

Wellesley Public Schools 2012 MCAS Results

School Committee Presentation
10/2/2012

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2012 District Results English Language Arts

Grade	% Advanced & Proficient	% Needs Improvement	% Warning
10	99	1	0
8	97	3	1
7	92	6	2
6	88	10	3
5	83	13	3
4	81	14	5
3	86	11	3

Grades 3-5 are district results; Grades 6-10 are school results.

English Language Arts History of % Scored at Advanced & Proficient Levels

Gr.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
10	91	92	93	93	95	94	97	98	99	99
8				95	95	96	96	95	95	97
7	93	91	91	92	96	94	92	93	92	92
6				96	95	86	92	90	88	88
5				89	85	86	89	84	86	83
4	82	85	73	75	83	81	83	76	81	81
3	83	87	81	82	86	79	76	84	83	86

Grades 3-5 are district results; Grades 6-10 are school results.

English Language Arts History of % Scored at Advanced & Proficient Levels


Gr.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
10	91	92	93	93	95	94	97	98	99	99
8				95	95	96	96	95	95	97
7	93	91	91	92	96	94	92	93	92	92
6				96	95	86	92	90	88	88
5				89	85	86	89	84	86	83
4	82	85	73	75	83	81	83	76	81	81
3	83	87	81	82	86	79	76	84	83	86

Grades 3-5 are district results; Grades 6-10 are school results.

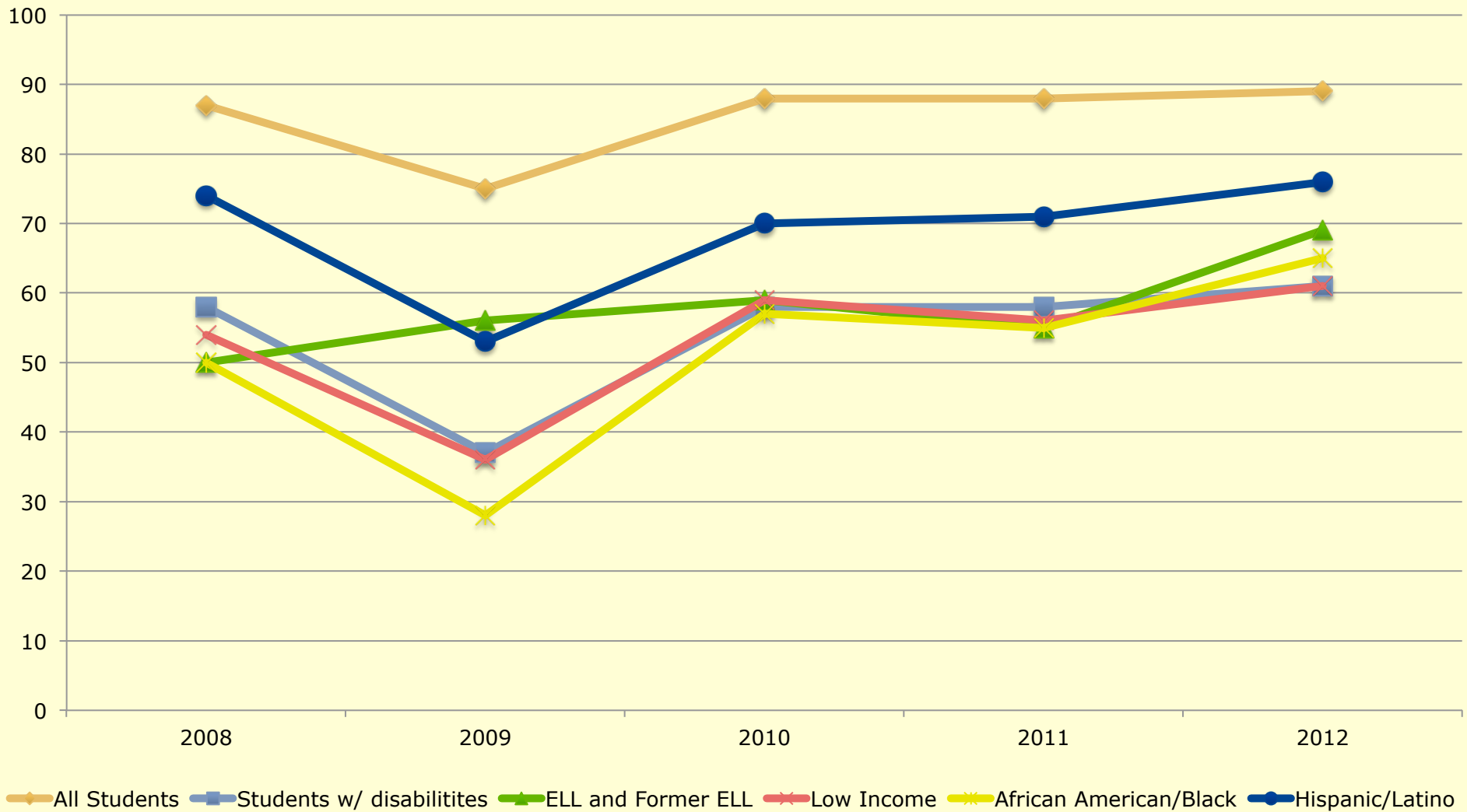
Class of 2013
 Class of 2014
 Class of 2015
 Class of 2016
 Class of 2017

