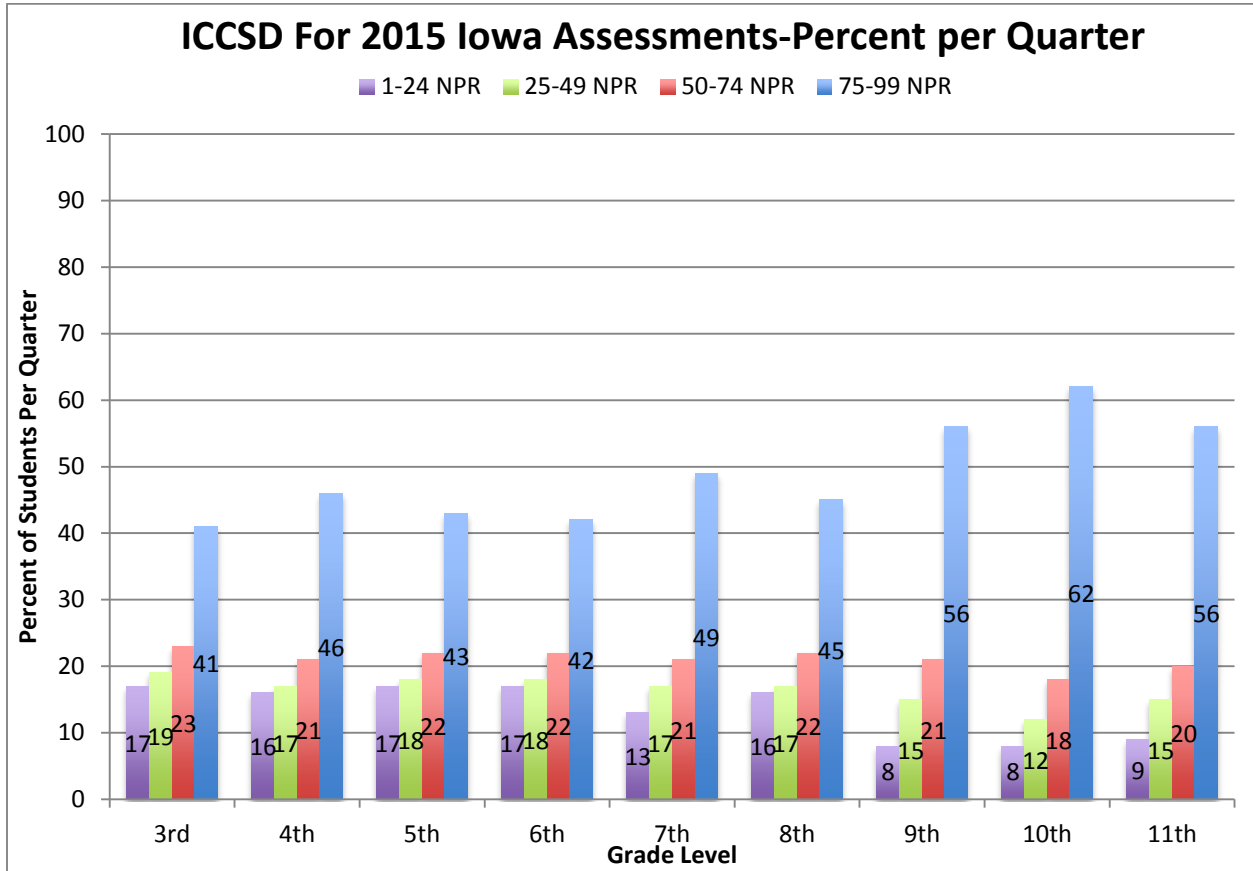
To compare academic performance of ICCSD students to students across the nation, a comparison of percentile ranks has been established. The following chart permits the District to make a relative comparison of the two groups. The percentile ranks are averages of all students taking the assessment in fall 2015.

ICCSA student academic performance exceeds national performance in all grades and all subject areas.

*ICCSA National Percentile Ranks Fall 2015 Iowa Assessments by Grade and Subject*

