## 2016 MCAS/PARCC Data \&

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## Our Education System

## State Assessments (PARCC/MCAS/

MCAS 2.0) serve as one measure of many used to inform teaching and learning, as together we nurture the whole child.

They measure the outcomes of a standards-based curriculum in ELA, math, and science, and can be helpful in better aligning our curriculum.

## Agenda

The 'Why'?
Introduction (Accountability, PPI, CPI, Concepts)
The 'What'?
Math, ELA, \& Science-5-Year History
Student Growth Percentile (SGP)
Disaggregated Data
The 'How'?
Action Plan \& Improvement Benchmarks
Q\&A

The 'Why'?

## Common Core State Standards (CCSS) ${ }^{+}$

Content = What all students need to know Performance = What students should be able to do

- The development and adoption of a common core of standards in English language arts and mathematics for grades K-12.
$\checkmark$ Not a national curriculum, rather universal standards
$\checkmark$ Common Core Plus-Massachusetts' additions to CCSS (MA DESE)
$\checkmark$ Accountability is a cornerstone to the reauthorization.
Education reform:
Reauthorization of NCLB:
- Goal was to establish the United States as the global standard for public education.
- Addition of: Progress \& Performance Index (PPI) \& Student Growth Percentile (SGP) (On next slide)

ESSA- On December 10, 2015, the Elementary and Secondary Education Act ( $1^{\text {st }}$ reauthorized as the No Child Left Behind Act) was again reauthorized as the Every Student Succeeds Act (ESSA). Maintains certain accountability requirements for schools, which take effect in SY 2017-18.

## Key Vocabulary

## Accountability - State Assessments (MCAS/PARCC) used for:

- Improvements in teaching, learning, \& curriculum alignment to standards
- School and district accountability
- Student accountability

PPI ~80 percent of schools in MA are classified into Level 1 or 2 based on the cumulative Progress and Performance Index (PPI) for the "all students" and high needs groups. Watertown is a Level 2 district.
CPI - Massachusetts uses the 100-point Composite Performance Index (CPI) to measure progress towards the goal of narrowing proficiency gaps. The CPI assigns $100,75,50,25$, or 0 points to each student participating in PARCC, MCAS, and MCAS Alternate Assessment (MCAS-Alt) tests based on how close they came to scoring Proficient or Advanced.
Achievement Gap = Difference between CPI for All Students v. a subgroup

to PARCC

to MCAS 2.0
(NOTE: Spring 2016 state-level achievement and growth results in grades 3-8 ELA and Mathematics are not reported for PARCC or MCAS.)

## Student Growth Model

## Student Growth Percentile (SGP)

- Tells educators how much a student has grown over the previous year compared to his or her academic peers.
- Example - A student in the $60^{\text {th }}$ percentile in Grade 5 Math showed stronger growth than 60 percent of students who had similar growth on Grades 3 \& 4 assessments.

| SGP Range | Description |
| :--- | :--- |
| $1-39$ | Lower <br> Growth |
| $40-59$ | Moderate <br> Growth |
| $60-99$ | Higher <br> Growth |

## Statewide MCAS Trend Results Disaggregated by Subgroup

Statewide MCAS Results by Student Status
Ex. Grade 4 ELA -\%age of Students at Each Achievement Level 2009 - 2015

| Students with Disabilities |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Year | A | P | NI | W | SGP |
| 2015 | 1 | 15 | 42 | 43 | 36.0 |
| 2014 | 1 | 14 | 41 | 44 | 37.0 |
| 2013 | 1 | 13 | 40 | 46 | 34.0 |
| 2012 | 1 | 17 | 38 | 44 | 37.0 |
| 2011 | 1 | 14 | 44 | 41 | 36.0 |
| 2010 | 1 | 15 | 44 | 40 | 36.0 |
| 2009 | 1 | 15 | 44 | 39 | 34.0 |

NOTE: Spring 2016 state-level achievement and growth results in grades 3-8 ELA and Mathematics are not reported because most students in Massachusetts participated in the PARCC test.
Statewide - Grade 4 Students w/Disabilities A/P level hasn't risen above 18 percent in 7 years in both Math and ELA

