

Bedford Public Schools

MCAS-PARCC Accountability Report
and Next Steps
October 18, 2016

2016 and 2017: Two Years of Test Transition

Spring 2016

Grades 3-8 ELA and Math: PARCC test (all pencil-and-paper) PARCC scores 1-5; MCAS scores 1-4

Grade10 ELA and Math: MCAS

Science: MCAS (on previous standards) grades 5 and 8; Physics grade 9 and other science: MCAS (also on previous standards)

Moving ahead in 2017:

- Grades 3-8 ELA and Math: **MCAS 2.0**
 - blends elements of MCAS and PARCC
 - On-line required at grades 4 and 8
- Grade 10 ELA and Math: MCAS
- Grades 5 and 8 science; high school science: MCAS



Calculating Accountability Levels: Elements

Progress and Performance Index (PPI) Annual PPI based on up to 7 measures: **achievement** in math, ELA, and science; **student growth** (SGP) in ELA and math; cohort graduation rate and annual dropout rate (for high schools). The Annual PPI is a number up to 100.

Composite Performance Index (CPI) Calculates achievement in ELA, math and science: each student's MCAS score earns up to 100 points (P or A); PARCC scores were translated into CPI points

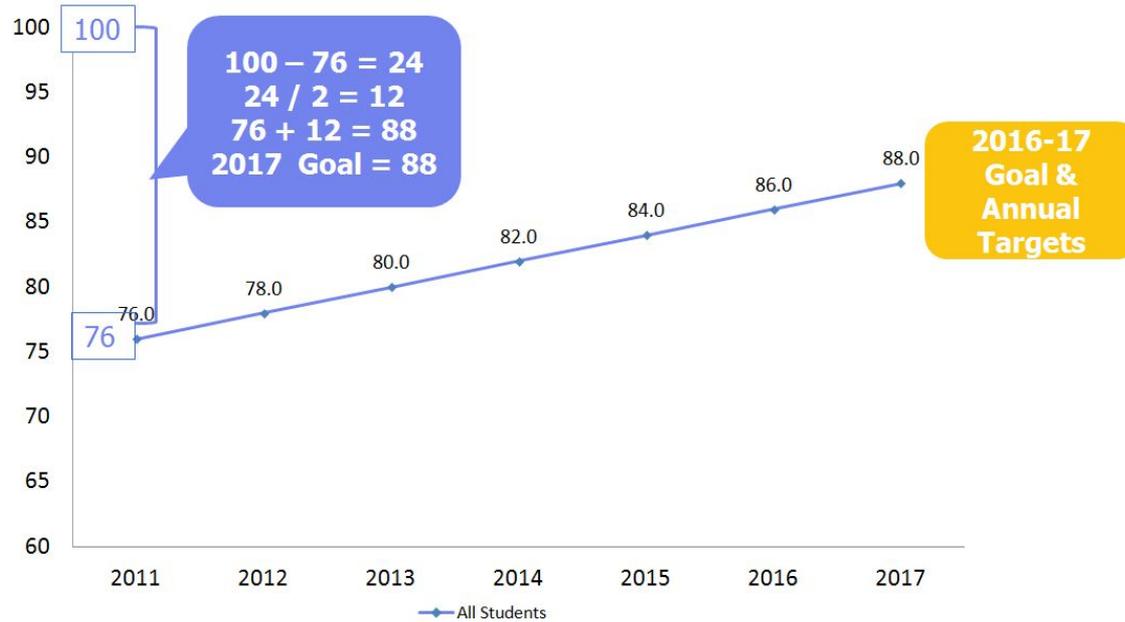
Student Growth Percentile (SGP) Measures a student's growth or improvement against peers who scored in the same range the previous year. (A student who earned 240 has as his/her peer set all the other students in the state who earned 240.) An SGP of 60 means student scored better than 60% of peers.