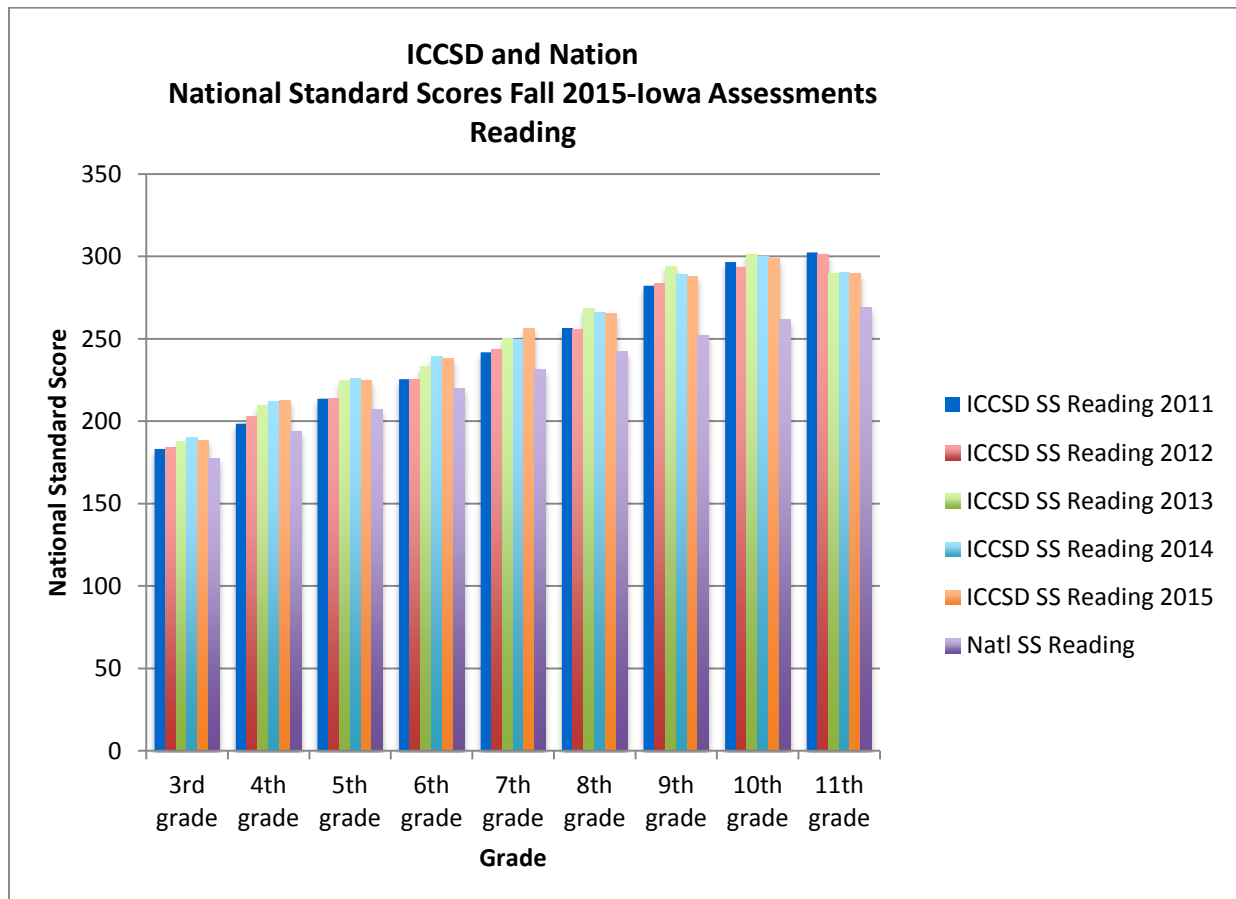
	<i>Reading</i>	<i>Written Expression</i>	<i>Conventions of Writing</i>	<i>Vocabulary</i>	<i>English LA Total</i>	<i>Math</i>	<i>Computation</i>	<i>Math Total</i>	<i>Social Studies</i>	<i>Science</i>	<i>Complete Composite</i>
3 <sup>rd</sup> grade	72	71	63	69	71	61	59	63	61	69	67
4 <sup>th</sup> grade	76	77	72	74	81	62	50	60	69	71	70
5 <sup>th</sup> grade	73	72	73	68	78	65	55	64	67	65	67
6 <sup>th</sup> grade	70	65	68	66	72	67	60	66	62	60	65
7 <sup>th</sup> grade	74	72	72	73	79	71	69	73	69	68	72
8 <sup>th</sup> grade	70	65	67	70	74	66	68	69	66	67	68
9 <sup>th</sup> grade	79	74	NA	74	82	68	73	72	82	72	77
10 <sup>th</sup> grade	78	74	NA	77	83	72	72	74	83	75	79
11 <sup>th</sup> grade	66	70	NA	72	76	76	71	76	74	76	76

