

# DISTRICT ACADEMIC ACHIEVEMENT PROFILE 

## FALL 2015

## DesMoines

Think. Learn. Grow.

## Des Moines Public Schools

## District Academic Achievement Profile - Fall 20I5


\$53 1 million
Annual Budget
$i{ }^{i}$
31,654
Number of Students


19\%
Students Designated as English Language Learners



72\%
Students Eligible for Free or Reduced-Price School Lunch


64
Number of Schools
17.9\% African American
7.3\%

Asian
$\qquad$
Hispanic

Student Demographics


The Des Moines Public Schools exist so that graduates possess the knowledge, skills and abilities to be successful at the next stage of their lives.

# Des Moines Public Schools <br> District Academic Achievement Profile-Fall 2015 

All data for this report is based on the 2014-15 school year. Assessment data includes all students tested who were enrolled in the district at the time of testing. This report includes the following assessments:

- Iowa Assessments. These mathematics and reading assessments are administered to grade 3 through 11 in the spring of every school year. The Iowa Assessments are the district's primary measure of student proficiency and year-to-year academic growth.
- Basic Reading Inventory (BRI). The BRI is administered to grade 1 students in the fall and spring of every school year. This assessment measures the reading accuracy, fluency, and comprehension of students, providing an evaluation of reading skills acquired by the end of first grade.
- Scholastic Reading Inventory (SRI). The SRI is administered to grade 3 through 9 students in the fall, midyear, and spring of every school year. This assessment is used to monitor student growth in reading skills throughout the school year.
- Scholastic Math Inventory (SMI). The SMI is administered to grade 3 through 9 students in the fall, midyear, and spring of every school year. This assessment is used to monitor student growth in pre-algebra skills throughout the school year.
- ACT Explore. Explore is administered to $8^{\text {th }}$ grade students in the fall. The Explore assessment measures college-readiness in English, mathematics, reading, and science. In addition, Explore includes a career exploration component that stimulates students' thinking about future plans and relates personal characteristics to career options.
- Advanced Placement (AP) exams. AP exams are administered at the end of each AP course. These exams are optional, but highly encouraged at Des Moines Public Schools. AP exams measure mastery of content covered in the corresponding AP course. Des Moines Public Schools offers several AP courses in humanities, mathematics, and the language arts.
- ACT. The ACT is administered to all $11^{\text {th }}$ graders in the spring of every school year. The ACT serves as a college entrance exam for post-secondary institutions, measuring college-readiness in English, mathematics, reading, and science.


## Elementary Schools



38
Number of Elementary Schools


15,786
Number of Elementary Students


26\%
Elementary Students Designated as English Language Learners

## Mathematics: Percent Proficient on the Iowa Assessments, Grades 3-5



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Elementary grade levels experienced an overall 0.9 percent decrease in mathematics proficiency rate from spring 2014 to spring 2015. The African American, White, and Multi-racial subgroups, increased in elementary mathematics proficiency. Multi-racial students demonstrated the largest increase, increasing by 1.8 percent.

Reading: Percent Proficient on the lowa Assessments, Grades 3-5


Elementary grade levels experienced an overall 0.1 percent decrease in reading proficiency rate from spring 2014 to spring 2015. The Asian, White, Multi-racial, and Free/Reduced Lunch subgroups increased in elementary reading proficiency. Multi-racial students demonstrated the largest increase, increasing by 4.0 percent.

## Measuring Growth in Addition to Proficiency

Iowa Assessments allow growth to be measured by using vertically scaled (or articulated) scores, called standard scores. These scores plot out all students, regardless of grade level, on a continuum of student achievement. Standard scores describe a student's location on an achievement continuum. Using standard scores, we can understand the progress students make from year to year.