% of Students Achieving Advanced or Proficient in ELA by Subgroup

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	86	81	83	87	92	96	98
Students w/ disabilities	50	38	47	53	68	80	90
ELL and Former ELL	70	61	70	36	90	N/A	N/A
Low Income	50	26	55	50	84	85	95
High Needs	57	43	54	58	75	82	92
African American/Black	50	22	37	52	61	73	89
Hispanic/Latino	69	72	66	71	85	83	100

 Subgroups with an achievement gap of 20+ percentage points.

2008-2012 District-wide % of Students Achieving Advanced or Proficient in ELA by Subgroup



2012 District Results Mathematics

Grade	% Advanced and Proficient	% Needs Improvement	% Warning
10	98	2	1
8	81	13	6
7	76	17	7
6	76	16	9
5	75	16	9
4	67	27	6
3	77	11	3

Grades 3-5 are district results; Grades 6-10 are school results.

Mathematics History of % Scored at Advanced & Proficient Levels

Gr.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
10	84	92	93	90	94	91	95	98	96	98
8	75	80	76	66	75	82	73	76	82	81
7				72	79	74	66	76	71	76
6	85	81	80	81	86	76	79	80	80	76
5				73	74	72	80	77	74	75
4	68	72	68	59	67	77	67	62	66	67
3				69	81	74	70	75	71	77

Grades 3-5 are district results; Grades 6-10 are school results.

Mathematics History of % Scored at Advanced & Proficient Levels


Gr.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
10	84	92	93	90	94	91	95	98	96	98
8	75	80	76	66	75	82	73	76	82	81
7				72	79	74	66	76	71	76
6	85	81	80	81	86	76	79	80	80	76
5				73	74	72	80	77	74	75
4	68	72	68	59	67	77	67	62	66	67
3				69	81	74	70	75	71	77

Grades 3-5 are district results; Grades 6-10 are school results.