## Massachusetts and Watertown Profiles

Selected Populations (2015-16)

| Title | \% of <br> State | \% of <br> Cunniff <br> School | \% of <br> Hosmer <br> School | \% of <br> Lowell <br> School | \% of <br> WMS <br> School | \% of <br> WHS <br> School |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| First Language <br> not English | 19.0 | 30.0 | 33.2 | 28.0 | 34.3 | 36.3 |
| English <br> Language <br> Learner (ELL) | 9.0 | 12.3 | 15.2 | 10.8 | 6.4 | 6.1 |
| Students With <br> Disabilities | 17.2 | 18.4 | 21.5 | 17.2 | 24.9 | 20.1 |
| High Needs | 43.5 | 39.4 | 46.9 | $\mathbf{3 7 . 3}$ | 45.1 | 42.4 |
| Economically <br> Disadvantaged | 27.4 | 18.4 | 23.4 | 19.2 | 23.8 | $\mathbf{2 2 . 1}$ |

The significant difference in ELL population from elementary to middle and high school is the largely the result of student growth whereby some students are no longer determined to be limited English language proficient (now FLEP), some moving (churn rate), and some attending Minuteman at the HS level.

## Key factors about churn rate in WPS schools:

Approximately $30 \%$ of current WHS 10th grade students have been enrolled in district schools for less than seven years, suggesting that less than $70 \%$ of students receive a K-12 Watertown education.

- Of particular concern is the churn rate among Limited English Proficient (LEP) students, which for school year 2016 is $30 \%$ for the district.

The rate of churn among LEPs has been rising in recent years from $22 \%$ in 2014 to its current rate of $30 \%$ district wide.

Considering the high school separately, the churn rate among LEPs rises to 42\%.

The impact of churn, while apparent in testing results, is felt most keenly at the classroom level with students arriving at various points in the year, some lacking skills that must then be backfilled or retaught in order for the student to progress in the WPS curriculum.

The 'What'?

## Principal Presentations

- Cunniff
- Hosmer
- Lowell
- WMS
- WHS


## MCAS/PARCC 5-yr ELA <br> Cunniff v. State



## MCAS/PARCC 5-yr Math Cunniff v. State



## Cunniff School Median Student Growth Percentile (SGP) by Grade

|  | ELA SGP | ELA (N) | Math SGP | Math (N) |
| :---: | :---: | :---: | :---: | :---: |
| Grade 5 | 58.5 | 48 | 55.5 | 48 |
| Grade 4 | 43.5 | 48 | 34.5 | 48 |

$\checkmark$ Typical (moderate) growth = Grade 5 ELA and math, Grade 4 ELA
$\checkmark$ Lower growth = Grade 4 math
$\checkmark$ The SGP compares a student's MCAS score with the scores of all students in the state at that grade level who received similar MCAS scores in prior years. Most school and district median SGPs tend to range between 40 and 60

*Asian, African American, American Indian, and Multi-Race not included separately as $\mathrm{N}<10$.

## MCAS/PARCC 5-yr ELA <br> Hosmer v. State



## MCAS/PARCC 5-yr Math Hosmer v. State



## Hosmer School Median Student Growth Percentile (SGP) by Grade, 2016

Median SGP by Grade, 2016 - Hosmer

|  | ELA SGP | ELA (N) | Math SGP | Math (N) |
| :---: | :---: | :---: | :---: | :---: |
| Grade 5 | 38.0 | 68 | 33 | 67 |
| Grade 4 | 43.5 | 74 | 40.0 | 73 |

$\checkmark$ Typical (moderate) growth = Grade 4 ELA and math
$\checkmark$ Lower growth $=$ Grade 5 ELA and math
$\checkmark$ The SGP compares a student's MCAS score with the scores of all students in the state at that grade level who received similar MCAS scores in prior years. Most school and district median SGPs tend to range between 40 and 60

