

## Accelerated Math Pathway (AMP) Report: June 29, 2015

This report provides an update on the status of AMP enrollment projections for the 2015-2016 school-year, results of the Iowa Algebra Aptitude Test, and the number of 8<sup>th</sup> Grade students who passed the Algebra 1 exam as 8<sup>th</sup> Graders. We are please to report that all letters informing parents of their students' placement were sent home by Friday, June 19<sup>th</sup> via backpack or U.S. Mail. In addition, all families have the option of meeting with school staff to discuss their child's placement. Finally, included in the letters was information reminding CPS families about the Math Department's summer support programs.

The STEM Department worked diligently all year in collaboration with teachers to analyze data and establish a clear placement process for students. The recommendations for the AMP program were based on the following criteria when evaluating student readiness for the Accelerated Math Pathway:

- District assessments: 30%
- Teacher recommendation: 40%
- MCAS score: 15%
- Iowa Algebra Aptitude Test Score: 15%

After all of the data were calculated, students with an overall composite score of 90 and above automatically qualified for placement in AMP. An overall score below 70 indicated that students would be placed in the on-grade level class. Overall scores between 70 and 90 indicated that students may be eligible for placement in AMP and conversations with families were warranted. These meetings have been taking place over the last two weeks.

Scheduling of students for AMP classes has already begun with students being hand scheduled and placed in mixed ability groupings, which will provide for a richer accelerated learning environment.

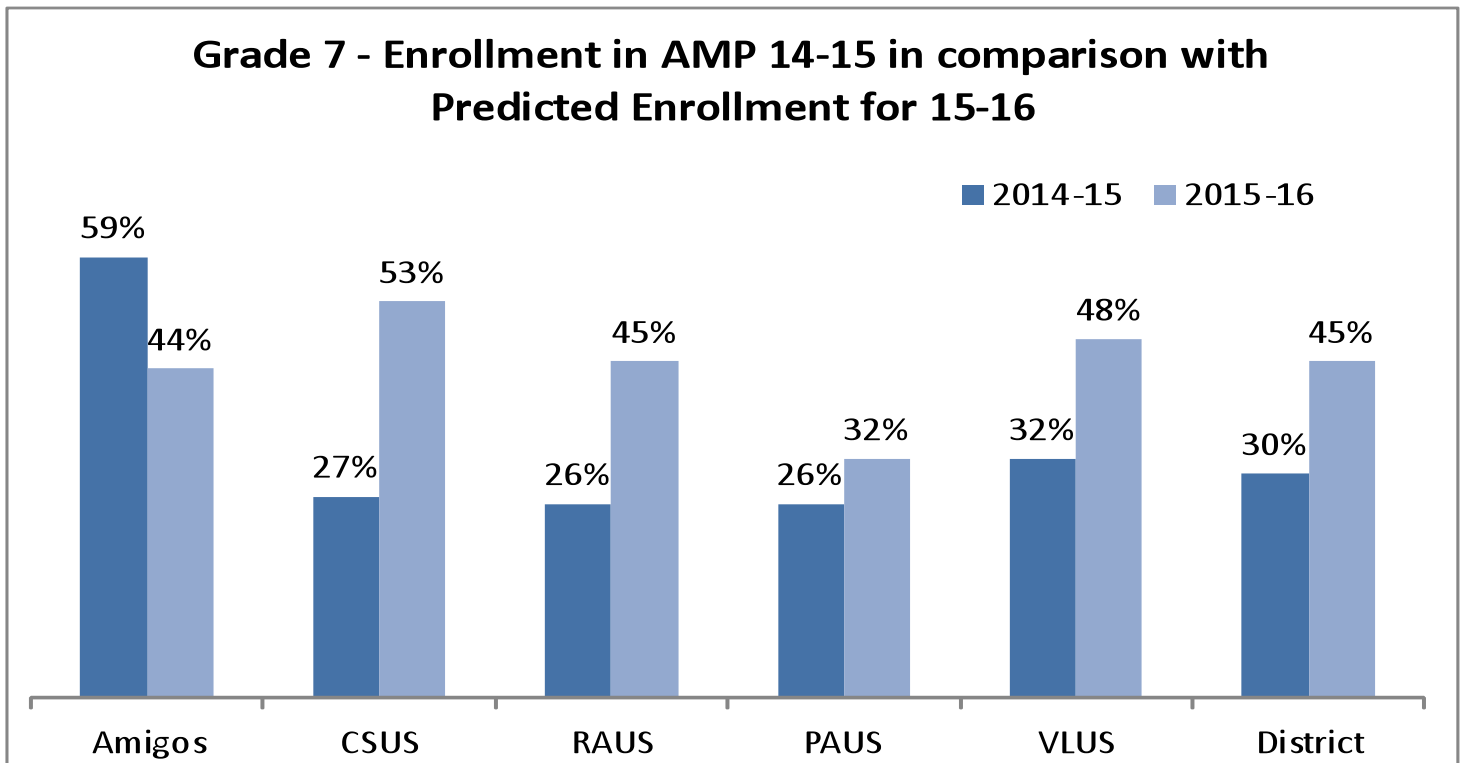
The Office of Curriculum and Instruction is please to report that that AMP enrollment for next year has seen significant increases overall. Particularly notable is the increase in Grade 8, which demonstrates the ability for students to make transitions into Algebra even though they did not enter AMP as 7<sup>th</sup> Graders. This fluidity sets the AMP program apart from separate tracks, which has been a concern raised. Additionally, we have significant increases in underrepresented groups. For example, in Grade 8, we will see increases in almost every subgroup. Even more promising is the significant increases in every subgroup in the rising 7<sup>th</sup> grade class.