Mathematics: Iowa Assessment Growth - 3rd, 4th, and 5th Grades


The 2015 cohort of $4^{\text {th }}$ grade students grew 13.5 standard score points on the mathematics Iowa Assessment from $3^{\text {rd }}$ grade, increasing from a class average of 183.1 as $3^{\text {rd }}$ graders in the spring of 2014 to a class average of 196.6 as $4^{\text {th }}$ graders in the spring of 2015 . This gain of 13.5 standard score points in mathematics from $3^{\text {rd }}$ to $4^{\text {th }}$ grade fell short of typical growth of 15 standard score points on the Iowa Assessments mathematics test by 1.5 points.
The 2015 cohort of $5^{\text {th }}$ grade students grew 12.4 standard score points on the mathematics Iowa Assessment from $4^{\text {th }}$ grade, increasing from a class average of 196.9 as $4^{\text {th }}$ graders in the spring of 2014 to a class average of 209.2 as $5^{\text {th }}$ graders in the spring of 2015 . This gain of 12.4 standard score points in mathematics from $4^{\text {th }}$ to $5^{\text {th }}$ grade fell short of typical growth of 14 standard score points on the Iowa Assessments mathematics test by 1.6 points.


The 2015 cohort of $4^{\text {th }}$ grade students grew 20.4 standard score points on the reading Iowa Assessment from $3^{\text {rd }}$ grade, increasing from a class average of 184.1 as $3^{\text {rd }}$ graders in the spring of 2014 to a class average of 204.4 as $4^{\text {th }}$ graders in the spring of 2015 . This gain of 20.3 standard score points in reading from $3^{\text {rd }}$ to $4^{\text {th }}$ grade exceeded typical growth of 15 standard score points on the Iowa Assessments reading test by 5.3 points.

The 2015 cohort of $5^{\text {th }}$ grade students grew 16.2 standard score points on the reading Iowa Assessment from $4^{\text {th }}$ grade, increasing from a class average of 203.4 as $4^{\text {th }}$ graders in the spring of 2014 to a class average of 219.7 as $5^{\text {th }}$ graders in the spring of 2015 . This gain of 16.2 standard score points in reading from $4^{\text {th }}$ to $5^{\text {th }}$ grade exceeded typical growth of 14 standard score points on the Iowa Assessments reading test by 2.2 points.

## Students Soar Thanks to ISU 4U Promise Camp

Through a partnership with Iowa State University, King and Moulton students had a chance to learn about aeronautics during the week-long DAVinCI Flight Camp thanks to the ISU 4U Promise initiative. Students used computer simulation and gaming technology to even design their own gliders, which they then built using 3D printers. On the last day of camp, the student-design gliders were launched on test flights!

Reading: Percent Proficient on the Basic Reading Inventory (BRI), Grade I



61 percent of 1 st graders were proficient in accuracy in 2015 on the BRI. This is down 2 percent from 2014. 75 percent of $1^{\text {st }}$ graders were proficient in comprehension. This is down 1 percent from 2014. Lastly, 60 percent of $1^{\text {st }}$ graders were proficient in fluency in 2015. This is unchanged from 2014.

Reading: Fall 2014 \& Spring 2015 Achievement Levels on the Scholastic Reading Inventory (SRI), Grades 3-5


1
74.9 percent of $3^{\text {rd }}-5^{\text {th }}$ grade students scored at or above the basic achievement level on the SRI in the Spring of 2015. This is up 20.6 percent from 54.3 percent in the Fall of 2014.

## Mathematics: Fall 2014 \& Spring 2015 Achievement Levels on the Scholastic Math Inventory (SMI), Grades 3-5



$\rightarrow$
65.2 percent of $3^{\text {rd }}-5^{\text {th }}$ grade students scored at or above the basic achievement level on the SMI in the Spring of 2015. This is up 25.7 percent from 39.5 percent in the Fall of 2014.

## DMPS Elementary School Teachers Become Authors to Help Kids

College professors have long labored with the mantra "publish or perish" dangling over their heads like the Sword of Damocles. Maybe they teach a few sections in their discipline but otherwise they're expected to do research, make breakthroughs, document them and publish their findings, to the great credit of the distinguished colleges and universities that provide them with the opportunities. But K-12 school teachers? Their days are full to overflowing with lesson-planning and, well, teaching. They put the research of the collegiate types into practice. Professional development demands that they keep abreast of best practices. But doing their own research and writing it up for the benefit of colleagues; who has time, let alone the insight, for that?

