# MILTON PUBLIC SCHOOLS:

## *ACHIEVEMENT & GROWTH ACROSS THE LEVELS*

## AND

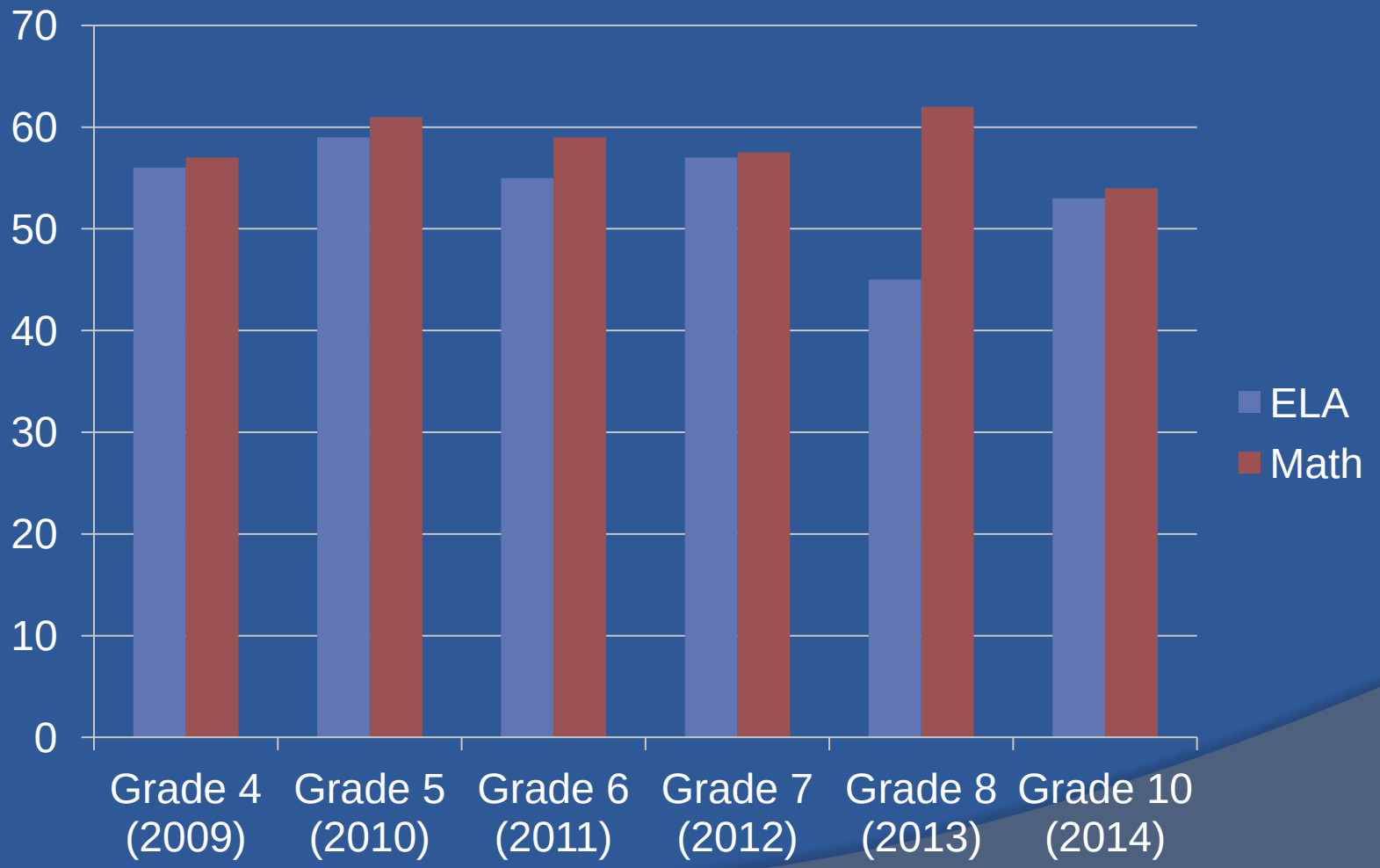
## *REFLECTING ON ADVANCEMENT INITIATIVES*

School Committee Presentation October 15, 2014

# Agenda

- MPS Growth Across the Levels
- MPS Achievement Across the Levels
- Data Driven Decision Making: Reflecting on Advancement Initiatives
  - Elementary Schools
  - Pierce Middle School
  - Milton High School