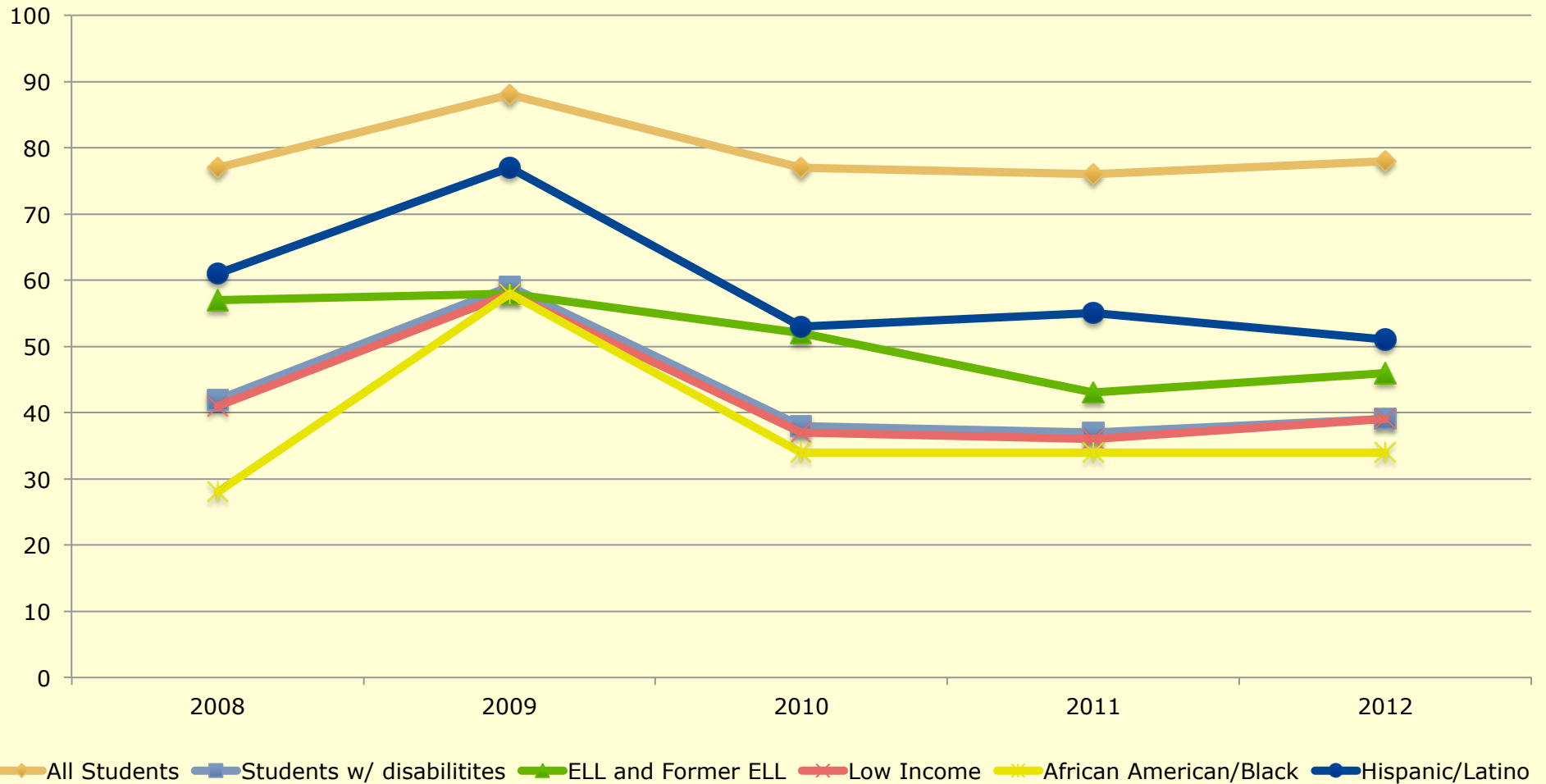
Class of 2013
 Class of 2014
 Class of 2015
 Class of 2016
 Class of 2017

% of Students Achieving Advanced or Proficient in Math by Subgroup

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	77	67	75	75	76	81	96
Students w/ disabilities	42	32	29	31	32	32	79
ELL and Former ELL	60	36	54	8	40	N/A	N/A
Low Income	39	9	43	32	42	32	90
High Needs	45	30	38	35	37	39	82
African American/Black	25	11	19	36	31	34	82
Hispanic/Latino	37	39	66	48	43	48	100

 Subgroups with an achievement gap of 20+ percentage points.

2008-2012 District-wide % of Students Achieving Advanced or Proficient in Math by Subgroup



2012 District Results Science and Technology/Engineering

Grade	% Advanced and Proficient	% Needs Improvement	% Warning
10	75	22	4
8	65	29	6
5	63	31	6

Grade 5 are district results; Grades 8 & 10 are school results.
Grade 10 assessment is in Chemistry.