Schools earn **extra credit** for decreasing % Warning-Failing by at least 10%; increasing % of student scoring Advanced by 10%; dropout re-engagement

Instead of requiring all students to be proficient by the year 2017 (original NCLB goal), all schools must **halve the distance** between CPI performance in 2011 and proficiency by 2017

Reducing Proficiency Gaps: Illustration

Example: Math CPI, All Students



Cumulative Progress and Performance Index

The cumulative PPI is the average of the PPI from the current year and the previous three years, weighted as follows:

$$2013 \times 1 + 2014 \times 2 + 2015 \times 3 + 2016 \times 4$$

This total is divided by 10

Result is a number up to 100

All Students and High Needs Subgroup (includes special ed, econ disadvantaged, and ELL-former ELL students) must have a number of 75 or above to earn Level 1

Table 7: Sample PPI calculation

Indicators		2013	2014	2015	2016
English Language Arts	Narrowing proficiency gaps (CPI)	50	50	75	100
	Growth (SGP)	0	25	50	75
	Extra credit for decreasing % <i>Warning/Failing</i> ($\geq 10\%$)	0	25	0	0
	Extra credit for increasing % <i>Advanced</i> ($\geq 10\%$)	0	0	25	0
Mathematics	Narrowing proficiency gaps (CPI)	75	50	100	75
	Growth (SGP)	50	50	75	100
	Extra credit for decreasing % <i>Warning/Failing</i> ($\geq 10\%$)	0	0	0	25
	Extra credit for increasing % <i>Advanced</i> ($\geq 10\%$)	0	0	0	0
Science	Narrowing proficiency gaps (CPI)	50	50	50	100
	Extra credit for decreasing % <i>Warning/Failing</i> ($\geq 10\%$)	0	0	25	25
	Extra credit for increasing % <i>Advanced</i> ($\geq 10\%$)	0	0	0	25
High School	Annual dropout rate	75	100	75	100
	Cohort graduation rate	75	75	75	75
	Extra credit for reengaging dropouts (2 or more)	-	0	0	25
English Language Acquisition	Extra credit for high growth on ACCESS for ELLs assessment (Student Growth Percentile on ACCESS)	-	-	0	25
Points awarded for achievement, growth, and high school indicators		375	400	500	625
Points awarded for extra credit		0	25	50	125
Total points awarded		375	425	550	750
Number of achievement, growth, and high school indicators		7	7	7	7
Annual PPI		54	61	79	107
Cumulative PPI (2013*1 + 2014*2 + 2015*3 + 2016*4) ÷ 10		84			

Main Points to Remember about Accountability

- The cumulative PPI for “all students” and “high needs students” must be 75 or above for a school to be rated Level 1. If not, the school is classified Level 2.
 - The annual PPI is a measure of the progress a group is making toward its own targets over a two-year period.
 - The SGP measures how a group of students’ achievement has grown over time in ELA and math. The goal for all groups is to maintain an SGP at least one point above the state median (51).
- 

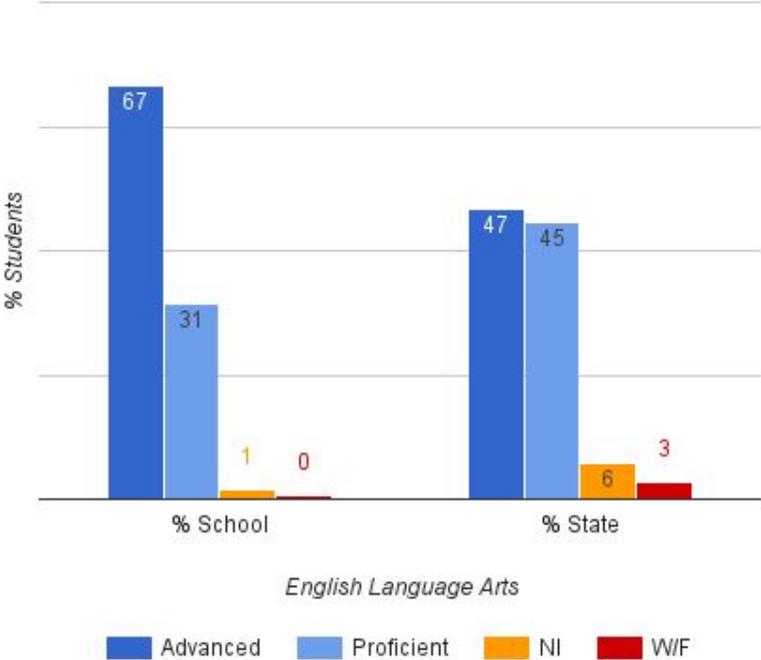
Bedford's Accountability Levels

	Accountability Level
The Lane School	Level Two
John Glenn Middle School	Level Two
Bedford High School	Level One
Bedford Public Schools (District)	Level Two