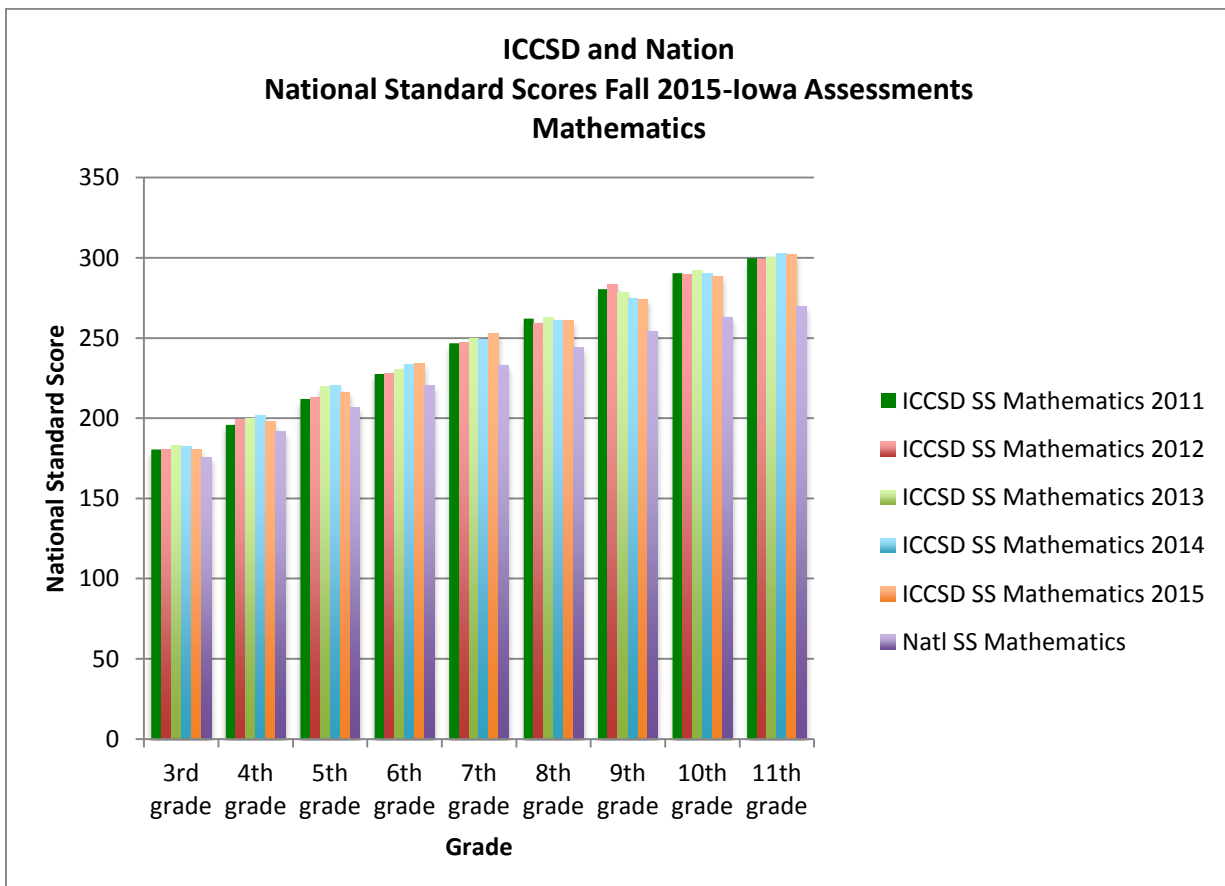
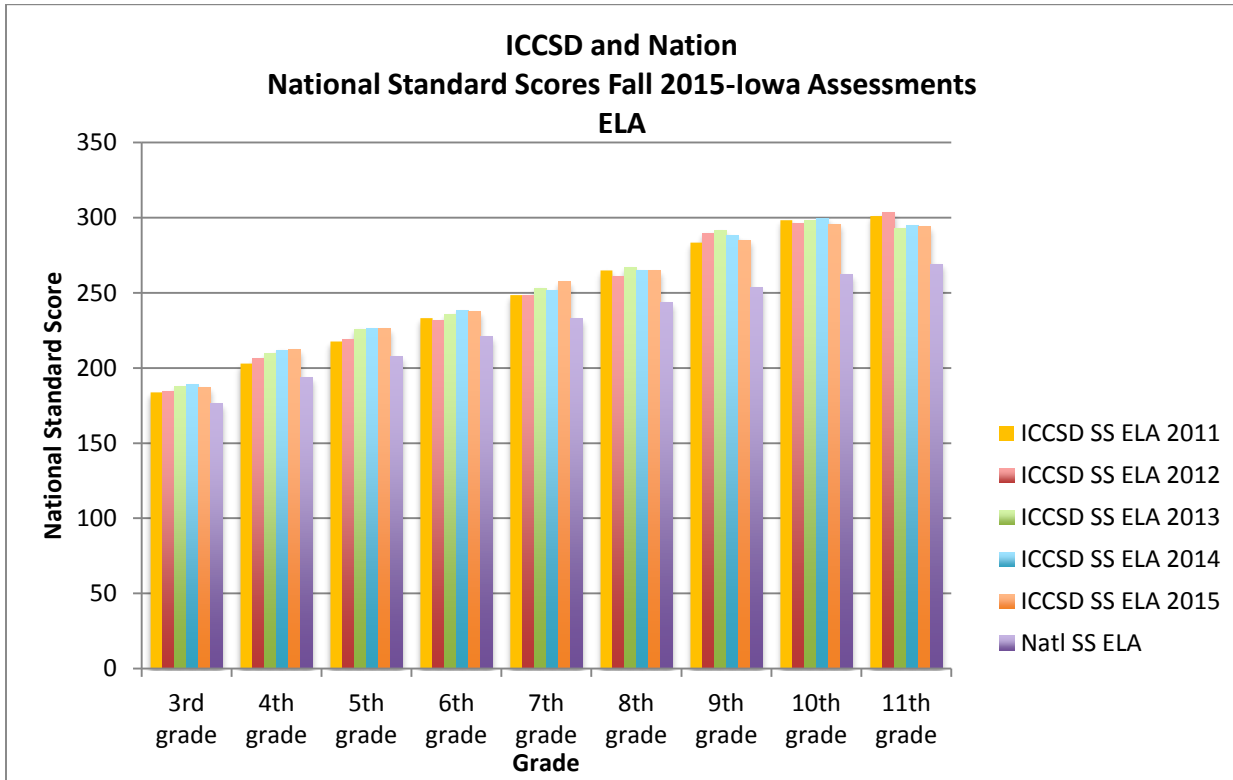
Another way to compare ICCSD student performance to national performance is to identify the percent of students in distribution of scores by quarters. The national percentile ranks for the quarters are: from 75 to 99, 50 to 74, from 25 to 49 and from 1 to 24. The graph below identifies the percent of ICCSD students in each of the four range groups for a complete composite score. A complete composite score is a weighted average of sub tests. The majority of ICCSD students perform in the top quarter; this is true for every grade and every subject area tested.