Let's see, Molly Sweeney (Downtown School) and Jennifer Johnson (Jefferson Elementary) of Des Moines Public Schools, to name two. They co-authored Transforming the Task with Number Choice, a text for teachers aimed at elementary math instruction in grades 1-3 that examines the importance of number choice in problem-solving. The book's preface puts it this way: "In this book, we suggest that the work of teaching elementary mathematics with and through worthwhile tasks is more manageable-and more accessible to all students-through a focus on number choice. We define number choice as the strategic use of numbers and number combinations in the context of problemsolving tasks. This book provides examples of and strategies for using number choice, based on our teaching experiences and research, to 'engage and challenge students' with problems that 'can be approached in more than one way."

## Middle Schools


10
Number of Middle Schools

Number of Middle School Students


16\%
Middle School Students Designated as English Language Learners

Mathematics: Percent Proficient on the lowa Assessments, Grades 6-8


Middle school grade levels experienced an overall 1.4 percent increase in mathematics proficiency rate from spring 2014 to spring 2015. All subgroups increased in middle school mathematics proficiency. Asian students demonstrated the largest increase, increasing by 4.0 percent.

Reading: Percent Proficient on the lowa Assessments, Grades 6-8


$\checkmark$
Middle school grade levels experienced an overall 1.9 percent increase in reading proficiency rate from spring 2014 to spring 2015. All subgroups increased in middle school reading proficiency. Asian students demonstrated the largest increase, increasing by 6.3 percent.

## Measuring Growth in Addition to Proficiency

Iowa Assessments allow growth to be measured by using vertically scaled (or articulated) scores, called standard scores. These scores plot out all students, regardless of grade level, on a continuum of student achievement. Standard scores describe a student's location on an achievement continuum. Using standard scores, we can understand the progress students make from year to year.

## Mathematics: Iowa Assessment Growth - 6th, 7th, and 8th Grades



The 2015 cohort of $7^{\text {th }}$ grade students grew 12.8 standard score points on the mathematics Iowa Assessment from $6^{\text {th }}$ grade, increasing from a class average of 219.8 as $6^{\text {th }}$ graders in the spring of 2014 to a class average of 232.6 as $7^{\text {th }}$ graders in the spring of 2015 . This gain of 12.8 standard score points in mathematics from $6^{\text {th }}$ to $7^{\text {th }}$ grade exceeded typical growth of 12 standard score points on the Iowa Assessments mathematics test by 0.8 points.

The 2015 cohort of $8^{\text {th }}$ grade students grew 6.9 standard score points on the mathematics Iowa Assessment from $7^{\text {th }}$ grade, increasing from a class average of 235.8 as $7^{\text {th }}$ graders in the spring of 2014 to a class average of 242.7 as $8^{\text {th }}$ graders in the spring of 2015 . This gain of 6.9 standard score points in mathematics from $7^{\text {th }}$ to $8^{\text {th }}$ grade fell short of typical growth of 11 standard score points on the Iowa Assessments mathematics test by 4.1 points.

## Reading: Iowa Assessment Growth - 6th, 7th, and 8th Grades



The 2015 cohort of $7^{\text {th }}$ grade students grew 13.4 standard score points on the reading Iowa Assessment from $6^{\text {th }}$ grade, increasing from a class average of 223.7 as $6^{\text {th }}$ graders in the spring of 2014 to a class average of 237.1 as $7^{\text {th }}$ graders in the spring of 2015 . This gain of 13.4 standard score points in mathematics from $6^{\text {th }}$ to $7^{\text {th }}$ grade exceeded typical growth of 12 standard score points on the Iowa Assessments reading test by 1.4 points.

The 2015 cohort of $8^{\text {th }}$ grade students grew 17.1 standard score points on the reading Iowa Assessment from $7^{\text {th }}$ grade, increasing from a class average of 235.3 as $7^{\text {th }}$ graders in the spring of 2014 to a class average of 252.5 as $8^{\text {th }}$ graders in the spring of 2015 . This gain of 17.1 standard score points in mathematics from 7th to 8th grade exceeded typical growth of 11 standard score points on the Iowa Assessments reading test by 6.1 points.