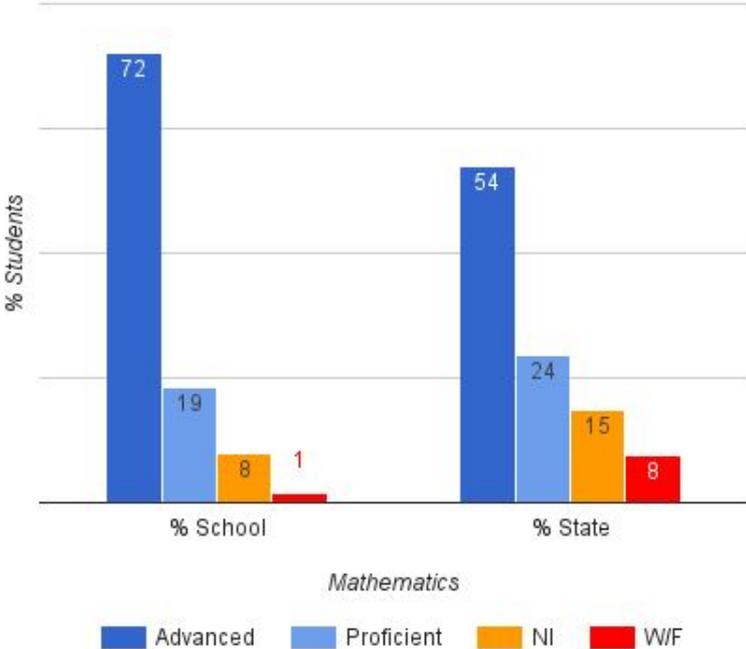


Bedford High School: Grade 10 ELA and Math

2016 ELA MCAS Achievement Levels



2016 Math MCAS Achievement Levels



Bedford High School

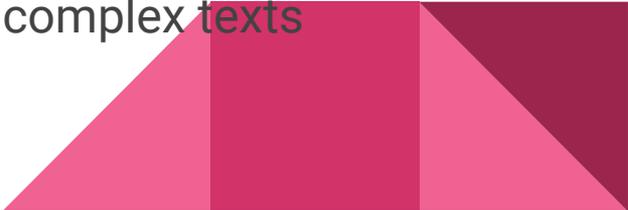
Level One School

- At or above target for reducing proficiency gaps measured by PPI
 - Annual PPI shows growth over two years
 - Cumulative PPI represents growth over time
 - Uses up to 7 core indicators and extra credit possibilities to calculate
 - In 87th percentile measured against other high schools
 - Student Growth Percentiles (SGPs) consistently at or above target (51)
 - Measures students against their scoring “peers” in previous test
 - 50th percentile SGP: student scored better than 50% of students in same scoring range on previous test. Above 60 is considered strong growth.
- 

BHS Steps to Continue Student Growth: Math

- Math department has identified the support-growth required by every struggling learner, with co-taught classes in STEM, Algebra I and Geometry CP
- Calculus Project cohort now freshmen
- 6-12 days devoted to looking at student work to strengthen program
- Department will coordinate grades 6-12 with free-response template structures
- Math lab (new in 16-17) will offer additional support for students; taught by math teacher
- CP Geometry has created makeup quizzes and process for additional study and practice for students
- Title I math (9-12) and .7 math-science interventionists in Skills Center
- Small directed study TA is pushing into CP Geometry
- 66% of students taking Algebra II this year (up from 50% in 2015)

BHS Steps to Continue Student Growth: ELA

- Baseline assessments identify areas of concern early in the year each year
 - Co-teaching 10th grade courses build in appropriate practice and scaffolding for complex reading and writing tasks
 - Coursework incorporates working with multiple complex texts
 - Writing labs, now offered at all levels, continue to support student growth in writing
 - Coordination and vertical work 6-12 will fine-tune alignment to common core where necessary
 - Coordinate with social studies on deeper analysis of complex texts
- 

