

MCAS & Accountability

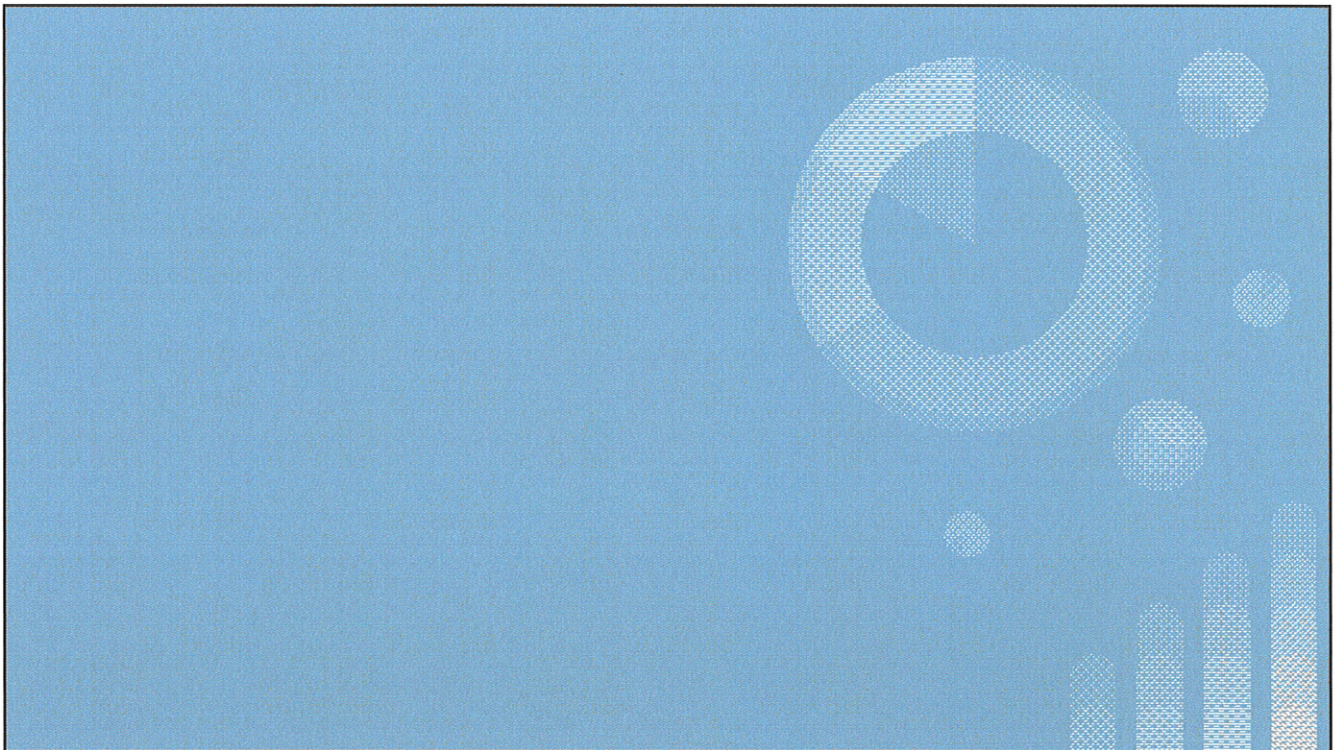
Contextualizing the 2018 MCAS Results

Contextualizing the Assessment



GRADE 3-8 5 Year Assessment Timeline

- 2012-2013- MCAS
- 2013-2014- MCAS
- 2014-2015- PARCC Paper (3-8)
- 2015-2016- PARCC Paper (3-7) online (8)
- 2016-2017- MCAS 2.0 online
- 2017-2018- MCAS 2.0 online





Non High school Accountability Weight

Indicator	Measures	Weighting (3:1)	
		With EL	No EL
Achievement	ELA, math, & science achievement	60%	67.5%
Student Growth	ELA & math SGP	20%	22.5%
English Language Proficiency	Progress made by students towards attaining English language proficiency	10%	--
Additional Indicators	Chronic absenteeism	10%	10%