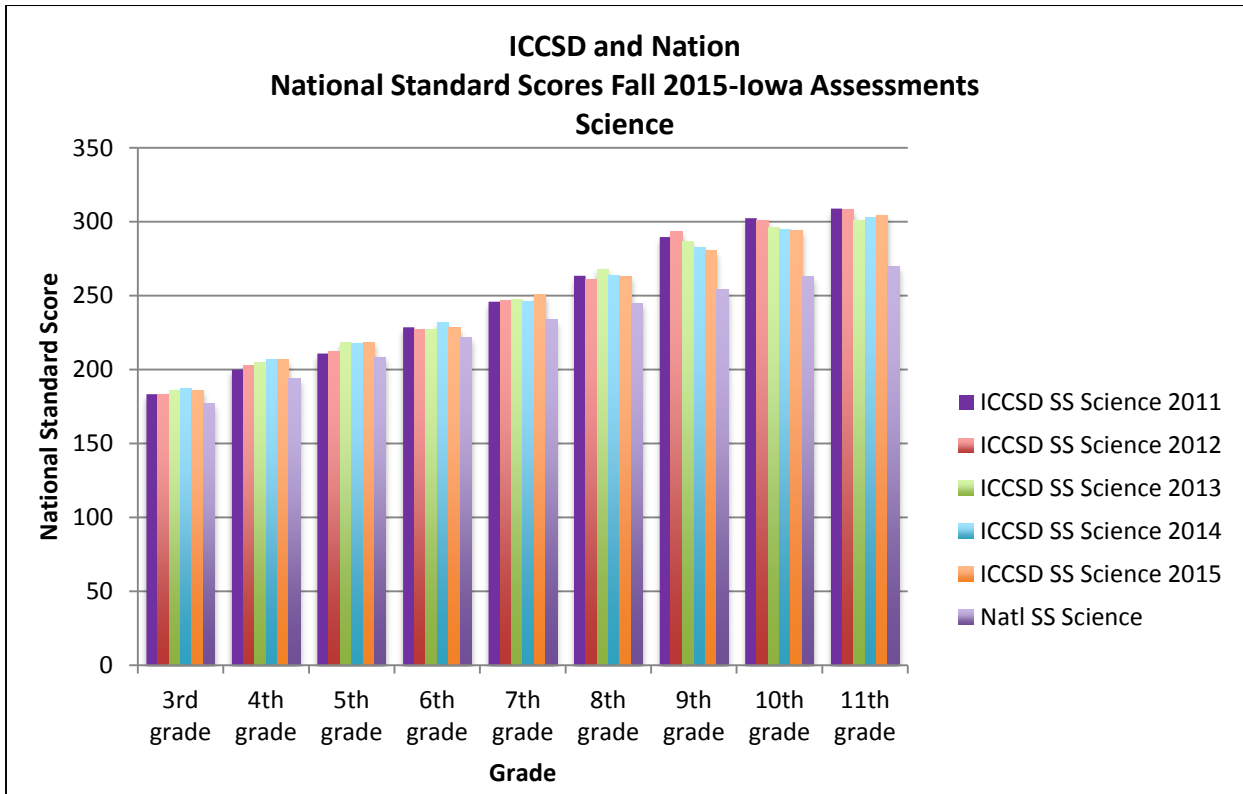
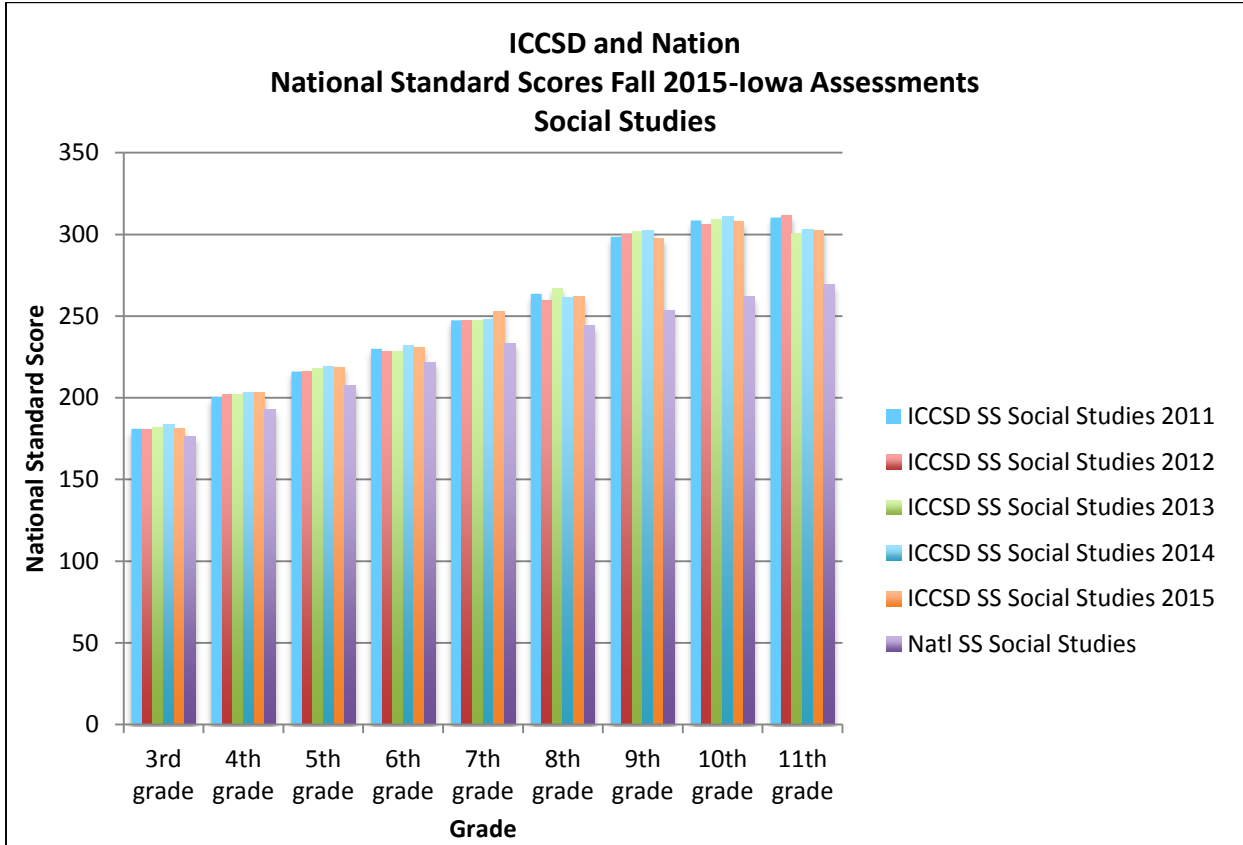