# MCAS Median SGP 2009-2014



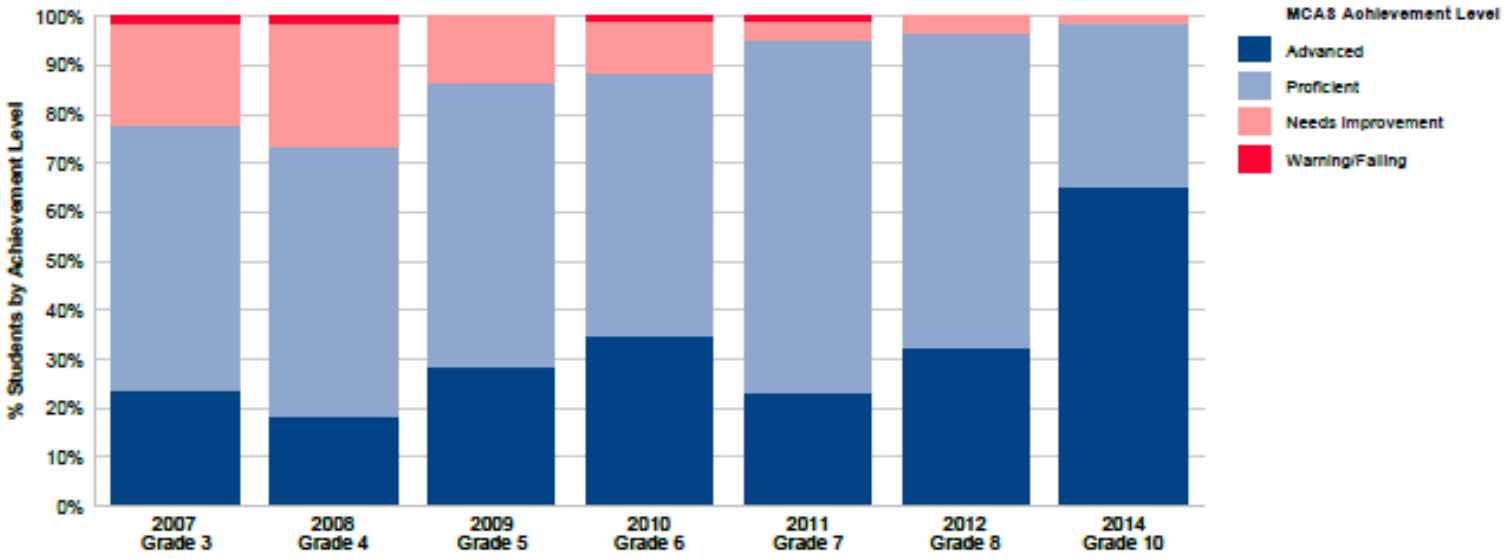
# MCAS Achievement By Year- ELA (Cohort Year of Graduation 2016) Students Who Took **ALL** Tests in MPS

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

**MCAS Cohort Achievement History**
**English Language Arts**

District: Milton
School: Milton High
Cohort: Class of 2016
Source: SIMS Collection (latest*)

Students Included: Students who took all tests at the district




| | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Grade 3 | | Grade 4 | | Grade 5 | | Grade 6 | | Grade 7 | | Grade 8 | | Grade 10 | |
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Advanced | 36 | 24% | 28 | 19% | 43 | 29% | 52 | 35% | 35 | 23% | 49 | 33% | 98 | 65% |
| Proficient | 81 | 54% | 82 | 55% | 87 | 58% | 81 | 54% | 108 | 72% | 96 | 64% | 50 | 33% |
| Needs Improvement | 31 | 21% | 38 | 25% | 20 | 13% | 16 | 11% | 6 | 4% | 5 | 3% | 2 | 1% |
| Warning/Failing | 2 | 1% | 2 | 1% | | | 1 | 1% | 1 | 1% | | | | |
| *Total* | 150 | | 150 | | 150 | | 150 | | 150 | | 150 | | 150 | |

*Latest SIMS collection loaded is June 2013-2014.