High School Accountability Weight

Indicator	Measures	Weighting (3:1)	
		With EL	No EL
Achievement	ELA, math, & science achievement	40%	47.5%
Student Growth	ELA & math SGP	20%	22.5%
High School Completion	Four-year cohort graduation rate Extended engagement rate Annual dropout rate	20%	20%
English Language Proficiency	Progress made by students towards attaining English language proficiency	10%	--
Additional Indicators	Chronic absenteeism Advanced coursework completion	10%	10%

Sample Accountability Determination

Indicator	All students (50%)			Lowest performing students (50%)		
	Points earned	Total possible points	Weight	Points earned	Total possible points	Weight
ELA scaled score	3	4	-	2	4	-
Math scaled score	2	4	-	2	4	-
Science achievement	2	4	-	-	-	-
Achievement total	7	12	60%	4	8	67.5%
ELA SGP	4	4	-	4	4	-
Math SGP	3	4	-	4	4	-
Growth total	7	8	20%	8	8	22.5%
EL progress	2	4	10%	-	-	-
Chronic absenteeism	3	4	10%	4	4	10%
Weighted total	6.1	9.6	-	4.9	7.6	-
Percentage of possible points	63.5%		-	64.5%		-
Criterion-referenced target percentage	64%					

District- Not Requiring Assistance or Intervention

Progress toward improvement targets												
Indicator	All students (Non-high school grades)			Lowest performing students (Non-high school grades)			All students (High school grades)			Lowest performing students (High school grades)		
	Points earned	Total possible points	Weight %	Points earned	Total possible points	Weight %	Points earned	Total possible points	Weight %	Points earned	Total possible points	Weight %
Weighted total	3.2	9.6	-	5.1	7.6	-	3.6	10.7	-	6.3	7.6	-
Percentage of possible points	33%		-	67%		-	34%		-	83%		-
Percentage of possible points by gradespan	50%						59%					
	Weight of non-high school results: 70%						Weight of high school results: 30%					
Criterion-referenced target percentage	53%											
	Partially meeting targets											

2018 Special Education Assistance Determination

Meets Requirements (MR)

- Overall classification = “not requiring assistance or intervention” and criterion-referenced target percentage is greater than 49; and
- No outstanding concerns about compliance with state and federal obligations for special education

Overall results

Green Meadow
Not Requiring Assistance or Intervention

Progress toward improvement targets		All students (Non-high school grades)			Lowest performing students (Non-high school grades)		
Indicator		Points earned	Total possible points	Weight %	Points earned	Total possible points	Weight %
Achievement	English language arts achievement	2	4	-	-	-	-
	Mathematics achievement	1	4	-	-	-	-
	Science achievement	-	-	-	-	-	-
	Achievement total	3	8	90.0	-	-	-
Growth	English language arts growth	-	-	-	-	-	-
	Mathematics growth	-	-	-	-	-	-
	Growth total	-	-	-	-	-	-
High school completion	Four-year cohort graduation rate	-	-	-	-	-	-
	Extended engagement rate	-	-	-	-	-	-
	Annual dropout rate	-	-	-	-	-	-
	High school completion total	-	-	-	-	-	-
Progress toward attaining English language proficiency	English language proficiency total	-	-	-	-	-	-
Additional indicators	Chronic absenteeism	0	4	-	-	-	-
	Advanced coursework completion	-	-	-	-	-	-
	Additional indicators total	0	4	10.0	-	-	-
Weighted total		2.7	7.6	-	-	-	-
Percentage of possible points		36%			-		
Criterion-referenced target percentage		36%			-		
		Partially meeting targets					