### SY' 15-16' Comparison 7<sup>th</sup> Grade

- Overall 7<sup>th</sup> Grade + 15%
- White + 16%
- Black + 9%
- Asian +19%
- Multi-Racial +7%
- Hispanic +18%
- SWD +11%
- ELL +20%

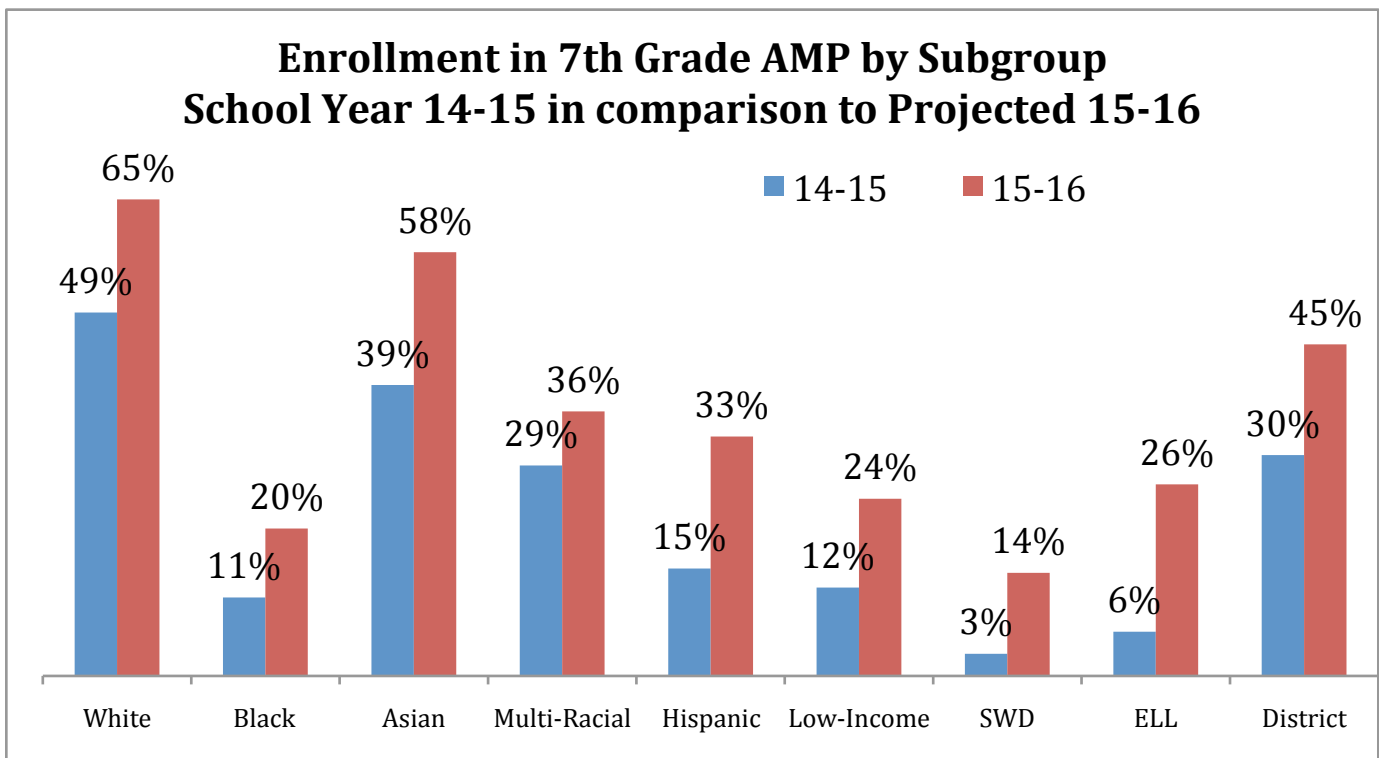
These increases are due to a tremendous amount of work and support of students by our teachers, math coaches, and district coaches (**See attached graphs**).