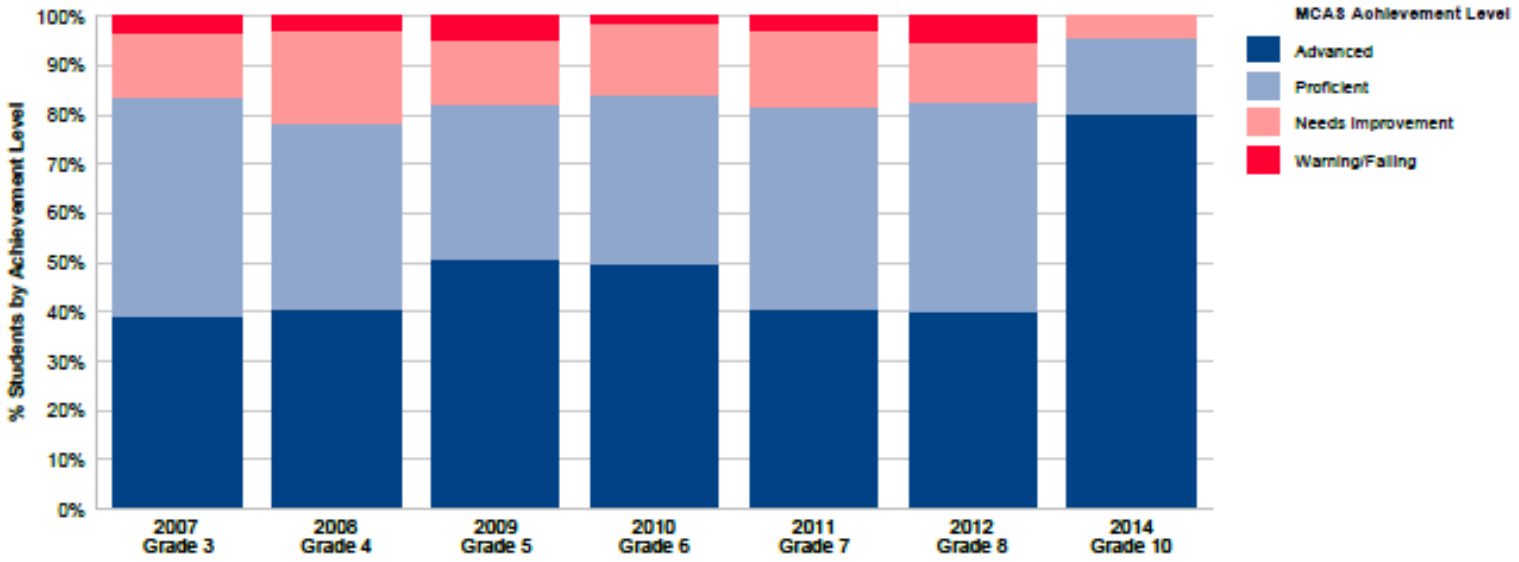
# MCAS Achievement By Year- Math (Cohort Year of Graduation 2016) Students Who Took **ALL** Tests in MPS

Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

**MCAS Cohort Achievement History**
**Mathematics**

District: Milton
School: Milton High
Cohort: Class of 2016
Source: SIMS Collection (latest*)

Students Included: Students who took all tests at the district




| | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Grade 3 | | Grade 4 | | Grade 5 | | Grade 6 | | Grade 7 | | Grade 8 | | Grade 10 | |
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % |
| Advanced | 60 | 39% | 62 | 41% | 77 | 51% | 76 | 50% | 62 | 41% | 61 | 40% | 122 | 80% |
| Proficient | 67 | 44% | 57 | 38% | 48 | 32% | 52 | 34% | 62 | 41% | 65 | 43% | 24 | 16% |
| Needs Improvement | 20 | 13% | 29 | 19% | 20 | 13% | 22 | 14% | 24 | 16% | 18 | 12% | 6 | 4% |
| Warning/Failing | 5 | 3% | 4 | 3% | 7 | 5% | 2 | 1% | 4 | 3% | 8 | 5% | | |
| *Total* | 152 | | 152 | | 152 | | 152 | | 152 | | 152 | | 152 | |

* Latest SIMS collection loaded is June 2013-2014.