Fowler School

Not Requiring Assistance or Intervention

Overall results

Progress toward improvement targets		All students (Non-high school grades)			Lowest performing students (Non-high school grades)		
Indicator		Points earned	Total possible points	Weight %	Points earned	Total possible points	Weight %
Achievement	English language arts achievement	2	4	-	0	4	-
	Mathematics achievement	3	4	-	3	4	-
	Science achievement	0	4	-	-	-	-
	Achievement total	5	12	67.5	3	8	67.5
Growth	English language arts growth	2	4	-	2	4	-
	Mathematics growth	2	4	-	2	4	-
	Growth total	4	8	22.5	4	8	22.5
High school completion	Four-year cohort graduation rate	-	-	-	-	-	-
	Extended engagement rate	-	-	-	-	-	-
	Annual dropout rate	-	-	-	-	-	-
	High school completion total	-	-	-	-	-	-
Progress toward attaining English language proficiency	English language proficiency total	-	-	-	-	-	-
Additional indicators	Chronic absenteeism	0	4	-	2	4	-
	Advanced coursework completion	-	-	-	-	-	-
	Additional indicators total	0	4	10.0	2	4	10.0
Weighted total		4.3	10.3	-	3.1	7.6	-
Percentage of possible points		42%			41%		
Criterion-referenced target percentage		42%					
		Partially meeting targets					

High School

Requiring Assistance or Intervention- Low Subgroup Performance High Needs

Overall results

Progress toward improvement targets		All students (High school grades)			Lowest performing students (High school grades)		
Indicator		Points earned	Total possible points	Weight %	Points earned	Total possible points	Weight %
Achievement	English language arts achievement	3	4	-	4	4	-
	Mathematics achievement	2	4	-	4	4	-
	Science achievement	1	4	-	4	4	-
	Achievement total	6	12	47.5	12	12	67.5
Growth	English language arts growth	1	4	-	1	4	-
	Mathematics growth	2	4	-	1	4	-
	Growth total	3	8	22.5	2	8	22.5
High school completion	Four-year cohort graduation rate	3	4	-	-	-	-
	Extended engagement rate	0	4	-	-	-	-
	Annual dropout rate	0	4	-	-	-	-
	High school completion total	3	12	20.0	-	-	-
Progress toward attaining English language proficiency	English language proficiency total	-	-	-	-	-	-
Additional indicators	Chronic absenteeism	0	4	-	4	4	-
	Advanced coursework completion	2	4	-	-	-	-
	Additional indicators total	2	8	10.0	4	4	10.0
Weighted total		4.3	10.7	-	9.0	10.3	-
Percentage of possible points		40%			87%		
Criterion-referenced target percentage		64%					
		Partially meeting targets					



Accountability Highlights ELA

3-8

- Achievement
 - Improved below target or met target for all subgroups
- Growth
 - Below target for all subgroups

High School

- Achievement
 - Exceeded Target for Lowest Performing Subgroup
 - Met or Improved below target for most subgroups
 - No change for white subgroup
- Growth
 - Below Target for all Subgroups



Accountability Highlights Math

3-8

- Achievement
 - Exceeded Target -Lowest Performing, High Need, & Economically Disadvantaged
 - Improved Below Target for All Students & White students
- Growth
 - Below or met target for all subgroups

High School

- Achievement
 - Exceeded Target for Lowest Performing, High Need, & Economically Disadvantaged
 - Met or Improved below target for most subgroups
 - No change for All Students subgroup
 - Decline for White students
- Growth
 - Below Target for all Subgroups



Accountability Highlights Science

Grades 3-8

- Achievement
 - Decline for all Subgroups

High School

- Achievement
 - Met Target for High Need
 - Decline for all Students, White Students
 - No Change for Economically Disadvantaged



Other Accountability Measures

Growth based on District Action

- Participation- MET
 - Thank you, families and staff!
- 4 Year cohort Graduation Rate- Exceeded for all groups

Areas of Focus

- Chronic Absenteeism
 - 3-8 Declined for All Students, Economically Disadvantaged
 - 10 Exceeded for Lowest Performing Subgroup Decline for All, Economically Disadvantaged
- High School Advanced Coursework
 - All Students and White Students below target
 - High Need and Economically Disadvantaged declined

Addressing Accountability Determination

High Need Subgroup

- **Students in the following demographic groups**
 - Special Education
 - Economically Disadvantaged
 - English Learner
 - Former English Learner