**AMP Enrollment Comparison (14-15' and 15-16')**

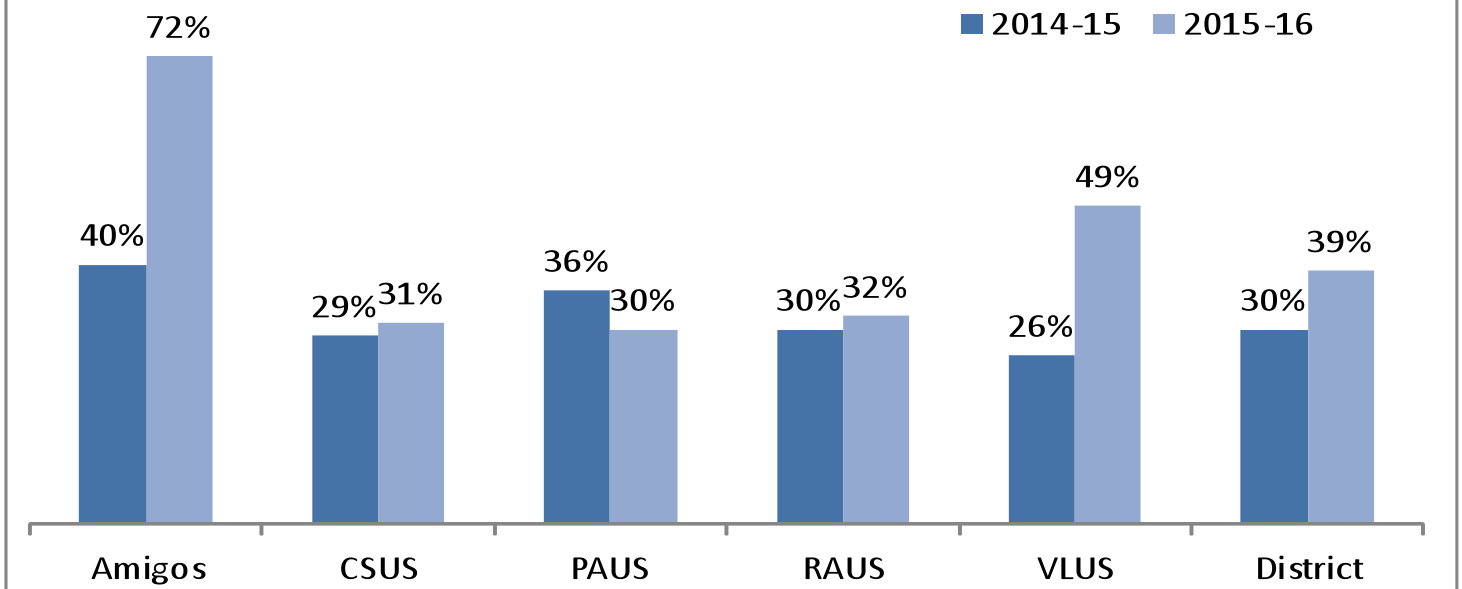


As you can see in the above chart there is a 15% increase in enrollment in the grade 7 AMP classes for next year across the district. This school-year (FY' 14-15), 120 students are enrolled in the grade 7 AMP (30% of that class). Next year (FY' 15-16), we project 162 students will be enrolled in grade 7 AMP (45% or almost half of the class).

**Because of the increase in enrollment in the grade 7 AMP program, two seventh grade AMP classes will be taught at each of the following schools next year: VLUS, CSUS, and RAUS.**



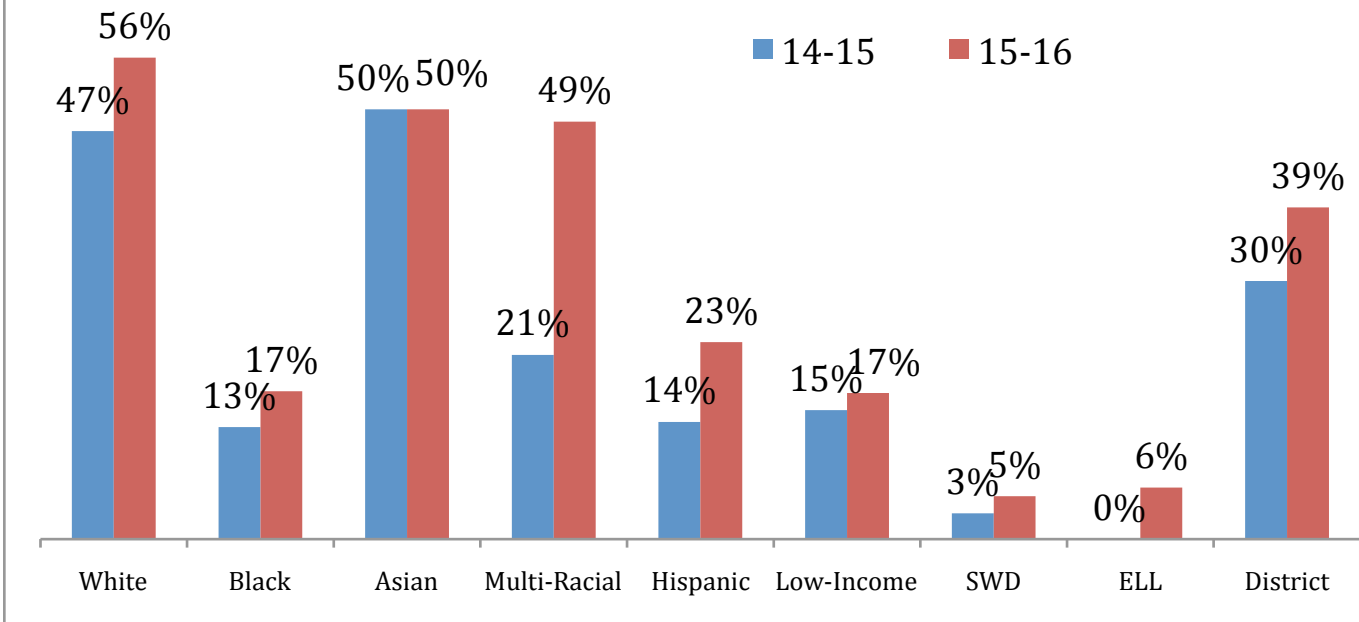
## Grade 8 - Enrollment in AMP 14-15 in comparison with Predicted Enrollment for 15-16



In 8<sup>th</sup> grade, we are projecting that there will also be an increase in enrollment in AMP classes for next year across the district. This year (FY' 14-15), 108 students are enrolled in the grade 8 AMP (30% of that class). Next year (FY' 15-16), we project 154 students (39% of that class) will be enrolled in grade 8 AMP. This is very promising in that we are seeing the fluidity and movement of students into higher mathematics as we had hoped.

