

2015 State PARCC Results

Presented to the Board of
Elementary and Secondary Education

Robert Lee
MCAS Chief Analyst and Acting PARCC Coordinator

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MASSACHUSETTS DEPARTMENT OF
ELEMENTARY AND SECONDARY
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Topics

- ★ A review of the outcomes of the 2015 MCAS/PARCC choice and participation
 - ★ A reminder about representative samples and PARCC participation policies in 2015
- ★ 2015 state PARCC results: combined online and paper
- ★ A comparison of MCAS and PARCC across the grades
- ★ Comparisons of PARCC, MCAS and NAEP results



Assessment Choices for Spring 2015

Spring 2015	Number of public districts	MCAS			PARCC		
		# of districts	% of districts	# of students	# of districts	% of districts	# of students
Grades 3-8	359	165	46%	202,000	194	54%	229,500
PARCC for Grade 9 and/or 11 (optional)	295	N/A	N/A	N/A	69	23%	22,500

2015 Participation Rates

Spring 2015	Enrolled	Tested	Part. Rate
MCAS Grades 3-8	202,000	200,000	99%
PARCC Grades 3-8	229,500	223,500	98%
MCAS Grade 10	71,500	70,000	98%



What are the Representative Samples?

- ★ Large groups (71% to 75%) of the students who took PARCC or MCAS in grades 3-8 in 2015
- ★ Selected statistically to match the state population
 - ★ On achievement variables
 - ★ Demographically (race/ethnicity, income and special needs)
- ★ Identified in spring **before** 2015 test scores were available



Why use Representative Samples?

1. **Because the districts choosing MCAS were different from the districts choosing PARCC.** In particular, MCAS districts had 10% fewer low income students than PARCC students.
2. **To estimate “state” results** when showing trends and on summaries given to parents and the public.
3. **To make other calculations for the accountability system;** such as measures of growth and progress toward closing the achievement gap. PARCC schools will receive accountability ratings in 2015 but will be “held harmless.”



Different Scales and Achievement Levels

PARCC Achievement Levels		Scaled Score Range
Level 5	Exceeded expectations	Varies by grade - 850
Level 4	Met expectations	750- varies by grade
Level 3	Approached expectations	725-749
Level 2	Partially met expectations	700-724
Level 1	Did not yet meet expectations	650-699

MCAS Achievement Levels	Scaled Score Range
Advanced	260-280
Proficient	240-258
Needs Improvement	220-238
Warning (3-8) Failing (HS)	200-218



Mass. PARCC State* Results: **ELA**

	Meeting Expectations				
	Level 1	Level 2	Level 3	Level 4	Level 5
Grade 3	10%	14%	22%	47%	7%
Grade 4	5%	12%	25%	42%	15%
Grade 5	4%	10%	23%	55%	8%
Grade 6	4%	11%	25%	48%	12%
Grade 7	6%	11%	22%	40%	21%
Grade 8	5%	10%	20%	48%	16%
All (3-8)	6%	12%	23%	47%	13%

*State Representative Sample

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Mass. PARCC State* Results: **ELA**

	Not Meeting Expectations (Levels 1-3)	Meeting Expectations (Levels 4 & 5)
Grade 3	46%	54%
Grade 4	43%	57%
Grade 5	37%	63%
Grade 6	40%	60%
Grade 7	40%	60%
Grade 8	36%	64%
All (3-8)	40%	60%

*State Representative Sample

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Mass. PARCC State* Results: Math

	Level 1	Level 2	Level 3	Meeting Expectations	
				Level 4	Level 5
Grade 3	6%	14%	25%	43%	12%
Grade 4	6%	18%	29%	41%	6%
Grade 5	5%	15%	26%	44%	11%
Grade 6	5%	14%	28%	44%	10%
Grade 7	5%	18%	32%	37%	8%
Grade 8	10%	15%	22%	43%	10%
Grade 8 Algebra I	1%	4%	15%	66%	14%
All (3-8)	6%	16%	27%	42%	10%

*State Representative Sample

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Mass. PARCC State* Results: **Math**

	Not Meeting Expectations (Levels 1-3)	Meeting Expectations (Levels 4 & 5)
Grade 3	45%	55%
Grade 4	53%	47%
Grade 5	45%	55%
Grade 6	47%	53%
Grade 7	55%	45%
Grade 8	47%	53%
Gr. 8 Alg. I	20%	80%
All (3-8)	48%	52%

*State Representative Sample

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Mass. PARCC State Results:

Grades 9, 11

		College and Career Ready				
		Level 1	Level 2	Level 3	Level 4	Level 5
ELA/L	Grade 9*	17%	19%	25%	31%	8%
	Grade 11*	19%	19%	22%	29%	10%
Math End of Course Tests	Algebra I – HS*	17%	33%	28%	21%	1%
	Geometry*	5%	23%	36%	34%	2%
	Algebra II*	45%	25%	17%	12%	1%
	Int. Math I*	11%	18%	22%	37%	12%
	Int. Math III*	34%	26%	30%	9%	1%

*No Representative Sample could be drawn;
participation was voluntary

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PARCC and MCAS High School Results