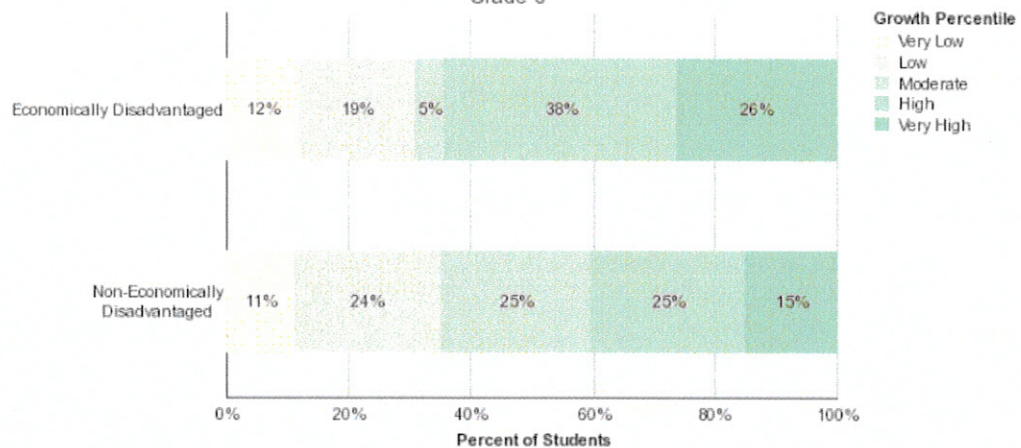
Step 1

Grades 3-8 - English Language Arts

	% Meeting or Exceeding Expectations	% Exceeding Expectations	% Meeting Expectations	% Partially Meeting Expectations	% Not Meeting Expectations	Average SS	N Included	Mean SGP	N Included in Mean SGP
All Students									
All Students	45	3	42	45	11	496.0	617	41.8	490
Economic Status									
Economically Disadvantaged	25	0	25	47	27	484.6	118	39.3	85
Non-Economically Disadvantaged	49	4	45	44	7	498.7	499	42.3	405
Disability Status									
Students w/ Disabilities	15	0	15	51	34	480.3	121	36.0	93
Non-Disabled	52	4	48	43	5	499.8	496	43.2	397
English Language Learner (EL) Status									
EL	13	0	13	48	39	476.0	23		10
Non-EL	46	3	43	45	9	496.8	594	41.4	480
Race/Ethnicity									
African Amer./Black	45	0	45	35	20	491.5	20		14
Amer. Ind. or Alaska Nat.							1		1
Asian							9		6
Hispanic/Latino	25	3	23	49	25	484.9	71	43.6	56
Multi-Race, Non-Hisp./Lat.	42	0	42	48	9	496.8	33		18
White	47	3	44	44	8	497.6	483	42.1	395
Gender									
Male	34	1	33	51	15	490.9	313	38.3	249
Female	56	5	51	38	6	501.3	304	45.4	241

