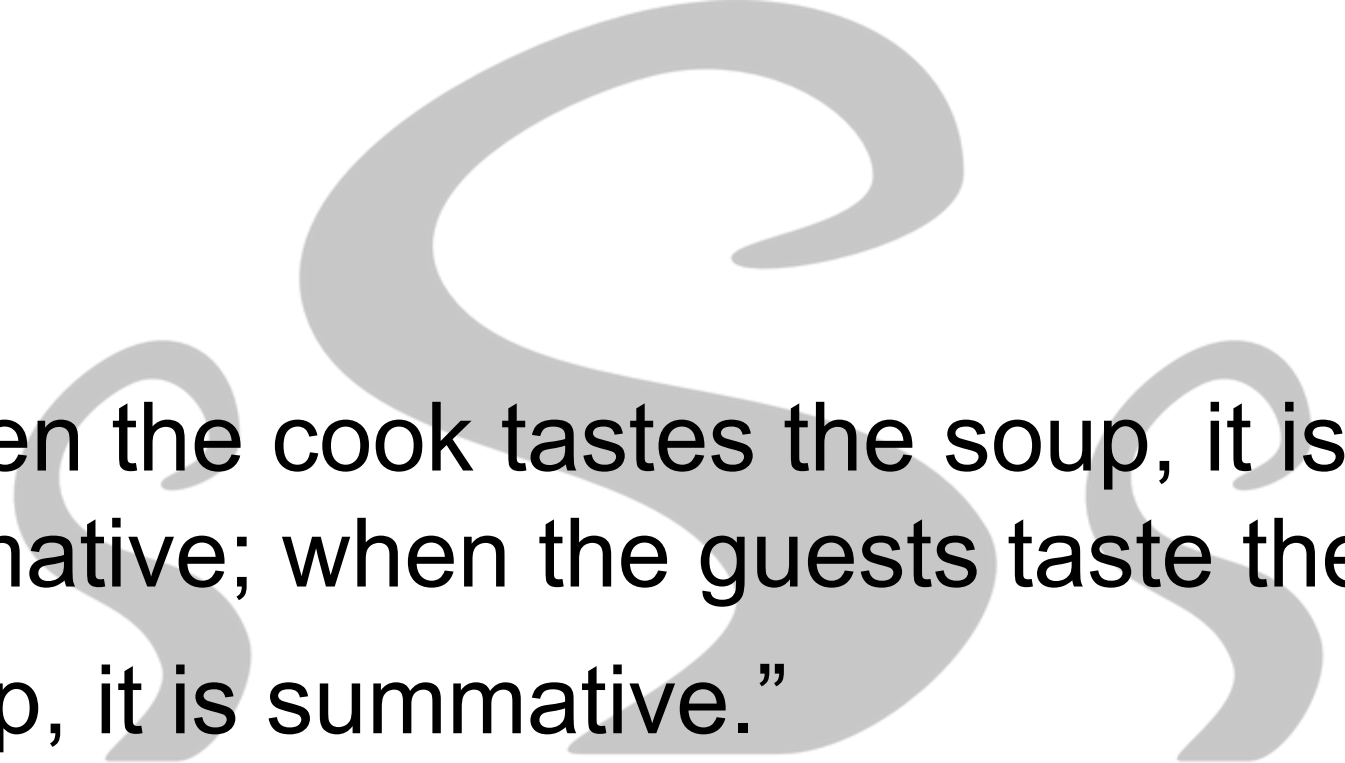


# Accountability Data: MCAS 2017

Sudbury Public Schools  
A presentation to the SPSSC  
November 6, 2017



When the cook tastes the soup, it is formative; when the guests taste the soup, it is summative.”



--Bob Stake, University of Illinois

# Types of Assessments

<b>Formative Learning Assessment</b>	<b>Formative Diagnostic Assessment</b>	<b>Benchmark Assessment</b>	<b>Summative Assessment</b>
Helps students reflect on own learning, set goals, and identify strategies	Identifies gaps in students' understanding or skills and inform teachers' instruction	Tracks students' academic progress as it relates to targets and goals and plan for instruction.	Describes overall of status of students and effectiveness of educational environment

For what purpose?