**Notably: VLUS will be offering two grade 8 AMP classes next year as their enrollment in the grade 8 AMP program has doubled from last year.**

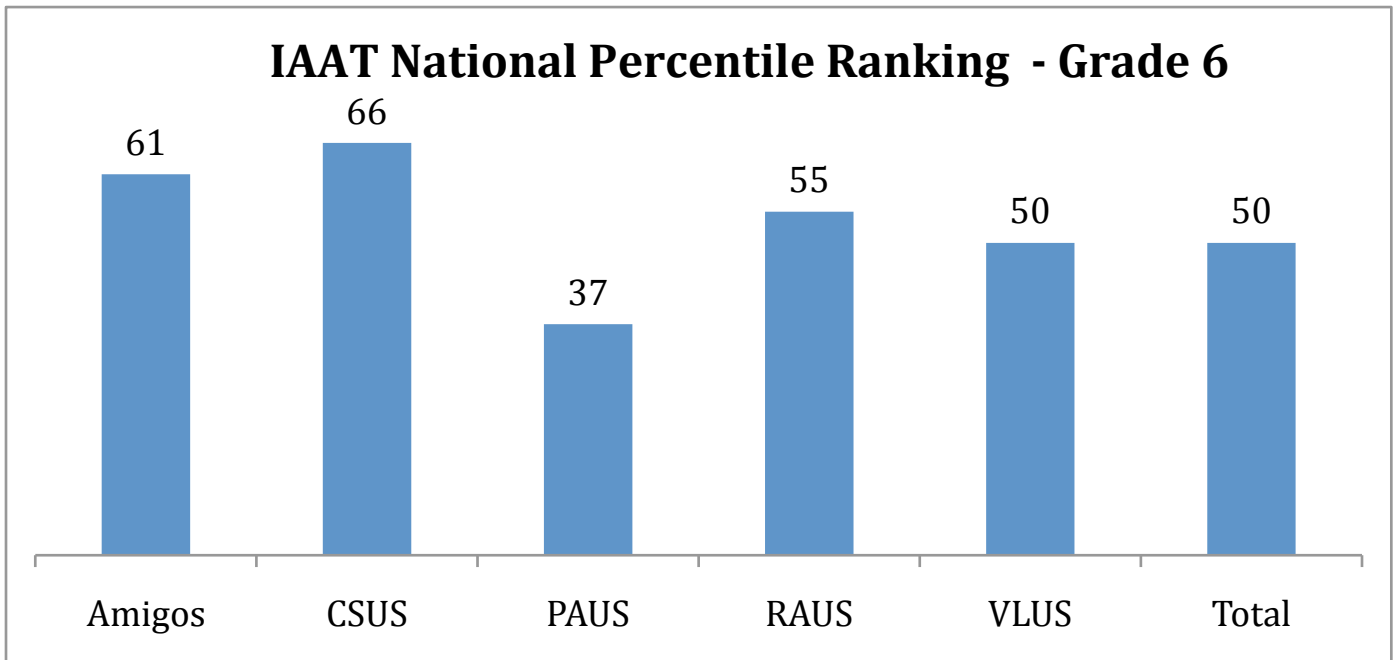
## Enrollment in 8th Grade AMP by Subgroup School Year 14-15 in comparison to Projected 15-16