Growth Distribution by Economic Status

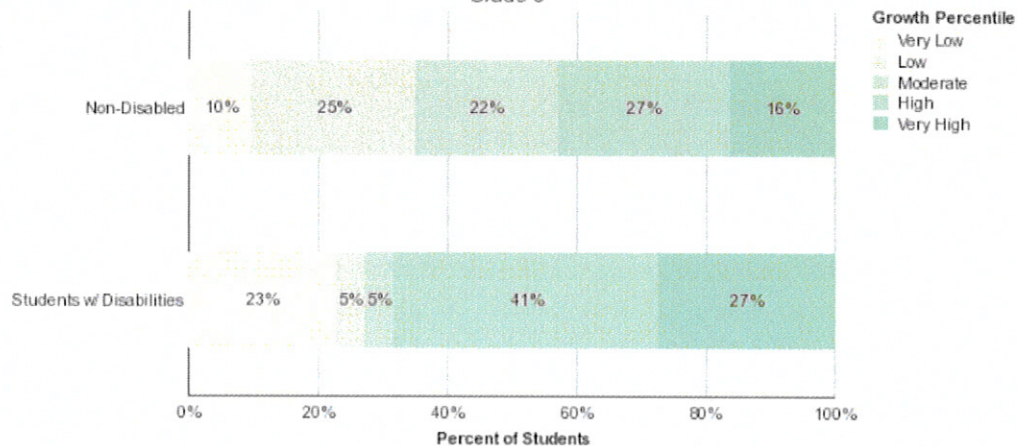
Grade 6





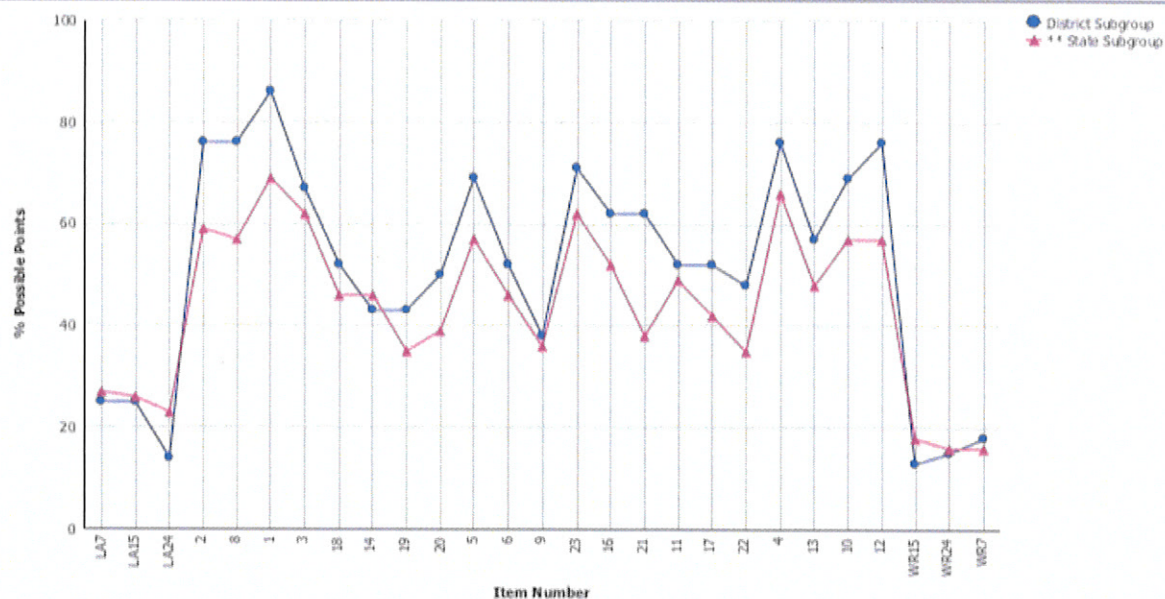
Growth Distribution by Disability Status