Science and Technology/Engineering History of % Scored at Advanced & Proficient Levels

Gr.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
10						74	77	77	79	75
8	62	56	65	56	39	58	44	44	41	65
5	66	69	69	64	70	62	58	64	58	63

Grade 5 are district results; Grades 8 & 10 are school results.
Grade 10 assessment is in Chemistry.

% of Students Achieving Advanced or Proficient in Science by Subgroup

	Grade 5	Grade 8	Grade 10
All	63	64	73
Students w/ disabilities	26	23	31
ELL and Former ELL	30	N/A	N/A
Low Income	38	16	36
High Needs	32	25	36
African American/Black	19	13	20
Hispanic/Latino	39	39	45

 Subgroups with an achievement gap of 20+ percentage points.

MCAS 2012 District Comparisons – Percent of Students Achieving Advanced or Proficient

	Grade 3		Grade 4		Grade 5			Grade 6		Grade 7		Grade 8			Grade 10		
District	ELA	Math	ELA	Math	ELA	Math	SE/T	ELA	Math	ELA	Math	ELA	Math	SE/T	ELA	Math	SE/T
Acton P.S.	80	82	74	72	82	82	76	88	90								
Boxborough P.S.	88	90	74	74	84	89	78	86	75								
A/B Regional										90	82	95	84	76	96	94	94
Carlisle P.S.	91	89	87	89	84	86	80	95	88	94	84	98	94	89			
Concord P.S.	86	86	83	78	85	86	81	91	83	89	80	96	76	80			
CC Regional HS															98	92	95
Lexington	86	86	83	83	86	89	82	92	87	93	87	97	87	77	99	95	95
Lincoln P.S.	75	82	69	68	78	79	77	80	66	80	65	89	71	58			
Lincoln/Sudbury HS															99	96	84
Natick	82	83	80	72	72	70	74	77	72	89	74	92	70	64	94	88	90
Needham	81	77	70	68	80	73	65	88	79	93	84	92	74	71	98	95	91
Newton	80	78	75	74	84	82	71	86	83	89	79	93	80	63	96	94	87
Sudbury P.S.	84	78	84	77	89	86	84	90	83	83	82	94	80	70			
Wayland	80	78	77	65	75	79	75	93	83	90	81	99	84	85	99	95	92
Wellesley	86	77	81	67	83	75	63	88	76	92	76	97	81	65	99	98	75
Weston	84	80	80	82	82	77	75	93	82	94	77	94	72	73	99	95	86
Westwood	86	83	88	87	87	83	83	87	84	91	75	94	75	59	99	96	93
Winchester	82	85	86	82	84	88	82	88	79	91	79	97	83	80	100	98	92

- Highest percentage among comparison group
- Lowest percentage among comparison group

Student Growth Percentiles (SGP) 2012 MCAS Results

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Student Growth Percentiles (SGP)

A measure of growth relative to a state-wide peer group with similar historical performance.

A student in the 60th percentile for Grade 5 Math, showed stronger growth than 60% of students who had similar scores on the Grades 3 & 4 assessments.

ELA & Math only.

Subgroups reported only when $N \geq 20$.

Why Is SGP Important?

We believe the growth of EVERY student is an essential part of our mission.

When a student reaches “Advanced” or “Proficient” they are not done learning.

SGP gives us a look at how all students at all proficiency levels are growing.

SGP shows us progress in closing achievement gaps.

Growth tends to be more strongly correlated with the quality of instruction than attainment.