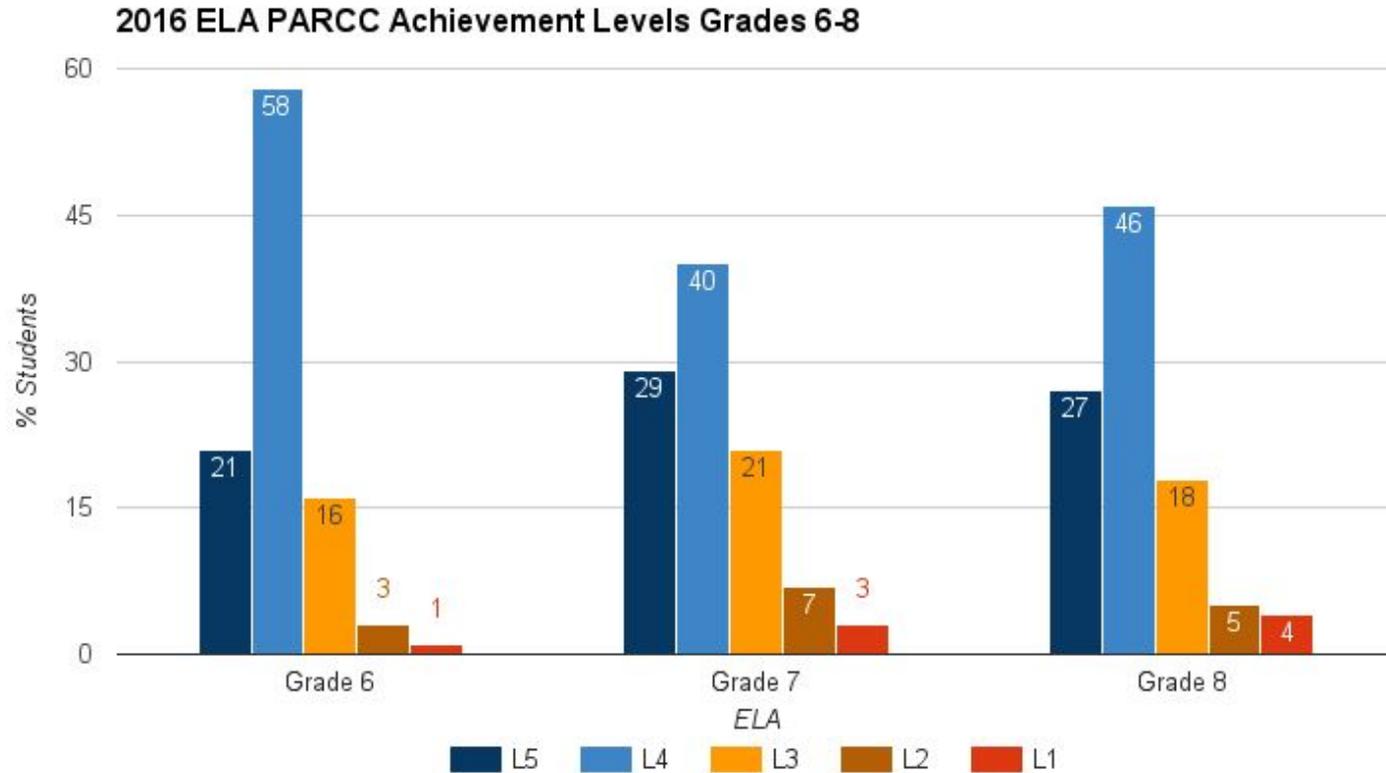
Lane & JGMS Science - The Transition Years

- **Expected dip in Science at grade 5 and 8 as the teachers are starting to utilize the new curriculum and emphasize the Science and Engineering practices.**
- **Tests in 2018 will be a mix of new and old standards; full testing of new standards begins in 2019. Expect higher results when test emphasizes new standards fully.**
 - Current test tests more on recall of facts and less on application of science and engineering practices.
- **Good News: on topics taught during the testing year, students performed at a much higher rate than the state average.**
 - Retention and incorporation of prior year's learning into each year is being researched for curriculum implementation.
- **Identifying methods to work on helping students learn.**
 - Currently, the MS Science is not leveled and teachers struggle with both ends of the learning spectrum. Supporting students in ELA and Math has priority.
 - Examining methods to both integrate the curriculum and spiral concepts from early grades for increased retention of knowledge.
 - Emphasizing more writing in science and the practices.
 - Increased focus on integrating Science topics into ELA at the elementary school (Lane)
 - Leveled science texts for guided reading groups supporting science content