## IOWA ALGEBRA APTITUDE TEST

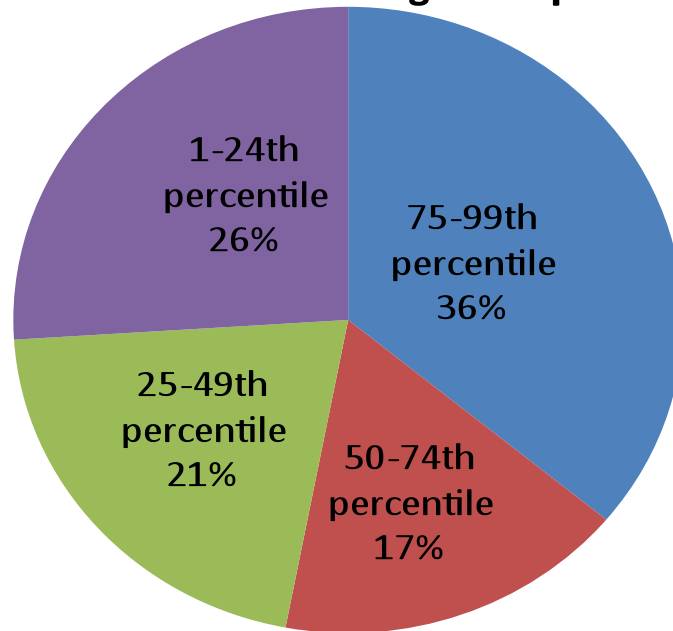
In May of 2015, all 6<sup>th</sup> and 7<sup>th</sup> grade Math students were given the Iowa Algebra Aptitude Test (IAAT™) to assess students' readiness for coursework in Algebra I. It was used along with the other previously mentioned measures to make recommendations for next year's AMP courses. Cambridge students were scored by national percentile rank. When aggregating individual percentile ranks, the median is used.

The median percentile rank for CPS grade six students was 50. There was some variation among schools (See Chart below).



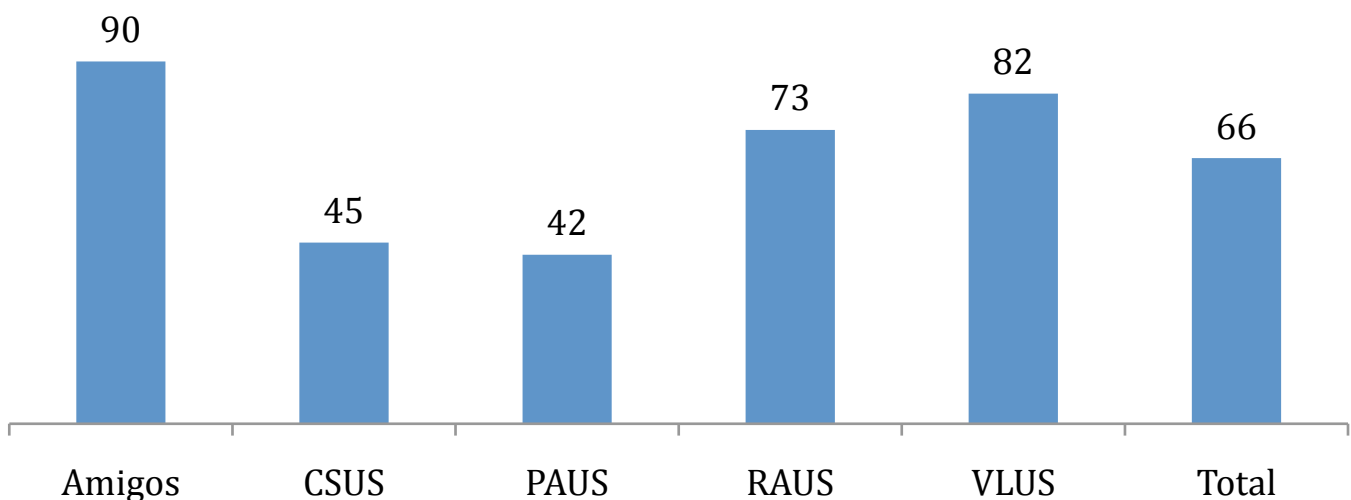
Another way to look at the IAAT National Percentile Rankings is by looking at the percentage of students in each quartile. In the district, 36% of Cambridge students scored in top quartile (75<sup>th</sup>-99<sup>th</sup> percentile).