# Transition: ELA & Math

**Pre-FY13**

**Legacy  
MCAS**

**Staged  
transition to  
2011 ELA and  
Mathematics  
standards**

**FY14-FY16**

**PARCC Test  
Drive**

**FY14 PBT and  
CBT by grade  
levels**

**FY15-FY16  
PARCC PBT for  
ELA & Math**

**Legacy STE**

**FY17**

**Next Gen  
MCAS**

**CBT grades 4,8**

**Revised ELA and  
Math standards**

**Legacy STE**

**No Accountability  
Level or SGP**

# Moving Forward

**FY18**

**Next Gen &  
Legacy**

**CBT grades 4, 5, 7, 8**

**Legacy STE**

**FY19**

**Next Gen  
MCAS**

**CBT all grades**

**Next Gen STE**

**Classes 2021 & 22**

**Interim CD  
Standard**

**Class 2023  
(this year's  
seventh  
graders) will  
take HS Next  
Gen for CD as  
10th graders**

## Next Generation MCAS

- **Updated version of the nearly 20-year old MCAS**
- **Focuses on students' critical thinking abilities, application of knowledge, and ability to make connections between reading and writing.**
- **Clearer signal of readiness for next grade level or college and career**
- **Designed to be given on computer**
- **Will eventually replace all older "legacy" MCAS**

# Interpreting the Results

- ★ The next-generation MCAS **measures in a different way**. The results do NOT mean that students learned less;
- ★ Remember: **2017 is the baseline year** — the first year of a new assessment — and we expect scores to change over time, as occurred when the legacy MCAS debuted in 1998.
- ★ **Massachusetts educators** set these standards, and they raised them in order to make sure our students will be college- and career- ready.
- ★ **In some grades and subjects** (grade 4 English language arts and math, grade 7 math), **the percent of students Meeting Expectations will likely be similar** to the percent that were Proficient previously. **In other grades and subjects** (grade 8 English language arts), **the percent** who are in Meeting Expectations **will likely be lower** than the previous percent of Proficient students.



# Interpreting the Results

- ★ The roughly equivalent proportion of students in each grade and subject area reflect:
  - ★ A standard setting process involving **panels of educators** who valued a clear progression of learning expectations from grade to grade;
  - ★ **Panelists' consistent application of the standards** as they made expert judgments about student achievement on the new tests;
  - ★ The fact that standards were set for all these tests **at the same time**, unlike with the legacy MCAS





# MCAS Achievement Levels

## ★ Legacy

### Advanced

Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.

### Proficient

Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.

### Needs Improvement

Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.

### Warning

Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.

## ★ Next-generation

### Exceeding Expectations

A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.

### Meeting Expectations

A student who performed at this level met grade-level expectations and is academically on track to succeed in the current grade in this subject.

### Partially Meeting Expectations

A student who performed at this level partially met grade-level expectations in this subject. The school, in consultation with the student's parent/guardian, should consider whether the student needs additional academic assistance to succeed in this subject.

### Not Meeting Expectations

A student who performed at this level did not meet grade-level expectations in this subject. The school, in consultation with the student's parent/guardian, should determine the coordinated academic assistance and/or additional instruction the student needs to succeed in this subject.