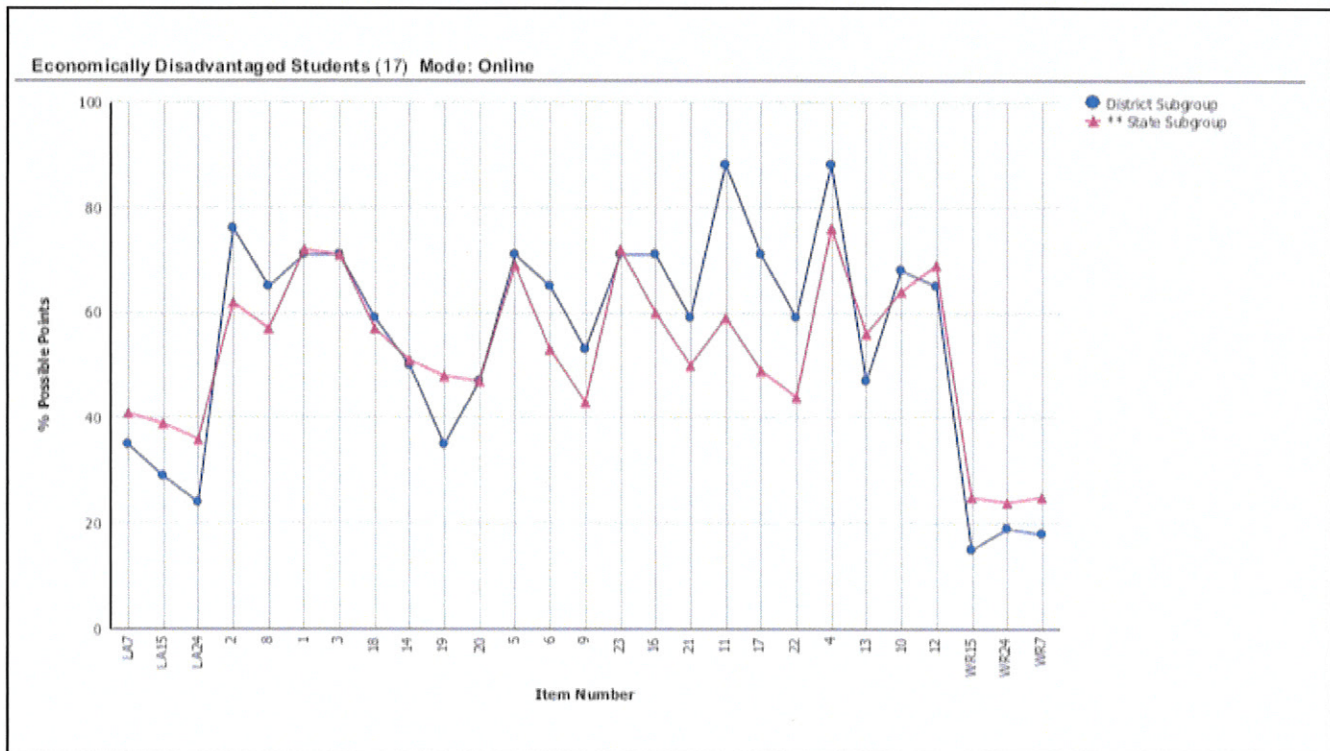
Grade 6



STEP 2

Students w/ Disabilities (21) Mode: Online





Step 3

- Instructional Leadership Team uses that analysis to identify and implement
 - Short term growth strategies
 - Long term growth strategies