## Harrison Barnes Shoots Hoops with DMPS Campers

Hundreds of students attending the DMPS 21st Century Community Learning Center summer program at middle schools around the district got a rare treat this summer - a close encounter with a world champion! Harrison Barnes, fresh from helping the Golden State Warriors win the NBA championship, was in town for a basketball camp at the Knapp Center on the campus of Drake University.


## ACT EXPLORE: Fall 2014 Grade 8 Average Scores



The ACT EXPLORE measures the skills and knowledge needed for college success and also includes a career exploration component that stimulates students' thinking about future plans and relates personal characteristics to career options. Results were used to not only gauge college readiness, but also assisted in planning high school coursework.

Reading: Fall 2014 \& Spring 2015 Achievement Levels on the Scholastic Reading Inventory, Grades 6-8

61.8 percent of $6^{\text {th }}-8^{\text {th }}$ grade students scored at or above the basic achievement level on the SRI in the spring of 2015. This is up 10.6 percent from 51.2 percent in the fall of 2014.

Mathematics: Fall 2014 \& Spring 2015 Achievement Levels on the Scholastic Math Inventory, Grades 6-8


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54.4 percent of $6^{\text {th }}-8^{\text {th }}$ grade students scored at or above the basic achievement level on the SMI in the spring of 2015. This is up 2.6 percent from 51.8 percent in the fall of 2014.

## Summer Programs Offer Variety of Learning and Activities

Summer programs provide a diverse mix of experiences. Hoyt Middle School 7th grader to be Alaina Stensrud was at school this summer and she couldn't have been happier. She was among friends in the district's robust summer program at one of nine 21 st Century Community Learning Centers. Besides Hoyt, program sites - all middle schools - include Callanan, Goodrell, Harding, Hiatt, Meredith, McCombs and Weeks. The program started on June 8th and runs through July 17th. It's primarily made possible through a generous grant from United Way of Central Iowa and is serving roughly 1,000 students in a wide range of arts, culture, STEM, intramural sports and service learning activities.

Community partners such as AmeriCorps, CultureAll and Community Youth Concepts are working with program coordinators, teachers, and coaches at each school site to offer a summer experience the kids actually get excited about. It includes everything from global cooking to martial arts, technology, robotics and sports. Fieldtrips are a highlight, too, to popular venues like the Des Moines Art Center, the Iowa Hall of Pride and the State Historical Building. The program also represents a terrific way for new 6th graders to make connections before the school year begins and ease the transition into middle school.

## High Schools



5
Number of High Schools


9,125
Number of High School Students

10\%
High School Students Designated as English Language Learners

Mathematics: Percent Proficient on the lowa Assessments, Grades 9-II


High school grade levels experienced an overall 0.5 percent increase in mathematics proficiency rate from spring 2014 to spring 2015. All subgroups, with the exception of African American and special education students, increased in high school mathematics proficiency. Multi-racial students demonstrated the largest increase, increasing by 4.0 percent.

Reading: Percent Proficient on the lowa Assessments, Grades 9-1 I


High school grade levels experienced an overall 0.5 percent decrease in reading proficiency rate from spring 2014 to spring 2015. All subgroups, with the exception of African American, white, and free/reduced lunch students, increased in high school reading proficiency. Multi-racial students demonstrated the largest increase, increasing by 3.5 percent.

## Measuring Growth in Addition to Proficiency

Iowa Assessments allow growth to be measured by using vertically scaled (or articulated) scores, called standard scores. These scores plot out all students, regardless of grade level, on a continuum of student achievement. Standard scores describe a student's location on an achievement continuum. Using standard scores, we can understand the progress students make from year to year.


The 2015 cohort of $10^{\text {th }}$ grade students grew 6.8 standard score points on the mathematics Iowa Assessment from $9^{\text {th }}$ grade, increasing from a class average of 259.9 as $9^{\text {th }}$ graders in the spring of 2014 to a class average of 266.8 as $10^{\text {th }}$ graders in the spring of 2015 . This gain of 6.8 standard score points in mathematics from $9^{\text {th }}$ to $10^{\text {th }}$ grade fell short of typical growth of 8 standard score points on the Iowa Assessments mathematics test by 1.2 points.