# District Elementary Schools

Data Driven Decision Making:  Reflecting on Advancement Initiatives

# Elementary Schools: Reflection on Advancement Initiatives- *Early Literacy*

*What Worked:*

- The implementation of district-wide internal reading assessments K-5 to help support targeted instruction and inform district-level supports
- The full implementation of Readers' Workshop in Grades 1-2
- Reading Specialist support for Grades 1-2

*Reflection /Additional Concerns identified:*

- Our internal reading assessment data showed significant growth in reading proficiency in grades 1 & 2 (Grade 1 English students went from 68% on or above benchmark to 86% from September 2013 to June 2014, and Grade 2 went from 81% to 86% on or above benchmark from September to June
- 3rd grade MCAS data continues to stay consistent with similar levels of students in proficient and advance (2012-71%, 2013-71%, 2014-69%)
- F&P and SRI data provides information regarding reading levels and in the case of F&P provides insights on reading behaviors; however, they are not a direct indicator of performance on MCAS

# Elementary Schools: Reflection on Advancement Initiatives- *Early Literacy*

*2014-2015 Focus:*

- Increase reading specialist support to service students in need of reading interventions in grades 1-3
- Utilize a reading coach to work with students and teachers across the district with a targeted focus on Grade 3
- Focus on writing instruction in all content areas with a specific focus on the implementation of Writers' Workshop and writing in response to text
- Target professional development in Readers' and Writers' Workshop
- Provide additional instructional coaching support for all teachers K-5
- Develop growth bands to measure student growth on internal assessments
- Implement Teaching Strategies GOLD in all kindergarten classrooms to measure growth
- Utilize technology to streamline assessment and analysis practices
- Increase access to mentor text and leveled libraries to support Readers' Workshop instruction

# Elementary Schools: Reflection on Advancement Initiatives- *Science and Tech/Engineering*

*What Worked:*

- Elementary Science coordinator working with classroom teachers K-5
- STEM curriculum in Grades 1,2 and increasing support in Grade 5 in general science instruction and content
- Students K-5 had the opportunity to participate in enrichment opportunities in and outside of school to increase exposure to STEM
- Science from Scientists pilot in two schools

*Reflection/Additional Concerns identified:*

- There continues to be a need to increase the number of students scoring in Proficient and Advanced
- Students need to write more in content areas
- Teachers need increased professional development in science

# Elementary Schools: Reflection on Advancement Initiatives- *Science and Tech/Engineering*

*2014-2015 Focus:*

- Elementary Science coordinator continuing to support K-5 teachers with an increased focus on STEM Grade 3 & proficiency in Grade 5
- District wide increase in professional development for new FOSS curriculum in Grade 3-5
- Continued Outdoor classroom collaboration; continued STEM enrichment opportunities planned for the 2014-2015 academic year
- Science from Scientists to be implemented for all Grade 5 Science classrooms
- Science notebooking in grades 3-5 to increase proficiency in Open Responses

# Elementary Schools: Reflection on Advancement Initiatives- *Closing Proficiency Gaps*

*What Worked:*

- Structured data analysis meetings in both ELA and Math to reflect on individual student needs and collaboratively plan targeted instruction
- Targeted instruction in the classroom in small groups in ELA and Math to support ALL students at their individual instructional levels
- Extended day programs for students who fell below proficiency

*Reflection/Additional Concerns:*

- Need to support teachers to enhance instructional practices for small group instruction and integration of technology to enhance instructional practices
- Continue to identify students in subgroups performing below benchmark and proficiency and individualize instruction and develop a Student Success Plan for each student
- Provide extended day programs earlier in the school year

# Elementary Schools: Reflection on Advancement Initiatives- *Closing Proficiency Gaps*

*2014-15 Focus:*

- Identify Extended learning Curriculum
- Establish extended learning opportunities earlier in the year
- Increase technology
- Increase inclusion methods for special education and reading specialist services

# Pierce Middle School

Data Driven Decision Making:  Reflecting on Advancement Initiatives

# Pierce Middle School: Reflection on Advancement Initiatives- *(Early) Literacy*

- **Strategy:** *Follow the Early Literacy Model*

Data Observations:

- 62% of students who received reading intervention moved more than 4 levels (above average growth)
- 24% of students who received reading intervention moved 4 levels (typical growth)
- 14% of students who receive reading intervention moved fewer than 4 levels (below average growth)
  - *Fountas & Pinnell Benchmark Assessment System- 4 levels is expected growth*
- Median SGP on 2014 ELA MCAS for students receiving reading intervention everyday= 72.5
- Median SGP on 2014 ELA MCAS for students receiving reading intervention every other day= 54
  - *Median SGP on 2014 ELA MCAS for all 6th grade students= 47*

2014-2015 Focus

- Discontinue intervention for students who no longer require it.
- Continue everyday/every other day as needed.