HS Science - Evolving to the New Standards

- **As the department transitions to the new standards, MCAS results have held steady and consistent with expectations.**
 - Results continue to be above state averages despite our increase in high need students. New testing format from state is TBD.
 - **Courses are incorporating the Science and Engineering practices and moving to more application based assessments which benefit students beyond the high school years.**
 - **With the increase of students with needs, the department is working with Special Education communities to customize learning and address specific needs.**
 - **Emphasis on identifying struggling students earlier in the year is being studied and implemented with the Academic Achievement Center.**
 - **New this year:**
 - Combined Math and Science co-taught class
 - STEP Course specific to Biology for MCAS concepts
 - Excel program with increased emphasis on Math and Science
- 

JGMS Grades 6-8 PARCC Results ELA



JGMS Grades 6-8 ELA Strengths-Concerns

Strengths:

- Percentage of students scoring 4 and above increased in grade 6 from 56% to 79%; grade 8 from 71% to 73%
- Composite Proficiency Index (CPI) improved for high needs students, students with disabilities, and African-American students
- Students Growth Percentiles (SGP) hit targets for every subgroup except African-American and Hispanic-Latino students.

Concerns:

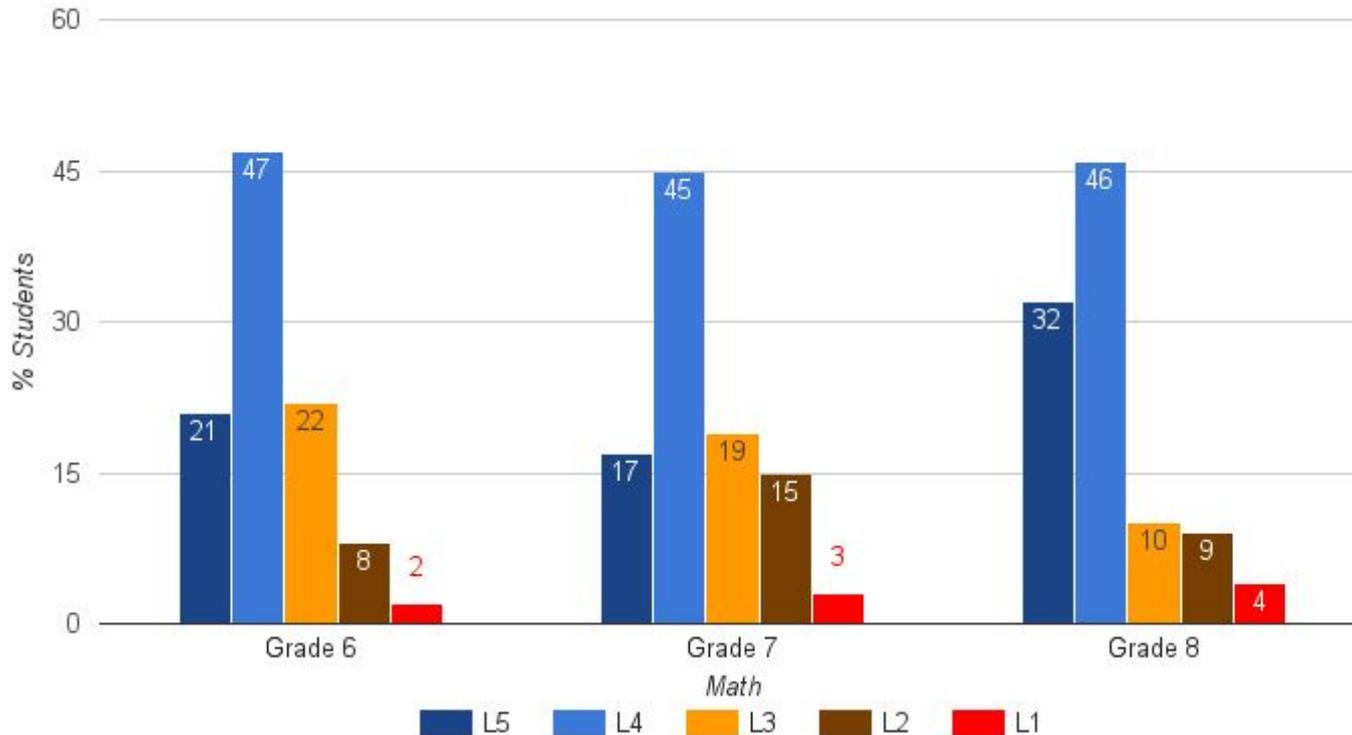
- Percentage of students scoring 4 and above dropped in grade 7 from 76% to 69%
- CPI still below target for narrowing proficiency gaps for All Students and High Needs Students
- SGP for All Students (44) and High Needs Students (37.5) below where we would like them to be, even though they met target for improvement. (SGP should be over 51 to be considered strong.)