Reviewing student achievement for the purpose of comparing achievement over time is possible by looking at standard scores. Results from 2015 are similar or slightly higher than 2011-2014. The pattern of increased achievement over the grades, particularly at the elementary level, continues to occur. These data are for all students enrolled in the district during test administration, with the exception of one percent of students who take an alternative assessment.

Reading, English language arts total, mathematics, social studies and science standard scores are listed below in graph format for the district (2011-2015) and the nation. A comparison of the two groups indicates student achievement in ICCSD exceeds the nation. When looking at achievement of grade level groups, the achievement above the nation increases with grade levels. This holds true for all subject areas tested.





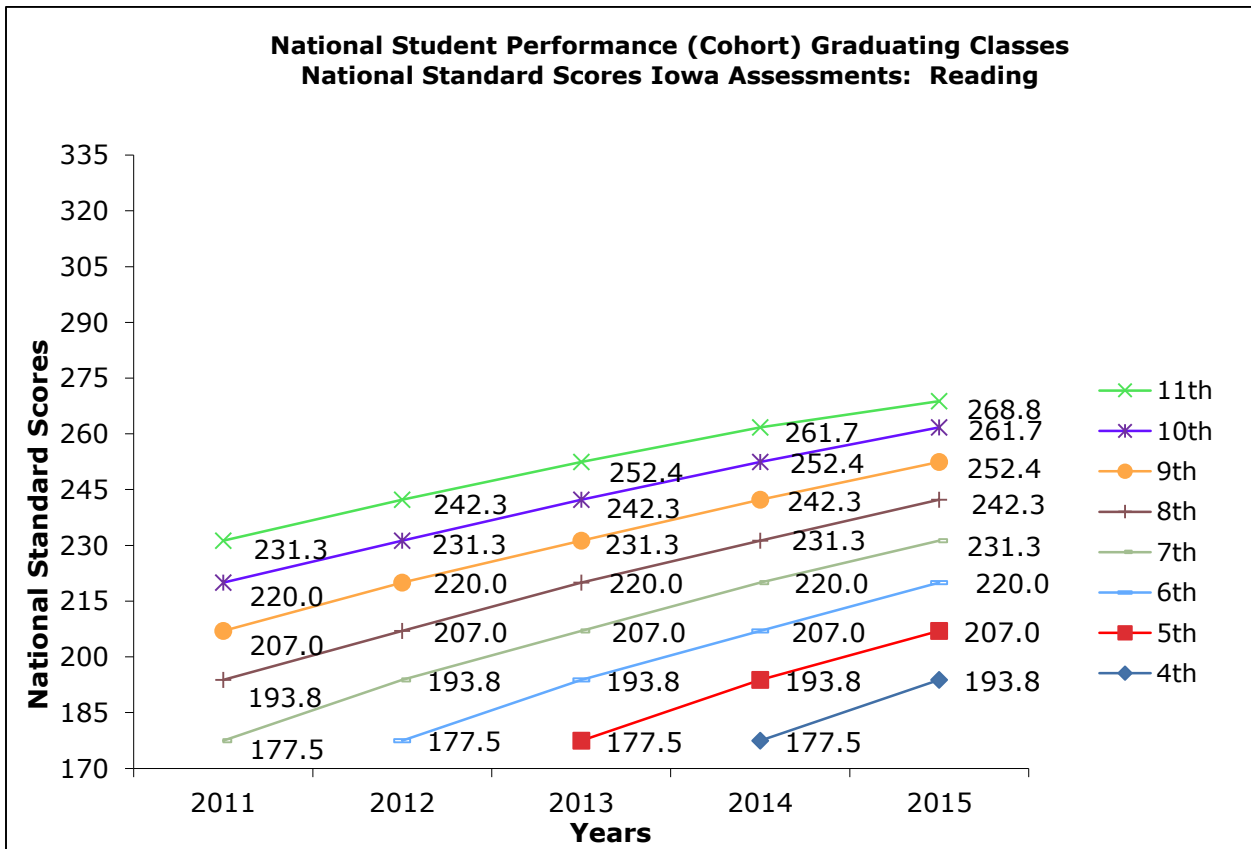
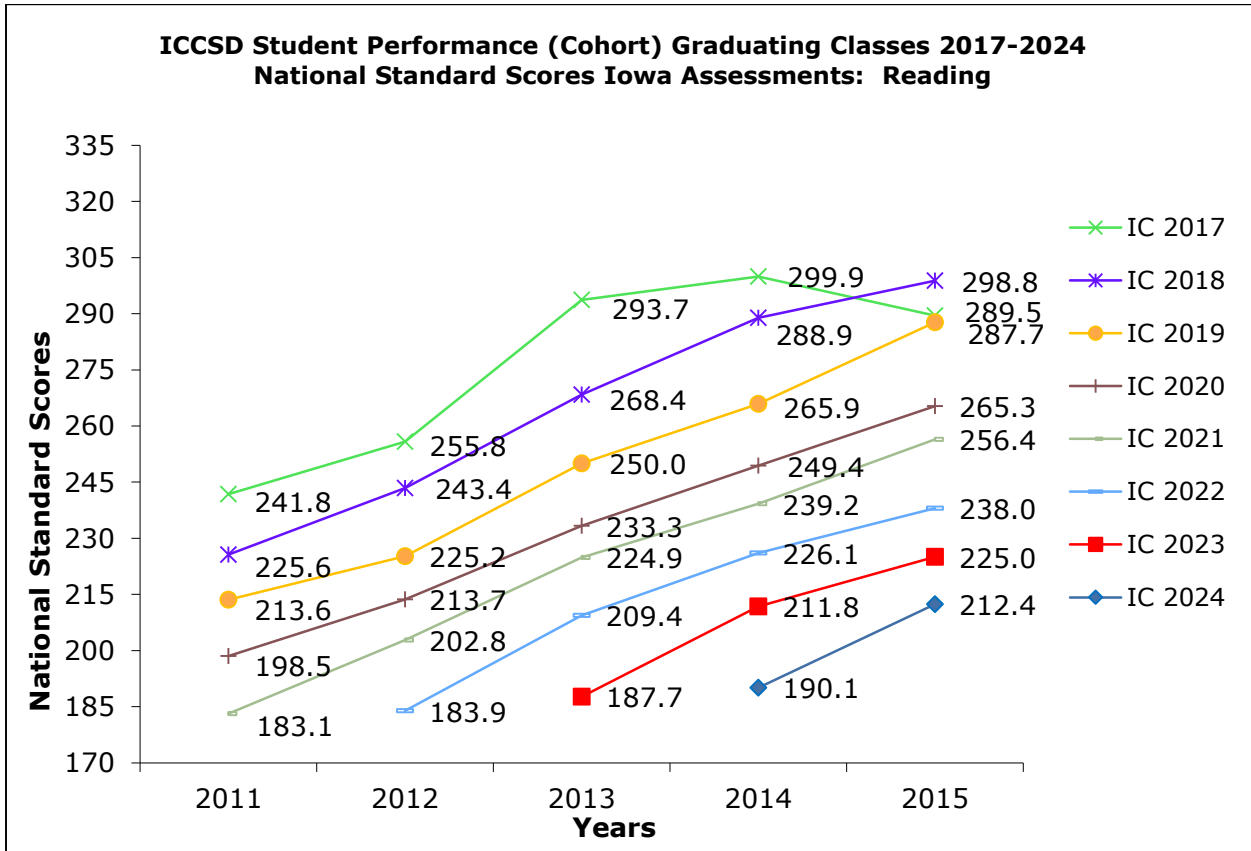