### Percentage of 14-15 6th Grade CPS Students by National Percentile Rank on Iowa Algebra Aptitude Test



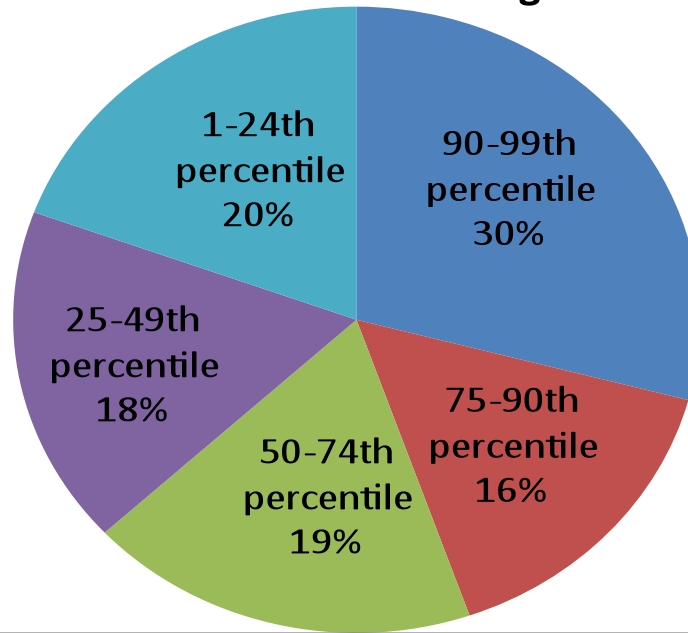
The median percentile rank for CPS grade seven students was 66. There was more variation among schools (See Chart below).

### Iowa National Percentile Ranking - Grade 7



Thirty percent (30%) of 7<sup>th</sup> grade students at CPS were nationally ranked in the top decimal (90-99<sup>th</sup> percentile) on the Iowa Algebra Aptitude Test.

## Percentage of 14-15 7th Grade CPS Students by National Percentile Rank on Iowa Test of Algebra Readiness



### Algebra 1 Exam

One of the goals of the Math Department is to not only increase the number of students taking 8<sup>th</sup> Grade Algebra, but also to increase the numbers of students who passed Algebra 1 and will enter CRLS taking Geometry.

### Grade 8 AMP students were administered the CRLS Algebra 1 exam.

In the FY' 14-15 school year, 108 students completed Algebra I at the upper schools with 45% (49 students) passing the CRLS exam. Another 24 students, who completed the grade 8 AMP course were on the cusp of passing the Algebra 1 exam and will be given the opportunity in August to retake the test and possibly enrolled in Geometry during the ninth grade.

During the 2012-2013 school year 83 students completed Algebra I at the upper schools with 42% and taking Geometry as ninth graders. That number increased to 86 students taking Algebra I during the 2013-2014 school year. Of the 86 students completing the course work, 42 (or 49%) of students passed the CRLS exam and enrolled in Geometry during the ninth grade.

### Updated Enrollment for Summer Programming

The STEM Department also did a tremendous amount of outreach to families to raise the participation of our summer math programming. This required us to hire an additional math teacher due to the high numbers. In addition to general education staff, we also have a special education staff member to support the range of learners in the summer program.

### Math 180:

**36 students, total**

20 rising sixth graders

16 rising seventh graders

**AMP Prep**

**40 students, total**

17 rising sixth graders

23 rising seventh graders

**Bridge**

**13 students, all seventh graders**

This summer we are partnering with the Breakthrough program, and sharing resources to ensure greater curricular alignment between summer programming, including Edgenuity. Additionally, 34 families requested Edgenuity accounts for their rising 8th graders! As a result, we will have a lot of kids doing lots of math this summer!