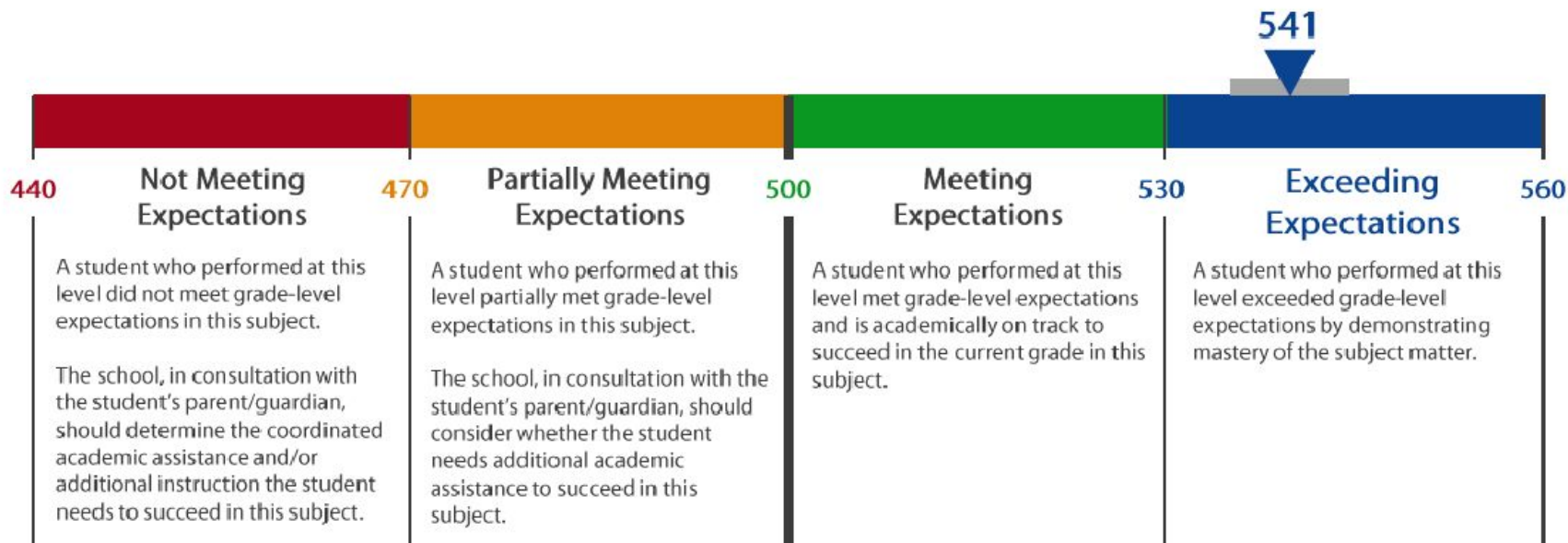


# Mathematics Results

Computer-based test

Your Child's Achievement Level: **Exceeding Expectations**

Your Child's Score: **541**








In the figure above, the triangle indicates your child's score on the test. The gray bar shows the range of likely scores your child would receive if he or she took the test multiple times.

## How your child performed compared to the school, district, and state

Your Child's Score	Average Score		
	School	District	State
<b>541</b>	<b>485</b>	<b>502</b>	<b>515</b>

## How your child performed on the test in each reporting category and on each individual test question

Reporting Category	Points earned by your child	Average number of points earned by students in the state who scored 500.
Operations & Algebraic Thinking 	7 out of 10	6.0 out of 10
Numbers & Operations in Base Ten 	10 out of 10	6.8 out of 10
Numbers & Operations - Fractions 	5 out of 5	4.0 out of 5
Measurement & Data 	8 out of 9	6.1 out of 9
Geometry 	3 out of 4	2.5 out of 4