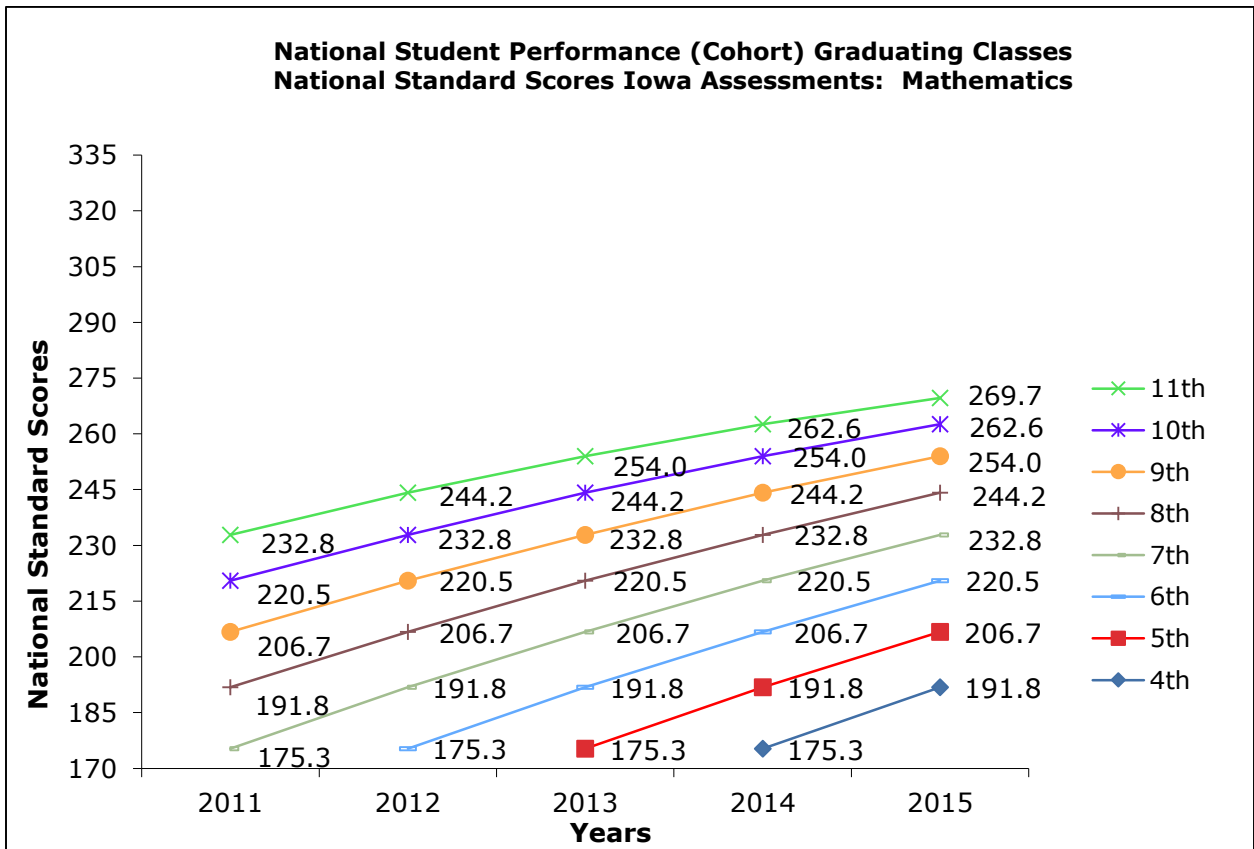
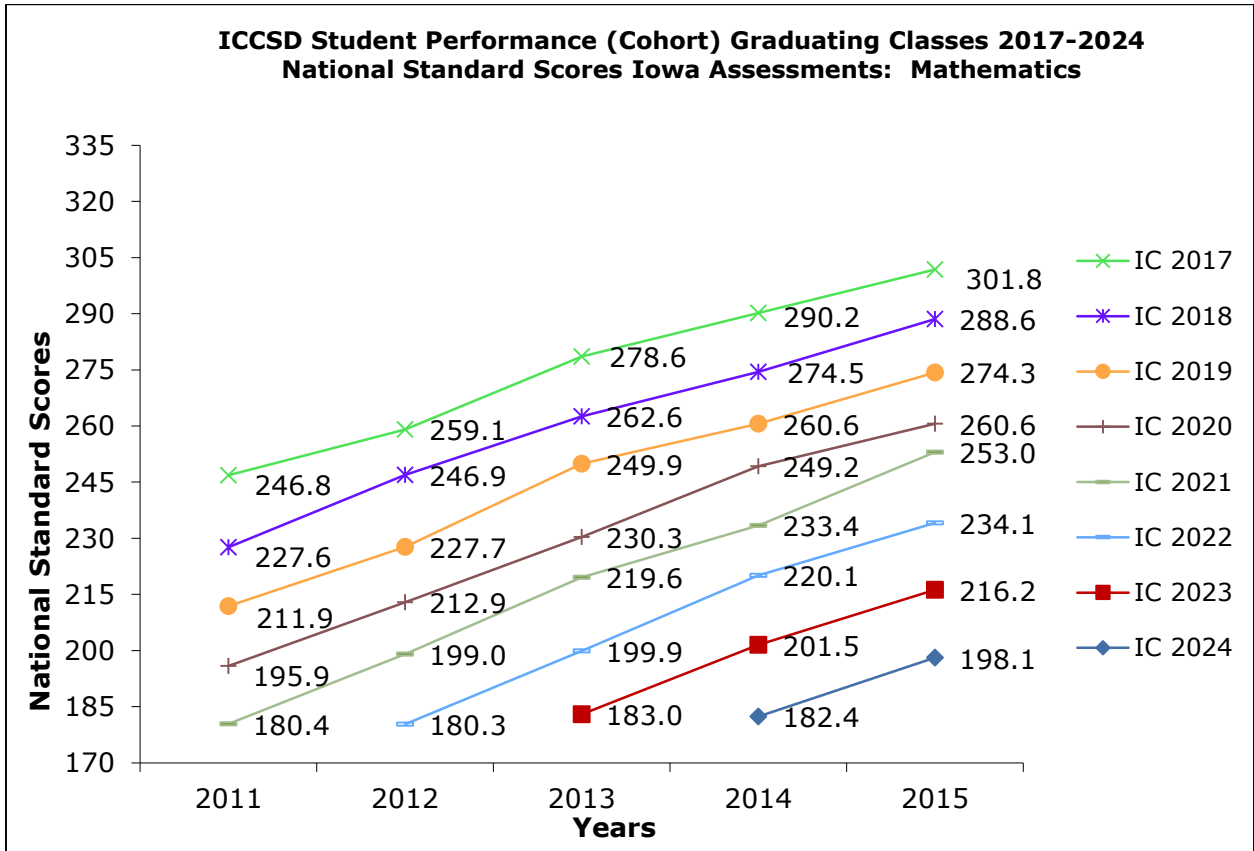
### *Growth Over Time*