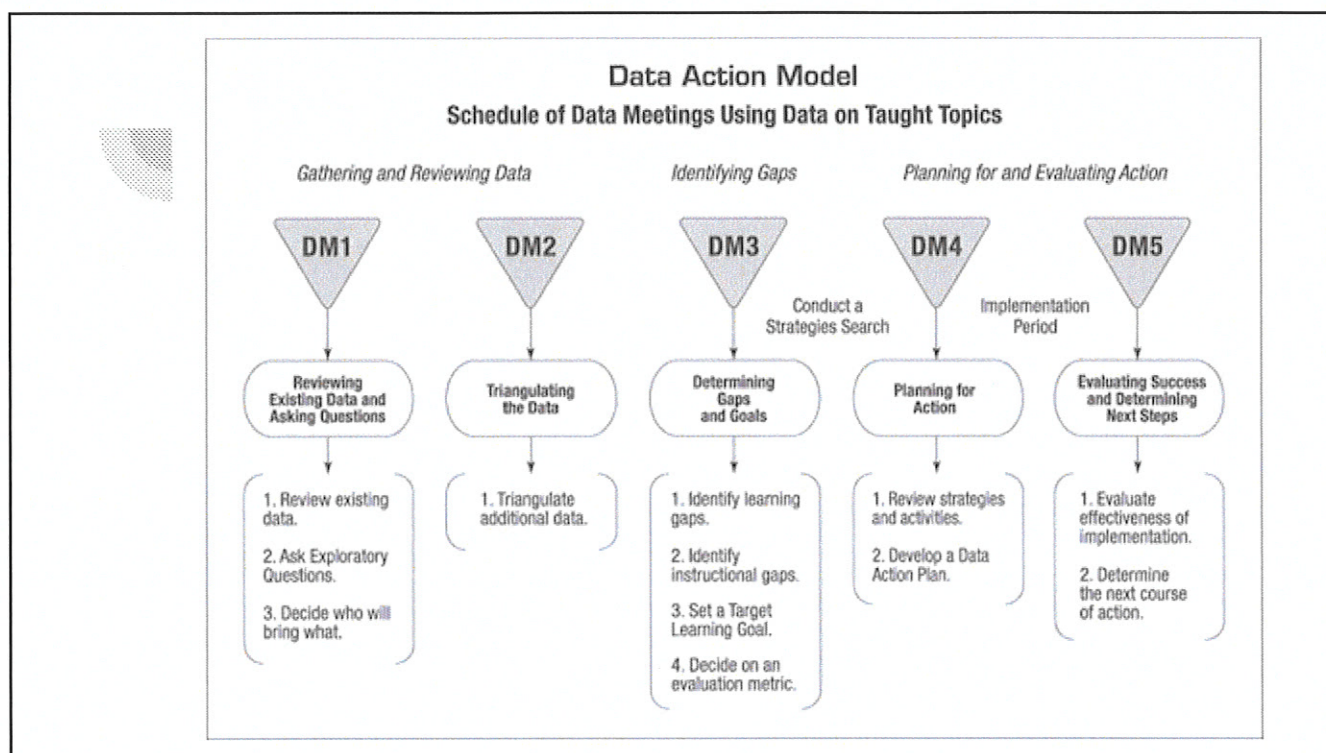


Step 4



Continuous Improvement Cycle

Data into Action Protocol



Analyzing Maynard's Results

Teacher Leader Analysis



Notice

- 85% of students in the economically disadvantaged subgroup are not meeting expectations
- In grades 3-5 more boys are meeting or exceeding expectations than girls. In grades 6-8 more girls are doing so
- The percentage of male students who meet or exceed expectations in ELA declines from Grade 5 (42%), Grade 6 (31%) Grade 7 (18%)



Wonder

- Is more instructional time spent on ELA than Math?
- Does EL Subject area instruction need improvement?
- Why boys' ELA achievement declines dramatically?
- Why EL students are disproportionately not meeting expectation?
- What is the attendance data for subgroups?
- Why is Physics the high school test given the 8th grade math scores?
- If practice test are used in all grades?

Vertical Teacher Analysis



Notice: Areas of Growth

English/Lang. Arts

- Domains/Standards
 - Reading: Key ideas & details
 - Reading: Integration of Knowledge & Ideas

Math

- Question Type
 - Short Answer
 - Selected Response
- Domains/Standards
 - Number System
 - Number & Operations Base 10
 - Geometry

Science

- Domains/Standards (Gr 8)
 - Earth & Space Science
 - Life Science



Notice: Areas of Consistency

English/Lang Arts

- Question Type
 - Selected Response
- Domains/Standards
 - Reading
 - Vocabulary use & Acquisition

Math

- Question Type
 - Selected Response
- Domains/Standards

Science

- Question Type
 - Multiple Choice
 - Open Response
- Grade 8
 - Physical Sciences
 - Technology/Engineering
- High School Physics
 - Conservation of Energy & Momentum
 - Electromagnetic Radiation
 - Electromagnetism
 - Heat and Heat Transfer
 - Motion & Forces
 - Waves



Notice: Areas of Focus

English/Language Arts

- Question Type
 - Essay
 - Constructed Response
- Domains/Standards
 - Language: Conventions of Standard English
 - Writing: Text Types & Purposes

Math

- Question Type
 - Constructed Response & Short answer for students in sub groups
- Domains/Standards
 - Number & Operations: Fractions



Notice Areas of Focus: Science

- General Achievement
 - Subgroups are struggling to meet expectations
 - English Learner
 - Special Education
- Test Specific
 - Grade 5- results indicate need to finalize curriculum K-5
 - High School-consistent with last year's performance



Exploratory Question

After analyzing the 2018 Math MCAS data, here is the exploratory question we will examine this year:

If we target foundational math skills, can we close gaps and improve learning?

The data points we will use to answer the exploratory question are, (but not limited to):

Khan Academy, Reflex Math, Zearn, Go Math, Pre-Test/Post-Test

Our second data meeting will be in **January**. Be sure to gather data consistently until our next meeting. Student work should be included in your collection. Student names should be left off of the data. We are reviewing the data in relationship to the exploratory question. **Since we are looking at whether working on math fact fluency closed gaps in learning, the data should include more than just math fact fluency data. Did working on math fact fluency improve student learning involving one-step equations? Involving ratios?**

At our second data meeting, we will analyze the data and generate a list of gaps: Observed learning gaps and observed instructional gaps.