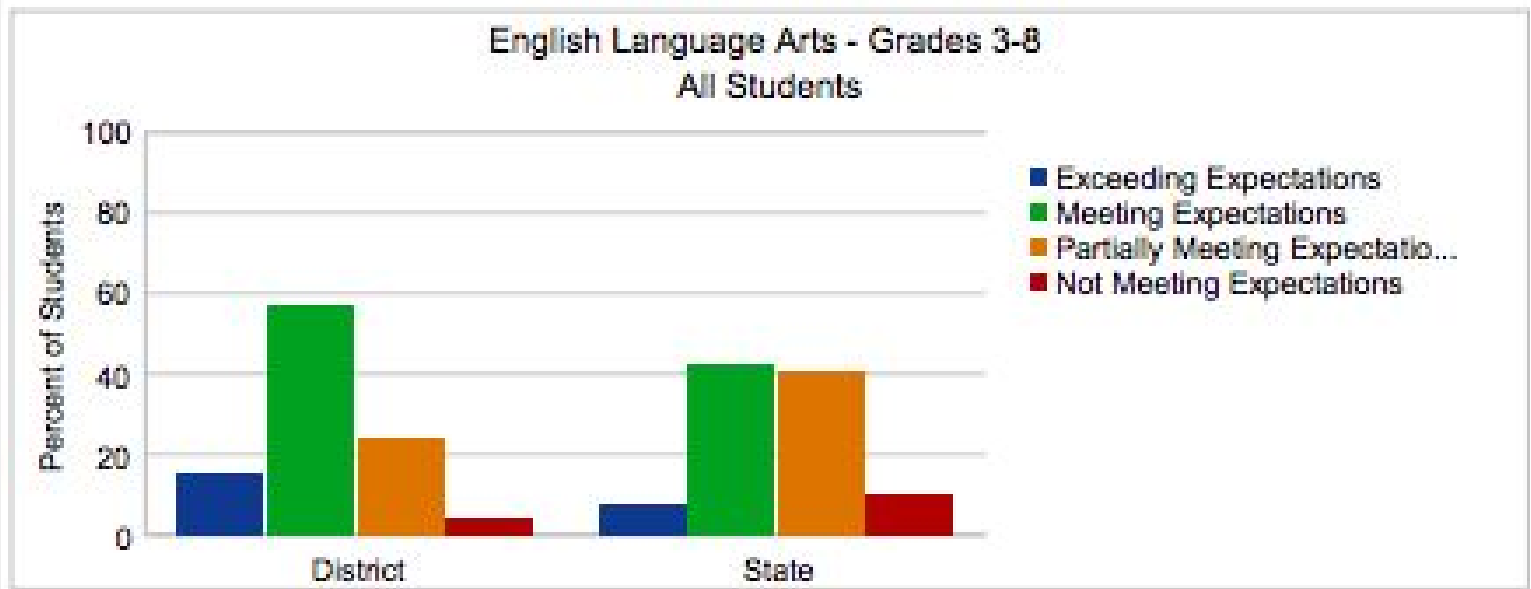
### Individual Test Questions

Question Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Points Earned	1/2	3/4	0/1	0/1	3/3	1/4	1/1	1/1	1/1	0/1	1/1	1/2	1/2	1/1	1/1	0/1	4/4	3/4	0/4	1/1	1/1	1/1	0/1	0/1	0/1	2/3	5/6	0/1	1/1	1/1