Hosmer Accountability by Subgroups
Percent Scored at Levels $4 \& 5$ (Meet or Exceed Expectations)

|  | Grade 3 <br> ELA/Math | Grade 4 <br> ELA/Math | Grade 5 <br> ELA/Math |
| :--- | :---: | :---: | :---: |
| By Grade Level | $\mathbf{4 0}(741) / 42(742)$ | $\mathbf{5 4}(751) / 45(744)$ | $\mathbf{5 7 ( 7 5 8 ) / 4 9 ( 7 5 0 )}$ |
| Overall | ELA | Math |  |
| All | 50 | 45 |  |
| High Needs | 29 | 29 |  |
| Econ. Disadvantaged | 35 | 30 |  |
| ELL/Former ELL | 23 | 21 |  |
| Students w/Disabilities | 20 | 24 |  |
| Hispanic/Latino | 35 | 45 |  |
| White | 51 | 46 |  |
| Asian | 68 | 48 |  |
| Multi-race, Non-Hisp. | 62 | 54 |  |

*African American and American Indian not included separately as N <10.
Subgroups with an achievement gap of 20+ \%age points

## MCAS/PARCC 5-yr ELA Lowell v. State



## MCAS/PARCC 5-yr Math <br> Lowell v. State



## Lowell School Median Student Growth Percentile (SGP) by Grade, 2016

## Median SGP by Grade, 2016 - Lowell

|  | ELA SGP | ELA (N) | Math SGP | Math (N) |
| :---: | :---: | :---: | :---: | :---: |
| Grade 5 | 64 | 57 | 35 | 57 |
| Grade 4 | 46 | 51 | 47 | 51 |

$\checkmark$ High growth = Grade 5 ELA
$\checkmark$ Lower growth = Grade 5 math
$\checkmark$ All other growth considered typical (moderate) growth
$\checkmark$ The SGP compares a student's MCAS score with the scores of all students in the state at that grade level who received similar MCAS scores in prior years. Most school and district median SGPs tend to range between 40 and 60

Lowell Accountability by Subgroups Percent Scored at Levels 4 \& 5 (Meet or Exceed Expectations)

|  |  |  | Grade 4 <br> ELA/Math | Grade 5 <br> ELA/Math |
| :---: | :---: | :---: | :---: | :---: |
| By Grade Level | 67(76 | 63 | (760)/58(752) | 76(767)/60(754) |
| Overall |  | ELA |  | Math |
| All |  | 69 |  | 63 |
| High Needs |  | 44 |  | 36 |
| Econ. Disadvantaged |  | 50 |  | 36 |
| ELL/Former ELL |  | 52 |  | 48 |
| Students w/Disabilities |  | 18 |  | 20 |
| Hispanic/Latino |  | 50 |  | 39 |
| White |  | 71 |  | 67 |
| Asian |  | 60 |  | 60 |
| Multi-race, Non-Hisp. |  | 91 |  | 64 |

*African American and American Indian not included separately as $\mathrm{N}<10$.
Subgroups with an achievement gap of 20+ \%age points

## MCAS/PARCC 5-yr ELA <br> WMS v. State



## MCAS/PARCC 5-yr Math WMS v. State



## WMS Median Student Growth Percentile (SGP) by Grade, 2016

|  | ELA SGP | ELA (N) | Math SGP | Math (N) |
| :---: | :---: | :---: | :---: | :---: |
| Grade 8 | 42 | 152 | 52 | 150 |
| Grade 7 | $\boxed{4}$ | 195 | 70 | 192 |
| Grade 6 | $\boxed{55}$ | 145 | 35 | 145 |

$\checkmark$ High growth = Grade 7 Math
$\checkmark$ Lower growth = Grade 6 math
$\checkmark$ All other growth considered typical (moderate) growth
$\checkmark$ The SGP compares a student's MCAS score with the scores of all students in the state at that grade level who received similar MCAS scores in prior years.
Most school and district median SGPs tend to range between 40 and 60

|  | Grade 6 <br> ELA/Math | Grade 7 <br> ELA/Math | Grade 8 <br> ELA/Math |
| :--- | :---: | :---: | :---: | :---: |
| By Grade Level | 72(761)/51(748) | 67(754)/61(755) | 64(758)/54(750) |
| Overall | ELA | Math |  |
| All | 68 | 56 |  |
| High Needs | 46 | 36 |  |
| Econ. Disadvantaged | 57 | 48 |  |
| ELL/Former ELL | 38 | 34 |  |
| Students w/Disabilities | 23 | 11 |  |
| Hispanic/Latino | 52 | 41 |  |
| White | 70 | 59 |  |
| Asian | 69 | 63 |  |
| Multi-race, Non-Hisp. | 78 | 74 |  |
| African American | 68 | 33 |  |