The 2015 cohort of $11^{\text {th }}$ grade students grew 5.3 standard score points on the mathematics Iowa Assessment from $10^{\text {th }}$ grade, increasing from a class average of 269.8 as $10^{\text {th }}$ graders in the spring of 2014 to a class average of 275.2 as $11^{\text {th }}$ graders in the spring of 2015 . This gain of 5.3 standard score points in mathematics from $10^{\text {th }}$ to $11^{\text {th }}$ grade fell short of typical growth of 7 standard score points on the Iowa Assessments mathematics test by 1.7 points.


The 2015 cohort of $10^{\text {th }}$ grade students grew 5.9 standard score points on the reading Iowa Assessment from $9^{\text {th }}$ grade, increasing from a class average of 271.8 as $9^{\text {th }}$ graders in the spring of 2014 to a class average of 277.6 as $10^{\text {th }}$ graders in the spring of 2015 . This gain of 5.9 standard score points in mathematics from $9^{\text {th }}$ to $10^{\text {th }}$ grade fell short of typical growth of 8 standard score points on the Iowa Assessments reading test by 2.1 points.

The 2015 cohort of $11^{\text {th }}$ grade students lost 5.1 standard score points on the reading Iowa Assessment from $10^{\text {th }}$ grade, decreasing from a class average of 278.4 as $10^{\text {th }}$ graders in the spring of 2014 to a class average of 273.3 as $11^{\text {th }}$ graders in the spring of 2015 . This loss of 5.1 standard score points in mathematics from 10th to 11 th grade fell short of typical growth of 7 standard score points on the Iowa Assessments reading test by 12.1 points.

## Advanced Placement: Number of Courses 201I to 2015



DMPS Average AP Exam Score: 2.28

National Average AP Exam Score: 2.82

2014-15

Completion of advanced placement (AP) courses decreased by 25 from 2014 to 2015. The average AP exam score for Des Moines students of 2.28 fell short of the national average AP exam score of 2.82 by 0.54 in the 2014-15 school year.

## ACT: Grade II Average Composite Score 2010 to 2015




$\square$The number of students taking the ACT test increased by 49 students from 2014 to 2015. The average composite score increased by 0.1 from 2014 to 2015. Since the spring of 2010, DMPS has increased ACT test participation by more than 250 students.

## DMPS High Schools Move Up lowa AP Index

For the third year in a row, all five comprehensive high schools at Des Moines Public Schools are listed among the state's top 50 high schools on the Iowa Advanced Placement Index. In fact, all five high schools are in the top half of the index, with each school matching or moving up from last year's ranking.
The Iowa AP Index, compiled and released by the Belin-Blank Center for Gifted Education at the University of Iowa, ranks how well Iowa high schools provide students with the opportunity to take college-level Advanced Placement courses. The rankings are based on the number of AP exams taken by students compared to the number of graduates from the spring of 2014.
"Our students do a great job of meeting higher expectations and taking advantage of great educational opportunities. Our teaching staff has taken this challenge seriously, and demonstrated uncompromising belief in our students," said Superintendent Tom Ahart.
"The successful effort to make AP courses available for more and more DMPS students is one of several factors that are contributing to our overall success, including a strong and steady increase in our graduation rate."
Des Moines Public Schools has put a significant effort over the past few years toward expanding AP course offerings at all five comprehensive high schools. Enrollment in AP courses has more than quadrupled and the number of AP exams taken by DMPS students has increased two-and-a-half times since 2011, including a $29 \%$ increase over the past year alone.
"DMPS has become a national leader in removing barriers and creating opportunities so more and more students have access to college-level coursework," said Amber Graeber, Advanced Placement Coordinator for Des Moines Public Schools. "By making access to AP courses more equitable across the district, we are meeting our goals of increasing our AP course offerings, AP enrollment and AP exam participation. Now we focus on the goal that matters most, which is ensuring greater student success." The Advanced Placement program was created by the College Board in 1955 to offer a college-level curriculum and examination to high school students. Many colleges and universities provide credit to students who score a 3 or higher (on a scale of 1 to 5) on the AP exam.