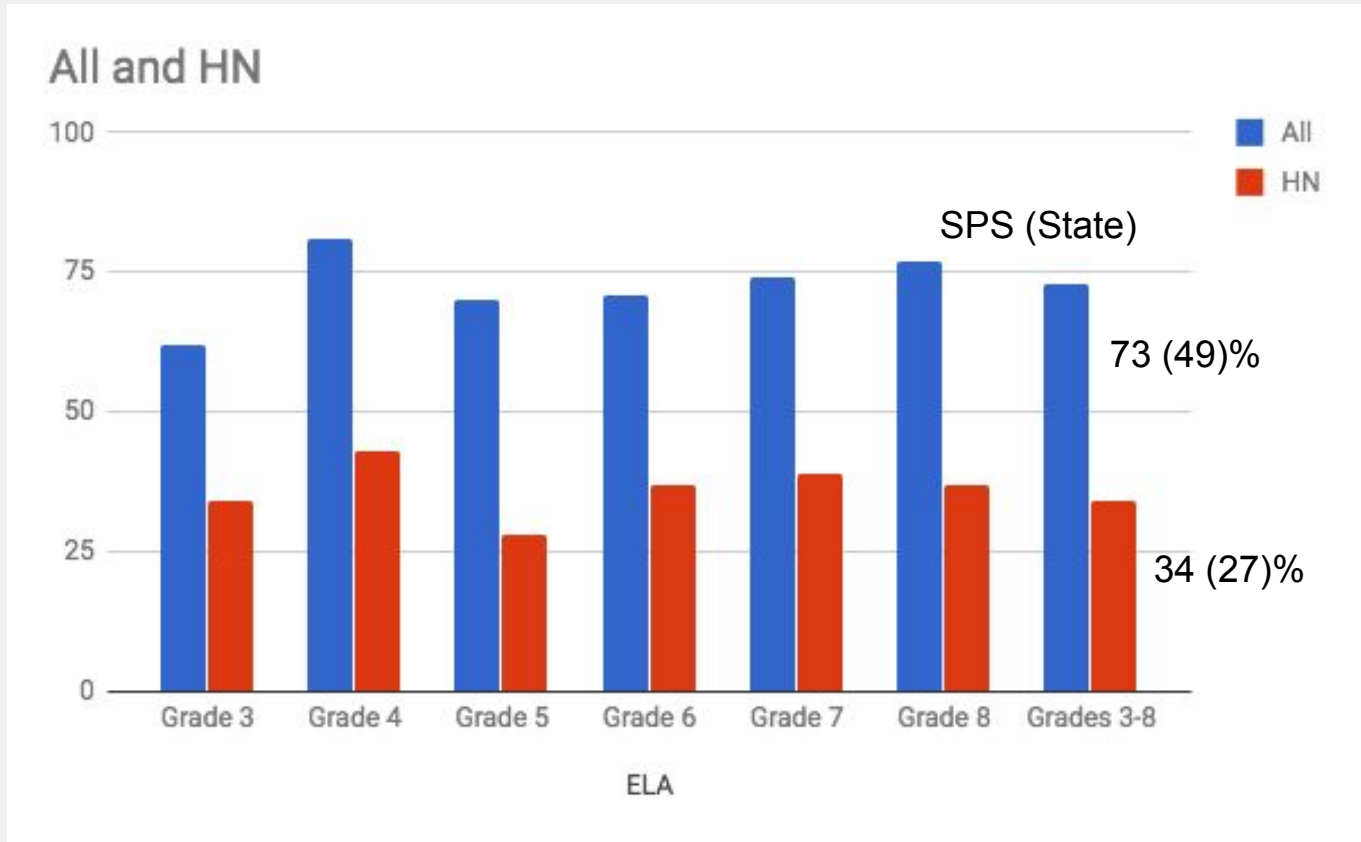
#### Key

x/y = x points earned out of y possible points  
 Blank space/y = no answer provided

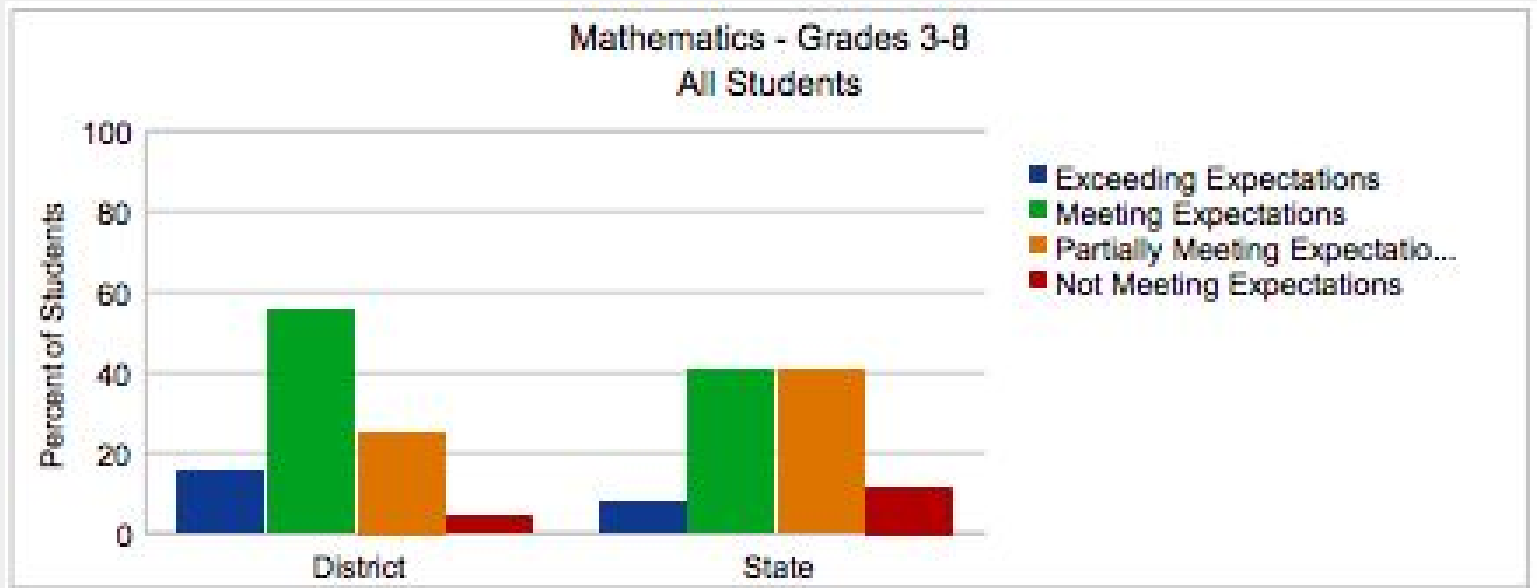
Go online to see a description of every test question at [www.doe.mass.edu/mcas/parents](http://www.doe.mass.edu/mcas/parents).