Department of Elementary and Secondary Education

Growth Percentile Ranges

<20 th Percentile	Very Low Growth
20 th -40 th Percentile	Low Growth
40 th -60 th Percentile	Typical Growth
60 th -80 th Percentile	High Growth
>80 th Percentile	Very High Growth

2012 District Median SGP by Grade

	ELA SGP	ELA (N)	Math SGP	Math (N)
Grade 4	65	389	67	393
Grade 5	54	381	49	385
Grade 6	49	386	50	385
Grade 7	53	362	56	364
Grade 8	55	363	63	363
Grade 10	50	336	63	335
All Grades	55	2,217	59	2,225

 High Growth (SGP of 60+)

- In Grade 4, High Growth in both ELA and Math
- High Growth in Grades 8 and 10 in Math
- All other growth considered Typical Growth

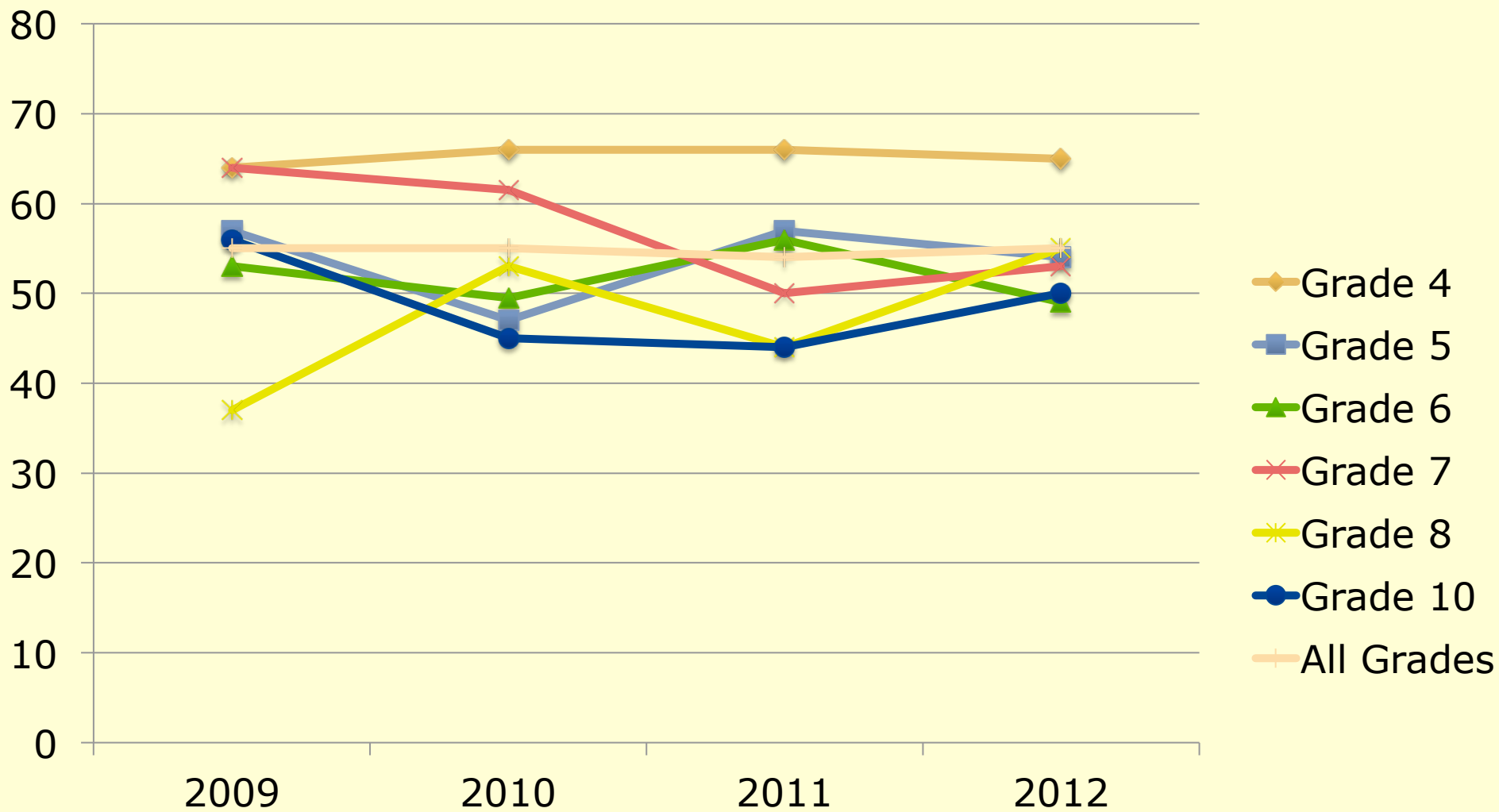
Student Growth Percentiles

2012 MCAS Parent/Guardian Report Sample

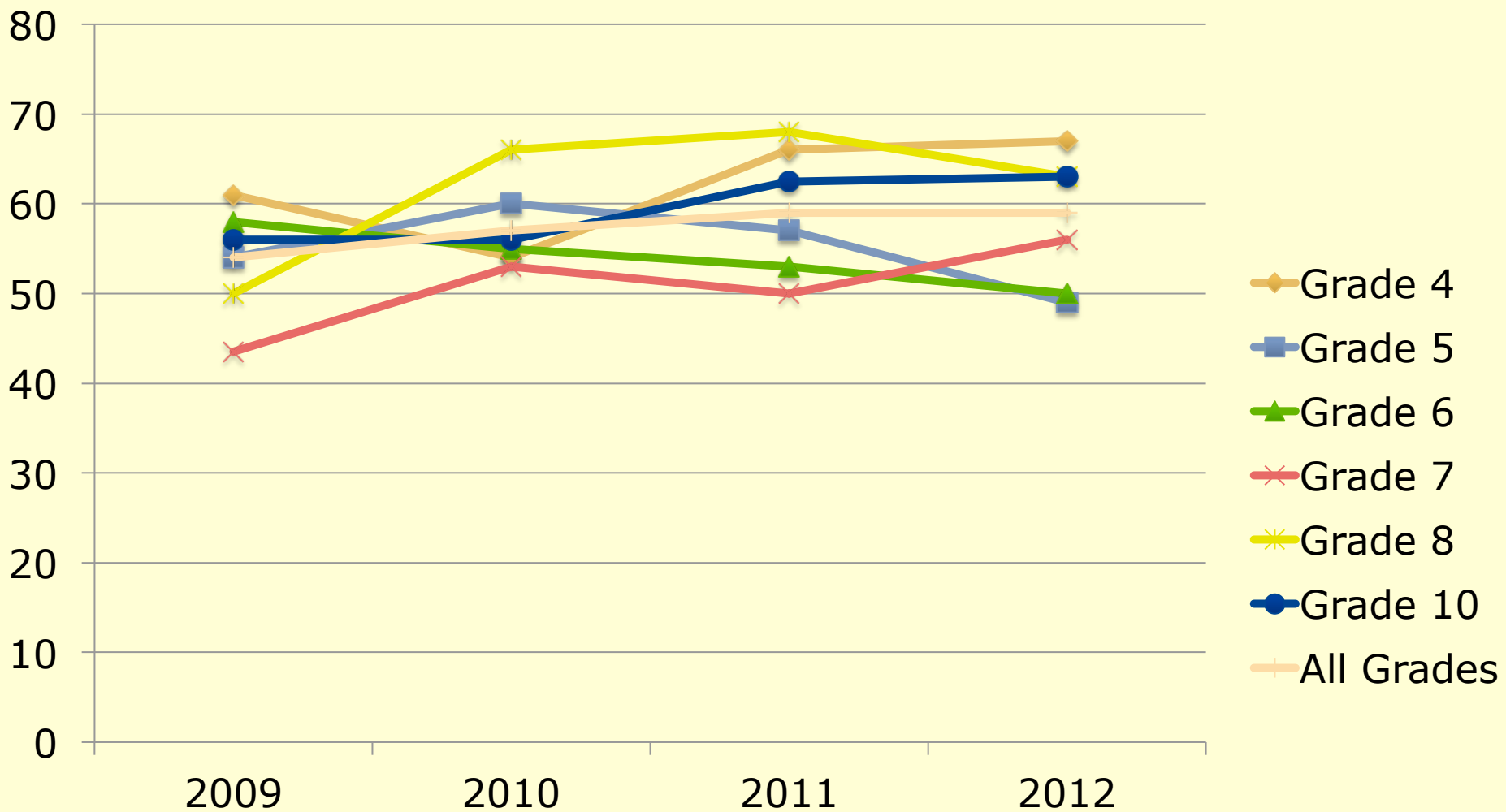
<i>Lower Growth</i>											English Language Arts											<i>Higher Growth</i>										
											Percentile																					
1	10	20	30	40	50	60	70	80	90	99	1	10	20	30	40	50	60	70	80	90	99	1	10	20	30	40	50	60	70	80	90	99
Your Child																																
						63											58															
School																																
District																																