Feedback from Staff on Process

- Overwhelming amount of Data
- Desire for administrative overview
- More Vertical Meetings are needed
- Professional Development
 - Data analysis
 - How to use that data to impact student growth
 - Subject specific strategies based on the data

Current Areas of Focus



How we are responding to the following challenges:

- Technology's impact
- Writing Skills
- High level questions
- English & Math curriculum challenges
- Use of data to improve student outcomes

Contextualizing Results to Other Schools

Demographic Comps	G 3-8 Proficient/Advanced				G 10 Proficient/Advanced			
Town	ELA 17	ELA 18	Math 18	Math 19	ELA 17	ELA 18	Math 17	Math18
Blackstone-Millville	45	44	41	40	89	88	77	78
Lunenburg	49	51	54	53	93	98	90	83
Maynard	41	45	41	40	91	88	77	75
Nantucket	37	41	34	30	91	90	66	75
Seekonk	64	62	60	57	96	92	86	78
Stoneham	57	62	49	52	96	93	85	79
Swampscott	60	65	58	57	98	96	94	89
W. Boylst.	60	57	57	57	98	90	89	81

Demographic Comps	G 3-8 Mean SGP		G 10 Mean SGP	
Town	ELA 18	Math 18	ELA 18	Math18
Blackstone-Millville	42.2	49.3	50.4	47.2
Lunenburg	47.6	54.2	46.5	50.5
Maynard	41.8	48.1	34.1	43.7
Nantucket	60.3	50.9	63.5	55.3
Seekonk	49.8	52.2	44.8	36.2
Stoneham	57.9	60.7	60.7	39.9
Swampscott	44.8	49.0	43.2	45.2
West Boylston	56.0	51.6	60.3	46.8

Ability to Pay	G 3-8 Proficient/Advanced				G 10 Proficient/Advanced			
Town	ELA 17	ELA 18	Math 17	Math	ELA 17	ELA 18	Math 17	Math 18
Georgetown	62	61	57	53	98	97	90	89
Lunenburg	49	51	54	53	93	98	90	83
Maynard	41	45	41	40	91	88	77	75
Millis	49	60	57	60	98	95	91	88
Sutton	58	63	53	55	94	97	85	92
Tyngsborough	51	54	53	51	98	98	94	91
West Bridgewater	56	57	49	47	99	99	84	86

Ability to Pay	G 3-8 Mean SGP		G 10 Mean SGP	
Town	ELA 18	Math 18	ELA 18	Math 18
Georgetown	49.3	43.2	63.6	65.7
Lunenburg	47.6	54.2	46.5	50.5
Maynard	41.8	48.1	34.1	43.7
Millis	58.3	56.2	54.2	60.6
Sutton	54.6	56.4	52.5	63.8
Tyngsborough	46.4	48.5	46.8	49.3
West Bridgewater	48.7	43.2	41.9	52.8

Regional Comps	G 3-8 Proficient/Advanced				G 10 Proficient/Advanced			
Town	ELA 17	ELA 18	Math 17	Math 18	ELA 17	ELA 18	Math 17	Math 18
Acton/Box.	71	73	75	77	97	99	95	96
AMSA	75	70	74	67	100	100	99	99
AVRTVHS					97	96	78	80
Concord- Carlisle	80	78	79	77.5	98	99	98	92
Hudson	50	52	50	50	96	95	80	85
Lincoln-Sudbury	62	65.5	62	66.5	98	94	96	95
Littleton	65	68	60	61	97	94	94	90
Maynard	41	45	41	40	91	88	77	75
Nashoba	69	73	71	72	97	95	94	90

Regional Comps	G 3-8 Mean SGP		G 10 Mean SGP	
Town	ELA 18	Math 18	ELA 18	Math 18
Acton- Boxborough	58.9	58.8	62.0	63.1
AMSA	53.5	47.4	68	71.6
AVRTVHS			57.1	63.3
Concord- Carlisle	53.35	52.85	50.7	48.4
Hudson	53.6	50.6	56.9	61.3
Lincoln-Sudbury	53.75	52.1	37.1	51.0
Littleton	59	52	55.2	70.6
Maynard	41.8	48.1	34.1	43.7
Nashoba	56	58	62.1	49.8