*American Indian not included separately as $\mathrm{N}<10$.

|  | Subgroups with an achievement gap of 20+ \%age points |
| :--- | :--- |

## MCAS 5-yr Science in Grades 5, 8, 10 Watertown v. State



## MCAS 5-yr ELA <br> WHS, Grade 10 v. State



## MCAS 5-yr Math WHS, Grade 10 v. State



## WHS Accountability by Subgroups Percent Scored at AIP Levels

|  | Science (N) | ELA (N) | Math (N) |
| :--- | :---: | :---: | :---: |
| All | $79(148)$ | $95(155)$ | $83(157)$ |
| Students w/Disabilities | $46(35)$ | $81(37)$ | $48(38)$ |
| Econ. Disadvantaged | $58(40)$ | $85(40)$ | $66(41)$ |
| High Needs | $61(61)$ | $88(64)$ | $63(66)$ |
| Hispanic/Latino | $80(15)$ | $94(16)$ | $77(17)$ |
| White | $81(118)$ | $95(125)$ | $85(125)$ |

*Asian, African American, American Indian, ELL, and Multi-Race not included separately as $\mathrm{N}<10$.

Subgroups with an achievement gap of 20+ \%age points

The 'How'?

## Develop Action Plans w/Benchmarks

$\checkmark$ Self-assess identified needs using Conditions for School Effectiveness as the lens; focusing on a few those closest to the instructional core (on next slide)
$\checkmark$ Link to analysis of data \& other evidence of impact
(MCAS, all reading assessments, formative/common assessments across disciplines)
$\checkmark$ Identify strengths \& areas for improvement
$\checkmark$ Use high leverage strategies to guide plan development (RTI blocks, PLCs, MCAS 2.0 Academy K-8, HS MCAS classes (Math/ELA/Science), etc.)
$\checkmark$ Complete Individual Student Success Plans (ISSPs)/Title 1

## Massachusetts, DESE

## Conditions for School Effectiveness

$\checkmark$ Effective district systems for support \& intervention
$\checkmark$ Effective school leadership
$\checkmark$ Aligned curriculum
$\checkmark$ Effective instruction
$\checkmark$ Student assessment
$\checkmark$ Principal's staffing authority
$\checkmark$ Professional development \& structures for collaboration
$\checkmark$ Tiered instruction \& adequate learning time
$\checkmark$ Students' social, emotional, \& health needs
$\checkmark$ Family-school engagement
$\checkmark$ Strategic use of resources \& adequate budget authority

## Primary District Assistance Avenues

$\diamond$ Prioritize the students and schools with the highest needs
$\diamond$ Reserve a portion of Title I, Part A funds commensurate with the scope of the high needs
$\diamond$ Leverage the Power of Collaborative Expertise (principals, curriculum coordinators, central office administrators, teachers) by structuring opportunities for focused curricular collaboration
$\diamond$ Plan targeted professional development to meet the articulated needs

## How parents can partner with us?

$\checkmark$ Read to or with your child/adolescent
$\checkmark$ Practice writing (Ex. Writing in any content area)
$\checkmark$ Encourage attendance at after-school homework help, afterschool tutoring at WMS \& WHS, and MCAS Academy in late winter for grades 3-8
$\checkmark$ Check out MA DESE website for released PARCC/MCAS questions
$\checkmark$ Keep student attendance high (limit tardies)
$\checkmark$ Support teachers' efforts, and assume integrity
$\checkmark$ Encourage daily math facts/skills practice (online or other)
$\checkmark$ Find opportunities to celebrate your child's academic successes (whether small or large)
$Q \& A^{\prime} s ?$