<i>Lower Growth</i>											Mathematics											<i>Higher Growth</i>										
											Percentile																					
1	10	20	30	40	50	60	70	80	90	99	1	10	20	30	40	50	60	70	80	90	99	1	10	20	30	40	50	60	70	80	90	99
Your Child																																
					44																											
School																																
District																																

District Median SGP ELA 2009-2012



District Median SGP Math 2009-2012



Progress and Performance Index (PPI)

Progress and Performance Index, or PPI, is the state's new measure to assess district and school improvement.

PPI replaces AYP.

Includes data on narrowing proficiency gaps, growth (SGP), MCAS participation, graduation rates and dropout rates.

Adequate Yearly Progress (AYP) vs. Progress and Performance Index (PPI)

Measure	Overall Goal	Annual Target
AYP	By 2014 all students at Advanced/Proficient	Composite Point Index (CPI) at 75 or 100
PPI	Schools/Districts must narrow achievement gaps by 50% over a six-year period (2011-2017)	Level 1: PPI of 75+ Level 2: PPI <75 or low-MCAS participation

Progress and Performance Index (PPI)

Cumulative PPI includes weighted annual PPI data for the most recent four years.

Considers all students in a school and the high needs subgroup (low-income students, students with disabilities, ELL and former ELL students).

Schools and districts placed into Levels 1 - 5 based on PPI. For a district to be Level 1, all schools in the district must be Level 1.

80% of schools are classified Level 1 or Level 2.

Framework for Accountability and Assistance Levels 1 & 2

	Accountability		Assistance	
	District Actions	State Actions	State Actions	District Actions
Level 1	Review & approve district & school improvement plans	Conduct district reviews for randomly selected districts	Provide voluntary access to district analysis & review tools for every district & school	Review level of implementation of district & school plans; review <i>District Standards & Indicators & Conditions for School Effectiveness</i> ; review promising practice examples
Level 2	Use district analysis & review tools to review & approve district & school improvement plans	Conduct district reviews for randomly selected districts	Suggest assistance; targeted assistance for identified student groups, professional development opportunities, etc.	Review and revise district & school plans with respect to level of implementation of <i>District Standards & Indicators & Conditions for School Effectiveness</i>

Source: DESE Framework for District Accountability and Assistance

2012 District PPI and Accountability Level

District Accountability Level 2

(One or more schools in the district classified into Level 2)

Student Group	PPI (1-100)	Progress Toward Target
All students	90	Met Target
High needs	67	Did Not Meet Target
Low income	70	Did Not Meet Target
ELL and Former ELL	56	Did Not Meet Target
Students w/ disabilities	67	Did Not Meet Target
Asian	100	Met Target
Afr. Amer./Black	61	Did Not Meet Target
Hispanic/Latino	65	Did Not Meet Target
Multi-race, Non-Hisp./Lat.	87	Met Target
White	95	Met Target

2012 School PPI and Level

School	PPI All	PPI High Needs	Level	Notes
Bates	94	N/A	Level 1	Meeting gap narrowing goals
Fiske	79	61	Level 2	Not meeting gap narrowing goals
Hardy	82	86	Level 1	Meeting gap narrowing goals
Hunnewell	82	N/A	Level 1	Meeting gap narrowing goals
Schofield	67	49	Level 2	Not meeting gap narrowing goals
Sprague	100	86	Level 1	Meeting gap narrowing goals
Upham	87	N/A	Level 1	Meeting gap narrowing goals
WMS	82	68	Level 2	Not meeting gap narrowing goals
WHS	100	85	Level 2	Low MCAS participation (High Needs)*