English Language Arts

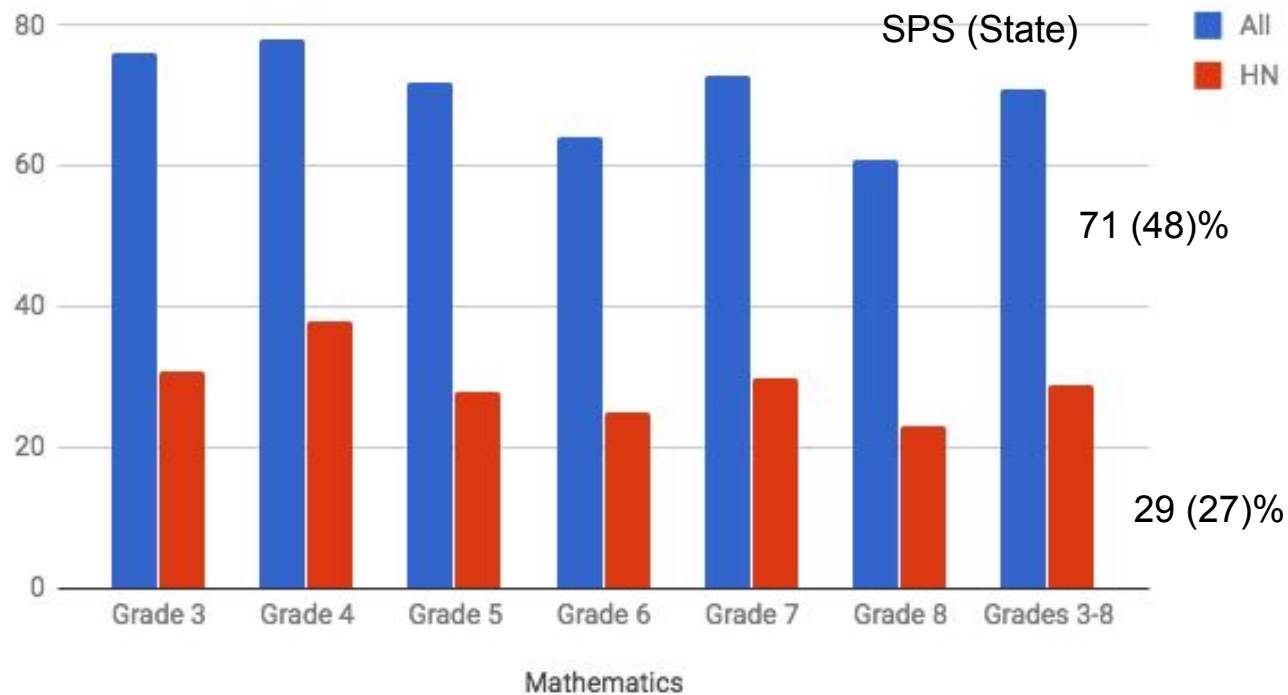


# ELA by Subgroup

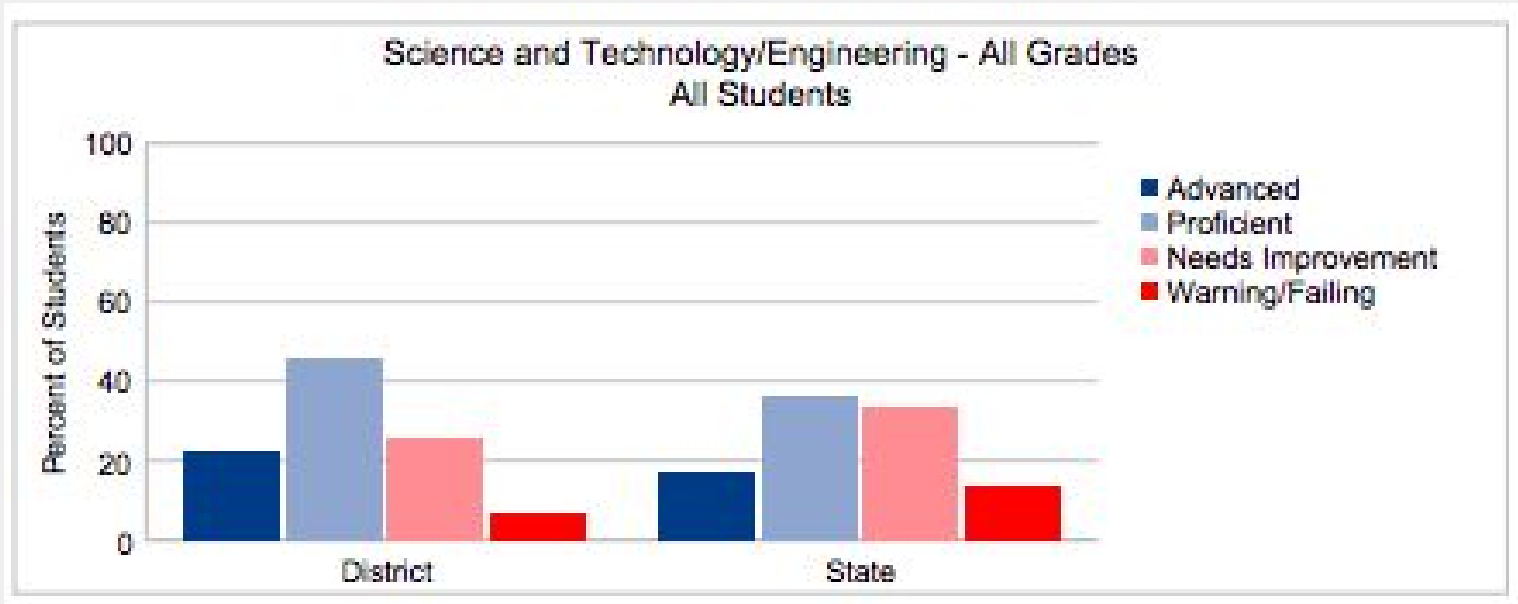


# Mathematics

## All and HN

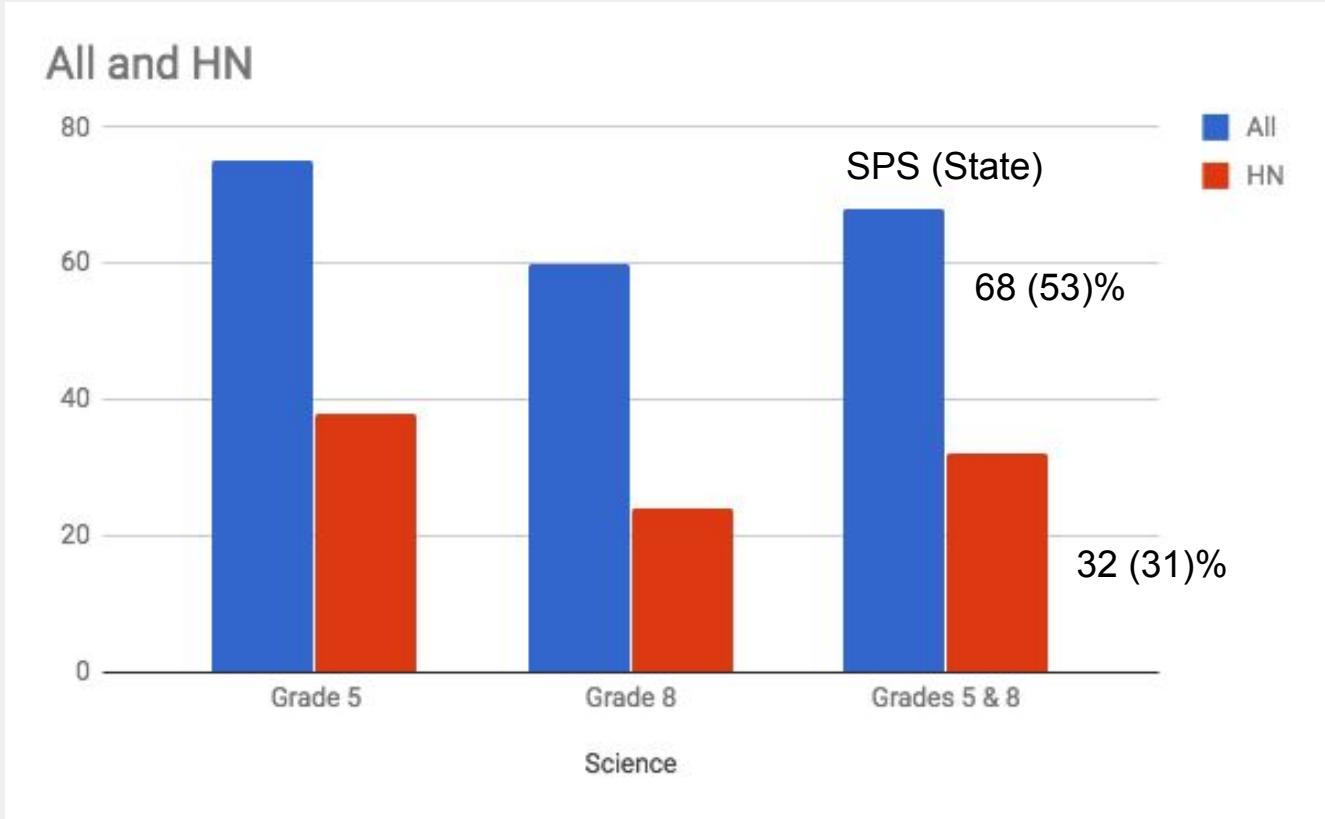


# Mathematics by Subgroup



Science, Tech, Engineering





# STE: by Subgroups

# Understanding the Data

- How are we doing?
- What are we doing well? How can we amplify our successes?
- Who isn't learning? Who aren't we serving? What aren't they learning?
- What in our practice could be causing that?
- What can we do to improve?
- How do we know if it worked?
- What do we do if they don't learn?



Nancy Love, *Using Data to Improve Learning for All*

# Response Strategies



## Progress Monitoring

Monitor student progress using benchmark and formative assessments. Use data to make instructional decisions.



## Aligned Curriculum

Implement aligned curriculum with extension and intervention components for elementary mathematics and science.



## Coaching

Build educator capacity through embedded professional learning, co-teaching, and modeling.



## Collaboration

Increased opportunities for special and general educators to work together to plan for and deliver instruction.



## RtI

Implement tiered instruction using aligned, research-based instructional tools and curriculum.



## PD

Increase educator capacity through collaborative professional development focused on content, instruction, and data literacy.

# References

## DARTs (District Analysis and Review Tools)

<http://profiles.doe.mass.edu/general/general.aspx?topNavID=1&leftNavId=100&orgcode=02880000&orgtypecode=5>



## DESE Parent MCAS Site

<http://www.doe.mass.edu/mcas/parents/>



## SC Presentation

[http://www.sudbury.k12.ma.us/index.php?option=com\\_docman&task=docview&gid=668&Itemid=349](http://www.sudbury.k12.ma.us/index.php?option=com_docman&task=docview&gid=668&Itemid=349)



## Questions & Comments

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