# Pierce Middle School: Reflection on Advancement Initiatives- *Science and Tech/Engineering*

- **Strategy**: *An Infusion of Science Curriculum Materials & Professional Development*

Data Observations:

- Percentage of students scoring average of 2 or more on Science Tech/Engineering Open Response items on 2014 STE MCAS is 10% above the State.
- Percentage of students scoring Proficient/Advanced on 2014 STE MCAS is now 6% above the State.
- Pierce earned extra credit points for shifting African American/Black students into Advanced categories STE.
- Pierce increased the number of students w/disabilities in Proficient/Advanced in STE by 10%.

Focus for 2014-2015

- Continue implementation of science notebooks.
- Continue to look collaboratively at student work and commons assessment data.
- Full curriculum implementation with fidelity; revisions as necessary.

# Pierce Middle School: Reflection on Advancement Initiatives- *Closing Proficiency Gaps*

- **Strategy:** *Target the Intervention to the Needs of the Student*

**Data Observations--Math Investigations**

- Median SGP on the 2014 Math MCAS is 52 for students who took Math Investigations. This is higher than the median for the school (46) and significantly higher than the median for the low income subgroup (37).
- Median SGP on the 2014 Math MCAS of 52 for students in Math Investigations is higher than their median on the 2014 ELA MCAS (45), which suggests the higher SGP for Math Investigations students is attributable to that particular intervention.

**Focus for 2014-2015**

- Continue curriculum/program development
- Develop growth measures and progress monitoring tools for this class

**Data Observations- Pierce Academy**

Median SGP on the 2014 MCAS for students who attended Pierce Academy:

- Grade 6 Median SGP= 29.5 (ELA); 24 (Math)
  - [Median SGP for Grade 6 Low Income Subgroup= 49(ELA); 36.5(Math)]
- Grade 7 Median SGP= 56(ELA); 34 (Math)
  - [Median SGP for Grade 7 Low Income Subgroup= 48(ELA); 29(Math)]
- Grade 8 Median SGP= 77(ELA); 45 (Math)
  - [Median SGP for Grade 6 Low Income Subgroup= 48(ELA); 38(Math)]

**Focus for 2014-2015**

- Continue with current structure- 10 per grade level
- Further develop the program- goal setting and reflection; family connections
- Develop additional measures of success

# Milton High School

Data Driven Decision Making:  Reflecting on Advancement Initiatives

# Milton High School: Reflection on Advancement Initiatives- *(Early) Literacy*

*Observations:*

- Milton High students would benefit from the strategies provided by a Reading Specialist

*Focus for 2014-15:*

- Identify students who are reading below grade level in grades 9 and 10; have a reading specialist work with identified students to improve reading skills

# Milton High School: Reflection on Advancement Initiatives- *Science and Tech/Engineering*

*What Worked:*

- The earlier administration of the Biology Final exam has let teachers identify student strengths and weaknesses prior to the MCAS Biology exam

*Focus for 2014-15:*

- Implement teacher-developed STEM units in Biology classes
- Revise curriculum for all science courses (excluding Biology) to meet the new MA Standards for Science, Technology and Engineering
- Implement new lab software (Vernier) in all core science courses

# Milton High School: Reflection on Advancement Initiatives- *Closing Proficiency Gaps*

*What Worked:*

- Creation of "At-Risk Informational Chart"
  - At-risk students were identified by MCAS scores, school academic performance, attendance, and teacher concern
  - Informs teachers of support services for at-risk students and identifies students that need additional support
- Enhancement of the Bridge Program
  - Increased parent participation
  - Inclusion of science in addition to mathematics and English
- MCAS Grant
  - Targeted support for students who are at-risk or failing

*Focus for 2014-15:*

- Continued identification of at-risk students
- Implementation of math support classes
- Identify additional measures of success for the Bridge Program
- Expansion of the math, science, and English inclusion classes
- Using common planning time to share strategies for struggling students and best practices in differentiated instruction to help students grow