** 92% of grade 10 students in the high needs subgroup were assessed in Science & Engineering/Technology, below the 95% target established by DESE.*

Current Interventions

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District- and School-Based Efforts

District-Wide Interventions

- Using Response to Intervention (RTI) model to support student (regular education intervention)
- Teacher Support Team (TST) teams at all schools
- Individual Student Support Plans (ISSPs) regular education
- IEPs and 504 plans for students with disabilities
- ELL
- Title I (WHS, Fiske and Schofield)

English Language Arts Support for Students

- Literacy specialists and reading intervention specialists at elementary level
- Reading specialists at middle and high school
- Diagnostic tools (AIMSweb, Fountas & Pinnell at elementary level)

Mathematics Support for Students

- WHS lab classes
 - WHS math support
 - WHS Math Plus course
 - WHS co-taught math classes
 - Special Education
-
- WMS Math Intervention Specialist
 - WMS ALEKs
 - Special Education
-
- Elementary Math Specialists
 - Universal screening, grades K and 3
 - Dreambox
 - Special Education

Science and Technology/Engineering (STE) Support for Students

- WMS summer science class
- WHS Conceptual Biological Chemistry (two year course)

Science Curriculum Alignment

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Elementary Science Curriculum

Kindergarten	Grade One	Grade Two	Grade Three	Grade Four	Grade Five
<ul style="list-style-type: none"> • Investigations • Water • Habitats 	<ul style="list-style-type: none"> • Investigations • Birds • Balance and Weighing 	<ul style="list-style-type: none"> • Sea Life • Structures • Plant Growth and Development 	<ul style="list-style-type: none"> • Fair Testing • Insects • Sound 	<ul style="list-style-type: none"> • States of Matter • Geology • Water Cycle, Topography and Climate 	<ul style="list-style-type: none"> • Models and Design • Scale and Magnification • Light

Topics not covered in Elementary Science Curriculum

Energy and energy transfer (PS)
 Magnetism (PS)
 Forces and motion (PS)
 Soil and properties of soil (ES)
 Moon Phases, solar system (ES)

Weather patterns (jet streams, etc.) (ES)
 Acquired vs. inherited characteristics, animal behavior (LS)
 Frog development, consumers/producers (LS)
 Simple machine (ENG)

Middle School Science Curriculum

Grade Six	Grade Seven	Grade Eight
<ul style="list-style-type: none"> • Think Like a Scientist • Electricity • Chemistry and Heat 	<ul style="list-style-type: none"> • Life Science 	<ul style="list-style-type: none"> • Introductory Physical Science

Other District's Curriculum Sequence

Grade Six	Grade Seven	Grade Eight
<ul style="list-style-type: none"> • Physical Science 	<ul style="list-style-type: none"> • Life Science 	<ul style="list-style-type: none"> • Earth Science

High School Science Curriculum

Grade 9	Grade 10	Grade 11	Grade 12
<ul style="list-style-type: none"> • Astronomy • Geology • Oceanography • Meteorology 	<ul style="list-style-type: none"> • Chemistry 	<ul style="list-style-type: none"> • Biology 	<ul style="list-style-type: none"> • Physics (and electives)

Curriculum sequence is not aligned:

	Grade 9	Grade 10	Grade 11	Grade 12
Wellesley	Earth Science	Chemistry	Biology	Physics
Other districts	Physical Science	Biology	Chemistry	Physics

Next Steps

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Next Steps

- Aligning curriculum with MA standards (including Common Core) in ELA, mathematics, and STE
- Ongoing professional development in mathematics and STE
- Explore providing a literacy and math coach at all elementary schools
- Professional Development in Cultural Proficiency
- Development of formative/summative assessments
- Professional development in data storage, analysis, and use to improve instruction and student learning