## High School Students Learn About Opportunities

Lots of opportunities came knocking yesterday at the third annual Youth Opportunity Fair in the gym at Central Campus for high school students from all around the district. The event that's coordinated jointly by DMPS, United Way, Wells Fargo and the Evelyn Davis Center was hosted by Hoover two years ago and East last year. This year the thought was to locate it more centrally. In addition to the students already there who regularly attend classes at Central Campus and Central Academy, buses ferried students from the district's five home high schools to Wednesday's event. Scavo students also attended for the first time this year.

There were three emphases: summer employment, community service volunteer options that count toward the silver graduation cords and post-secondary education.


But not until they'd wound their way through a maze of possibilities. More than 50 exhibitors were present, taking advantage of opportunities of their own to tap into one of the world's most abundant, powerful and renewable energy sources - youth!
"The event was a great chance for students to have the experience of speaking with local businesses about employment and volunteer opportunities," said Lyn Marchant, Community School Coordinator at Scavo. "For some students, this was their first time ever communicating with a potential employer. It was a chance to work out some nerves, see what they did well and identify areas to improve."

For several hours a space usually reserved for physical education was converted to one focused on a more fiscal type of exercise and learning. The official tally was 251 attendees who got a good workout without breaking a sweat.

Graduation: 4- and 5-Year Cohort Graduation Rates 2010 to 2014

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $90.0 \%$ |  |  |  |  |  |
|  |  |  |  |  |  |
| $70.0 \%$ |  |  |  |  |  |
|  |  |  |  |  |  |
| $60.0 \%$ |  |  |  |  |  |
| $50.0 \%$ |  |  |  |  |  |
| $30.0 \%$ |  |  |  |  | $40.0 \%$ |
| $\begin{aligned} & 30.0 \% \\ & 20.0 \% \end{aligned}$ |  |  |  |  |  |
| $10.0 \%$ |  |  |  |  |  |
|  |  |  |  |  |  |
| 0.0\% | 2010 | 2011 | 2012 | 2013 | 2014 |
| $\checkmark$ 4-Year | 78.5\% | 75.7\% | 79.2\% | 79.4\% | 81.7\% |
| $\square 5-\mathrm{Year}$ | 82.9\% | 81.0\% | 82.9\% | 84.0\% |  |



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The 4-year cohort graduation rate increased from 79.4 percent in 2013 to 81.7 percent in 2014. This was an increase of 2.3 percent. The 5 -year cohort graduation rate increased by 1.1 percent from 82.9 percent in 2012 to 84.0 percent in 2013 .

## Class of 2014 Set New High Mark for DMPS Graduation Rate

The Class of 2014 at DMPS had a district-wide graduation rate of $81.68 \%$, an increase of $2.52 \%$ over the previous year and the highest level since Iowa began using its current graduation rate formula in 2009. The four-year graduation rate at the district's five comprehensive high schools (East, Hoover, Lincoln, North and Roosevelt) alone was $86.58 \%$, up from $82.79 \%$ the previous year. Statewide figures show an overall increase in the percentage of Iowa high school students who completed high school in four years, with a statewide graduation rate of $90.54 \%$ for 2014 compared to $89.68 \%$ for 2013.
Des Moines Public Schools also saw an increase in the district-wide five-year graduation rate to $84.04 \%$ for the Class of 2013, up from $82.89 \%$ for the Class of 2012 and also the highest since 2009. The five-year graduation rate at the district's five comprehensive high schools alone was $86.66 \%$.The five-year graduation rate at the district's five comprehensive high schools alone was $86.66 \%$. Statewide figures also show an overall increase in the percentage of Iowa high school students who completed high school in five years, with a five-year rate of $92.28 \%$ for the Class of 2013 compared to $92.15 \%$ percent for the Class of 2012.
"This is very exciting news about our school district and the work we are doing, but it is also a challenge," said Superintendent Tom Ahart. "On the one hand, this is a great testimony to the work being done by our teachers, students and principals, and that our efforts are making a difference. On the other hand, it is a challenge to all of us at the school district and in the community to support education so more and more students can continue to grow and succeed."