	PARCC Tests	Level 1	Level 2	Level 3	College and Career Ready	
					Level 4	Level 5
ELA/L	Grade 9*	61%			39%	
	Grade 11*	61%			39%	
Math End of Course Tests	Algebra I – HS*	78%			22%	
	Geometry*	64%			36%	
	Algebra II*	87%			13%	
	Int. Math I*	51%			49%	
	Int. Math III*	89%			11%	

MCAS Tests	Failing	Needs Imp.	Prof.	Adv.
Gr. 10 ELA	9%		91%	
Grade 10 Math	21%		79%	

*No Representative Sample could be drawn;
participation was voluntary

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2015 PARCC and MCAS Results—Statewide

Percent of Students Scoring <i>Proficient</i> or Higher on MCAS or <i>Meeting Expectations</i> on PARCC						
	English Language Arts			Mathematics		
	PARCC*	MCAS*	Difference	PARCC*	MCAS*	Difference
Grade 3	54%	60%	-6	55%	70%	-15
Grade 4	57%	53%	+4	47%	47%	0
Grade 5	63%	71%	-8	55%	67%	-12
Grade 6	60%	71%	-11	53%	62%	-9
Grade 7	60%	70%	-10	45%	51%	-6
Grade 8	64%	80%	-16	53%	60%	-7
Grade 8 Algebra I	NA	NA	NA	80%	NA	NA
All Grades	60%	68%	-8	52%	60%	-8

* Statistically representative samples were used to report state trends in grades 3-8



2015 PARCC performance by 2014

MCAS achievement level: **Grade 9 ELA**

(N=7,758)

2014 MCAS Gr. 8 Level		2015 PARCC Achievement Level*				
		Level 1	Level 2	Level 3	Meeting Expectations	
					Level 4	Level 5
Advanced	11%	1%	2%	10%	47%	40%
Proficient	69%	9%	17%	30%	39%	5%
Needs Impr.	14%	38%	39%	20%	3%	0%
Warning	6%	73%	20%	6%	0%	0%
All Grade 9 ELA		16%	19%	25%	32%	8%

*All students included; Participation was voluntary –
no representative sample

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2015 PARCC performance by 2014

MCAS achievement level: **High School Algebra I** (N=5,504)

2014 MCAS Gr. 8 Level		2015 PARCC Achievement Level*				
		Level 1	Level 2	Level 3	Meeting Expectations	
					Level 4	Level 5
Advanced	10%	1%	4%	17%	67%	12%
Proficient	33%	5%	17%	38%	40%	0%
Needs Impr.	35%	16%	42%	36%	6%	0%
Warning	22%	40%	50%	9%	0%	0%
All HS Algebra I		17%	33%	28%	21%	1%

*All students included; Participation was voluntary –
no representative sample

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2015 PARCC performance by 2014 MCAS achievement level: **Geometry** (N= 1,598)

2014 MCAS Gr. 8 Level		2015 PARCC Achievement Level*				
		Level 1	Level 2	Level 3	Meeting Expectations	
					Level 4	Level 5
Advanced	35%	0%	3%	24%	67%	6%
Proficient	44%	1%	17%	51%	31%	0%
Needs Impr.	17%	8%	49%	40%	4%	0%
Warning	4%	36%	61%	4%	0%	0%
All Geometry		5%	23%	36%	34%	2%

*All students included; Participation was voluntary –
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2015 PARCC performance by 2014 MCAS achievement level: **Algebra II** (N=3,527)

2014 MCAS Gr. 10 Level		2015 PARCC Achievement Level*				
		Level 1	Level 2	Level 3	Meeting Expectations	
					Level 4	Level 5
Advanced	46%	23%	26%	28%	22%	2%
Proficient	33%	60%	32%	8%	1%	0%
Needs Impr.	17%	81%	17%	1%	0%	0%
Failing	4%	90%	10%	0%	0%	0%
All Algebra II		45%	25%	17%	12%	1%

*All students included; Participation was voluntary –
no representative sample

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2015 PARCC performance by 2014

MCAS achievement level: **Grade 11 ELA**

(N=5,999)

2014 MCAS Gr. 10 Level		2015 PARCC Achievement Level*				
		Level 1	Level 2	Level 3	Meeting Expectations	
					Level 4	Level 5
Advanced	40%	6%	8%	17%	46%	23%
Proficient	51%	22%	24%	30%	22%	2%
Needs Impr.	8%	50%	39%	10%	1%	0%
Failing	1%	71%	28%	1%	0%	0%
All Grade 11 ELA		19%	19%	22%	29%	10%

*All students included; Participation was voluntary –
no representative sample

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Comparing Massachusetts MCAS, PARCC and NAEP State Results:

Grade 4

	Percent Meeting Expectations* in Grade 4		
	MCAS (2015)	PARCC (2015)	NAEP (2013)
ELA (Reading for NAEP)	53%	57%	47%
Math	47%	47%	58%

*Defined as Proficient or higher for MCAS and NAEP, Level 4 or higher for PARCC



Comparing Massachusetts MCAS, PARCC and NAEP State Results:

Grade 8

	Percent Meeting Expectations* in Grade 8		
	MCAS (2015)	PARCC (2015)	NAEP (2013)
ELA (Reading for NAEP)	80%	64%	48%
Math	60%	53%	55%

*Defined as Proficient or higher for MCAS and NAEP, Level 4 or higher for PARCC