A fourth way to compare data is to identify student growth over time. The graphs that follow permit the reader to see patterns and trends of cohort student performance over time. The student cohort is the graduating class (it is not a matched intact group). Some students were not enrolled all years therefore not tested; the majority of students are enrolled and tested all years.

The first graph (in the set of two, one for reading, the other for mathematics) depicts ICCSD average student academic performance. The second graph represents national average student performance; nationally, the increments of growth from one grade to the next decline over time, in all subject areas.







## **CRITERON REFERENCED**

### *The District Compared to the Common Core State Standards*

Finally, it is possible to compare student performance to criteria. The Common Core State Standards in Literacy and Mathematics were integrated into the Iowa Code by Iowa State Board of Education in 2010. The chart on the following page identifies the number of items per subject area as well as the average number of items correctly answered by both the district and the nation; the difference between the two is also recorded. In every grade level, for reading, language and writing, and mathematics, district student performance is greater than the nation. The difference between district student performance and national student performance increases going up the grade levels. For example, the difference for 3<sup>rd</sup> grade reading is seven whereas the difference for 10<sup>th</sup> grade reading is nineteen.

ICCSA Performance on Common Core State Standards Fall 2015

3 <sup>rd</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	41	63	56	+7
Language & Writing	128	57	50	+7
Mathematics	75	57	53	+4
4 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	42	66	57	+9
Language & Writing	143	64	53	+11
Mathematics	82	60	58	+2
5 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	43	66	56	+10
Language & Writing	155	65	55	+10
Mathematics	89	63	60	+3
6 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	44	68	60	+8
Language & Writing	164	64	57	+7
Mathematics	95	64	58	+6
7 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	45	69	57	+12
Language & Writing	174	63	52	+11
Mathematics	101	63	52	+11
8 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	46	68	58	+10
Language & Writing	183	61	53	+8
Mathematics	107	61	52	+9
9 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	40	68	50	+18
Language & Writing	94	63	48	+15
Mathematics	70	54	41	+13
10 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	40	69	50	+19
Language & Writing	94	65	49	+16
Mathematics	70	55	41	+14
11 <sup>th</sup> grade	# Items	% Correct District	% Correct Nation	Difference
Reading	40	66	55	+11
Language & Writing	94	66	52	+14
Mathematics	70	60	42	+18

## **Glossary of Terms**

Standard Score (SS): This is a score on a continuum. Standard scores are useful to measure performance over time. Because average growth from year to year has been established, it is possible to determine how much a student or group typically increases in achievement over time.

Percentile Rank (PR): This is a score that indicates how many students performed below the student (or group). Percentile ranks are useful as a way to compare students or groups.

Matched Cohort : A group of students who have been in the district and taken the test all years reported. Data from a matched cohort follow a group of students (3<sup>rd</sup> to 4<sup>th</sup>) over time.