JGMS Grades 6-8 ELA Next Steps

- Identify every student with score of 3-2-1 to assure necessary supports are in place
 - Look at students below proficient, analyze their performance on district and common assessments to assure rigor and alignment, and revise or adjust accordingly
 - Expand and deepen implementation of JGMS Writing Guide across grades and subjects (began Fall 2015)
 - Strengthen coordination between ELA, social studies, and Reading Strategies course at grade 6
 - Continue writing lab intervention to support written analysis of complex and multiple texts
 - Begin ELA vertical team work grades 3-8 to refine incremental skills alignment and progression
 - Strengthen coordination of common core skills development between ELA and social studies
- 

JGMS Grades 6-8 PARCC Results Math

2016 Math PARCC Achievement Levels Grades 6-8



JGMS Grades 6-8 Math Strengths-Concerns

Strengths:

- Percentage of students scoring 4 and above increased in grade 6 from 55% to 68%; grade 8 from 74% to 78%
- Composite Proficiency Index (CPI) improved for African-American students, reflecting recent interventions to narrow proficiency gaps
- Student Growth Percentiles (SGP) for All Students (51) is on target; on target for every subgroup except students with disabilities and Hispanic-Latino students

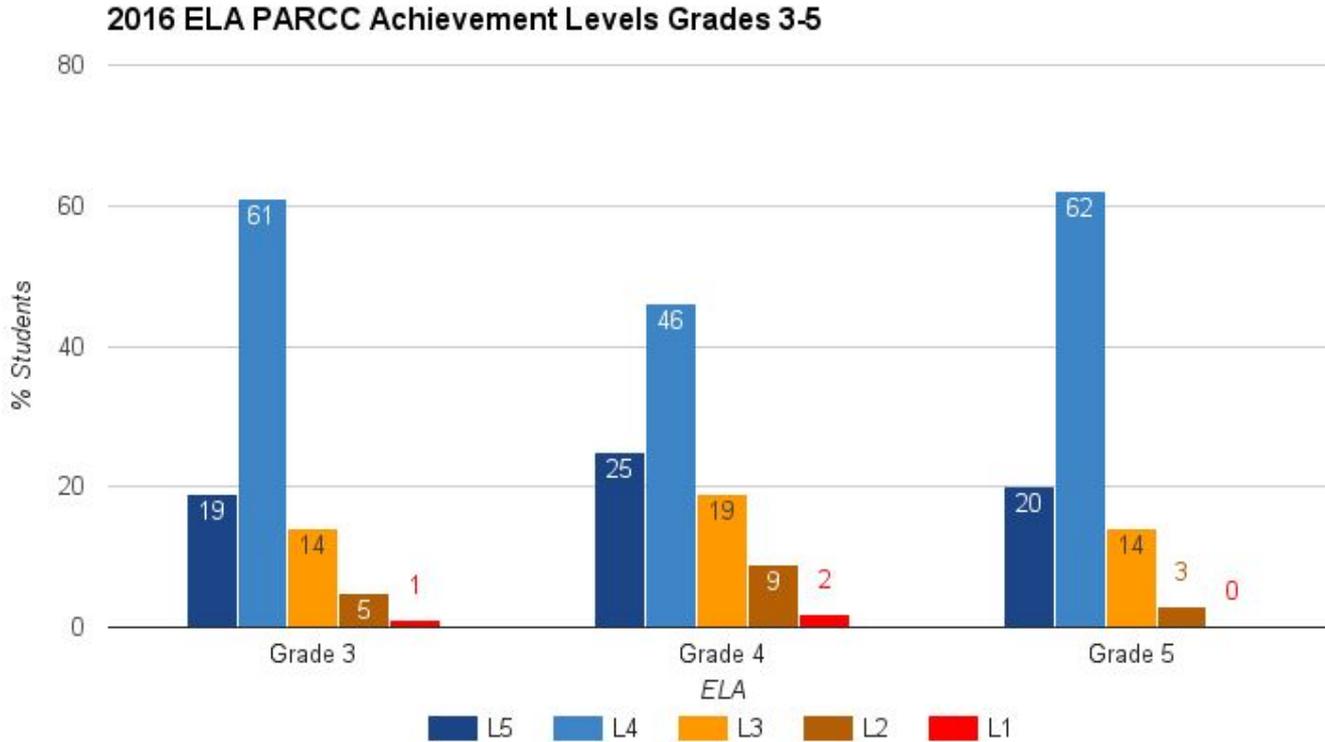
Concerns:

- Percentage of students scoring 4 and above decreased in grade 7 from 68% to 62%
- CPI still below target for narrowing proficiency gaps for All Students and High Needs Students
- SGP for High Needs Students (37.5) below where we would like it to be (High Needs includes students with disabilities, economically disadvantaged students, and ELL students)

JGMS Grades 6-8 Next Steps Math

- Identify every student with score of 3-2-1 to assure necessary supports are in place
 - Look at students below proficient, analyze their performance on district and common assessments to assure rigor and alignment, and revise or adjust accordingly
 - Continue Algebra IA course in grade 8--seen by teachers as one of the most positive changes in math at JGMS
 - Expand implementation of co-taught math classes (15-16 grade 6; 16-17 grades 6-7)
 - Continue professional development of math teaching skills for special education teachers who push into classrooms
 - Continue Calculus Project and Skills Support to improve gap narrowing
 - Coordinate and improve student training around free response questions that will be part of MCAS 2.0 grades 6-10
 - Develop greater vertical team coordination of math grades 3-8
- 

Lane Grades 3-5 PARCC Results: ELA



Lane Grades 3-5 Strengths and Concerns: ELA

Strengths:

- % of students scoring 4 and above: 80% grade 3; 70% grade 4; 83% grade 5
- Composite Performance Index (CPI) on target for All Students, above target for White and Asian students
- Student Growth Percentiles (SGP) on target for All Students, High Needs, ELL, and Students with Disabilities
- High English Language Proficiency Growth (59) for ELL and Former ELL Students

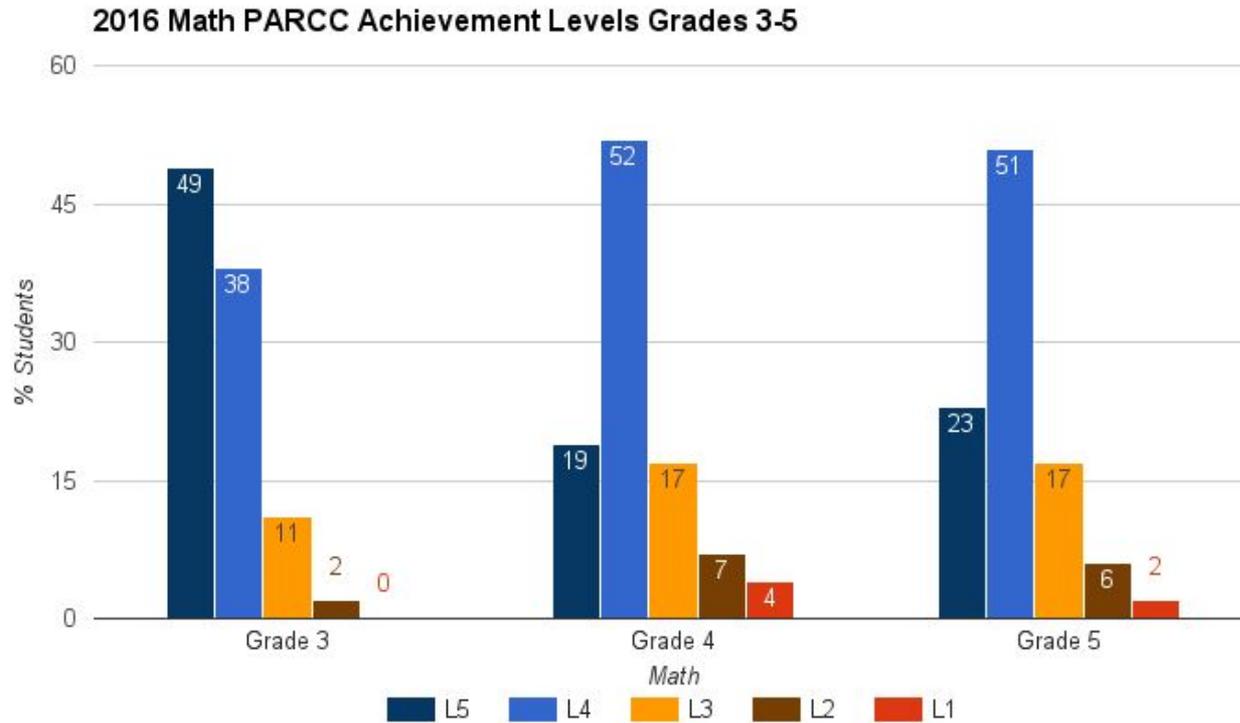
Concerns:

- CPI declined for Economically Disadvantaged, African American and Hispanic/Latino students
 - SGP below target for Economically Disadvantaged Students
- 

Lane Grades 3-5 Next Steps: ELA

- Identify every student with score of 3-2-1 and assure necessary supports are in place
- Look at students below proficient, analyze their performance on district and common assessments to assure rigor and alignment, and revise or adjust accordingly
- Continue close reading and writing about developmentally appropriate complex texts, including January work on prompt with multiple texts and subsequent instruction
- Work with new K-5 ELA Curriculum Director on the teaching of reading and writing
- Begin ELA vertical team work grades 3-8 to refine incremental skills alignment and progression
- Continue developing co-teaching model to strengthen performance of special education students in ELA
- Continue integration of ELA skills into social studies and science units
- Continue Title I Early Morning Literacy program in grade 3
- Improve coordination of Reading, ELL and Special Education services
- Train grade 4 students on word processing to support computer testing

Lane Grades 3-5 PARCC Results: Math



Lane Grades 3-5 Strengths and Concerns: Math

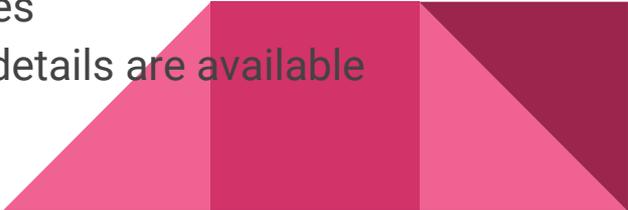
Strengths:

- Percentage of students scoring 4 and above: grade 3, 87%; grade 4, 72%; grade 5, 74%
- At or above CPI target for All Students, ELL and Former ELL Students, Asian and White Students
- On target for SGP for All Students, Students with Disabilities, Asian Students and White Students

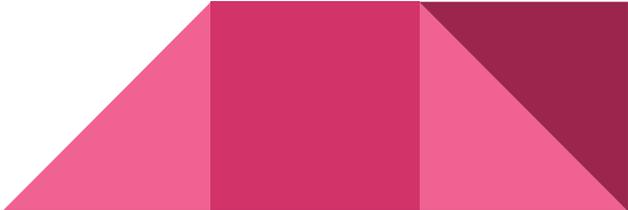
Concerns:

- CPI improved but below target for High Needs and Students with Disabilities; CPI declined for Hispanic-Latino students
 - SGP below target for High Needs, including Economically Disadvantaged and ELL students
- 

Lane Grades 3-5 Next Steps: Math

- Identify every student with score of 3-2-1 to assure necessary supports are in place
 - Look at students below proficient, analyze their performance on district and common assessments to assure rigor and alignment, and revise or adjust accordingly
 - Strengthen math coaching and professional development with Math K-5 curriculum coordinator
 - Continue professional development in math instruction for general and special education teachers
 - Strengthen vertical team work grades 3-8, especially on free response and multiple-step problems
 - Continue implementing co-teaching model at all three grades
 - Train grade 4 students on computer testing for math once details are available
- 

Conclusion

- State standardized testing will be in transition for next several years in ELA, math, and science
 - This reality underscores our need for reliable district measures aligned to current frameworks that allow us to monitor individual student progress and the efficacy of our curriculum and instruction
 - More than ever the district needs to strengthen its vertical alignment K-12 in math and ELA, and integrate skills training across disciplines, especially in ELA and social studies
 - Reinforces our decisions in recent years for more inclusion and co-teaching district-wide
- 

Special Thanks to Contributors

BHS: Principal Heather Galante, Program Administrators Patrick Morrissey and Michael Griffin, Academic Achievement Director Lisa Morrison

JGMS: Principal Kevin Tracey and Assistant Principal Matt Mehler

Lane: Principal Rob Ackerman, Assistant Principal and Science Coordinator Keith Kinney, Math Coordinator Sarah Dorer

ELA Curriculum Director Andrea Salipante

Special Education Director Marianne Vines

Superintendent Jon Sills

