MARYLAND STATE DEPARTMENT OF
EDUCATION
Preparing World-Class Students

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TO: Members of the State Board of Education

FROM: Lillian M. Lowery, Ed.D.

DATE: August 27, 2013

SUBJECT: School Progress Index: 2013 Elementary and Middle School Results

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PURPOSE:

To provide a summary and overview of the components, calculation, and results of the School Progress Index for 2013.

BACKGROUND:

In 2011, the United States Department of Education gave states the opportunity to develop a new system for measuring and reporting school performance. Maryland re-designed its accountability system focusing on the progress schools are making towards improving student achievement, closing achievement gaps, measuring student growth, and enabling students to move towards readiness for college and career by mastering grade-level and course-level curriculum goals each year. Under this new system, Maryland has adopted a realistic goal of cutting in half the number of students in each school who are not achieving at the proficient level. With the help of teachers and principals across the State, Maryland has developed measures of school progress based on multiple Indicators and referencing Annual Measurable Objectives (AMOs) based on the school's history. These Indicators are compared to the school's progress targets and combined to generate a School Progress Index (SPI) for every school. The SPI is an estimate of the extent to which the school has met its targets.

EXECUTIVE SUMMARY:

The School Progress Index addresses Indicators of "progress" —Achievement, Closing Achievement Gaps, Student Growth, and College- and Career-Readiness. Achievement and Closing Achievement Gaps were identified as essential Indicators of progress at all three levels. Student Growth was addressed in grades 3 through 8, and College- and Career- Readiness was identified as an essential high school Indicator.

Measures of progress were selected for each Indicator. The Maryland School Assessment (MSA) tests in reading, mathematics, and science and the High School Assessment tests in Algebra/Data Analysis, English, and Biology are used to measure student achievement in the elementary, middle, and high schools. Additional measures in the high school model include 5-year cohort graduation rate, 4-year cohort dropout rate, career preparation, performance on rigorous academic tests, and enrollment in college. Annual progress targets have been established for each measure and for school and subgroup based on 2011 baseline data and reflecting equal increments over time.

At each level and for each progress Indicator, actual performance is compared to the progress target. A value of 1.00 indicates that the progress target was achieved. Values less than 1.00 indicate progress that fell just short of the target. Values greater than 1.00 indicate progress that exceeded the target. The School Progress Index is a weighted composite of these Indicators, as shown below.

Values have been calculated for every content/subgroup and aggregate combination for every school and the State aggregate. The table below describes the values for each Indicator and the composite School Progress Index for Maryland.

Table 1. State Summary of School Progress by Level

Level	Indicator and Composite Progress Index Values for Maryland			
2013	Achievement	Gap	Growth	School Progress
Elementary	0.9436	0.8383	0.9142	0.8926
Middle	0.9476	0.7752	0.8992	0.8641
2012				
Elementary	0.9931	0.9594	1.0118	0.9852
Middle	0.9843	0.9197	0.9766	0.9562

Based on the SPI and performance on the Indicators, schools are placed in one of five Strands for support, intervention, and recognition as shown in Table 2 chart below.

Table 2.

Strand	Overall Score	Number of Components Met		
		E, M, H	EM, MH, EH	EMH
1	1.0 or greater	All 3	All 6	All 9
2		2 of 3	4-5 of 6	6-8 of 9
3	Greater than or equal to 0.9	1 of 3	2-3 of 6	3-5 of 9
4		0 of 3	0-1 of 6	0-2 of 9
5	Less than 0.9	0-2 of 3	0-4 of 6	0-6 of 9

As Table 3 below describes, in 2013 50 elementary and middle schools—4.5 percent—achieved an SPI of 1.00 or higher and achieved all three Progress Indicators. 54.9 percent were classified in Strand 2 or Strand 3, indicating attainment of one or more Progress Indicators. 40.6 percent of schools were classified in Strand 4 or Strand 5.

Table 3. Number of Schools – Strand Assignment

Strand	Elementary			Middle		
	2012	2013	Diff	2012	2013	Diff
1	255	47	-208	24	3	-21
2	357	220	-137	69	23	-46
3	205	309	104	72	64	-8
4	52	115	63	44	31	-13
5	23	201	178	21	109	88
Total	892	892		230	230	

CONCLUSION:

The purpose of this transmittal memo report is to describe the model and its application. Maryland's model holds schools accountable for continuous improvement in student learning. This accountability model employs three Indicators and multiple Measures; establishes clear, ambitious, and reasonable progress targets aligned with critical content; and determines progress using a set of Indicators and a composite School Progress Index. This wealth of data will enable schools and systems to drill down to identify what is working and what is not.

Data specific to schools and school systems will be reported on the Maryland Report Card website at 12:00 p.m. on August 27. School and central office staff will review, analyze, and interpret this information, share it with their school communities, and use it as a planning tool to guide actions to improve the learning of all students.

State Board Meeting

School Progress Index Elementary and Middle School 2013 Results

Henry R Johnson, Jr., Ed.D
Assistant State Superintendent
Division of Curriculum, Assessment and Accountability
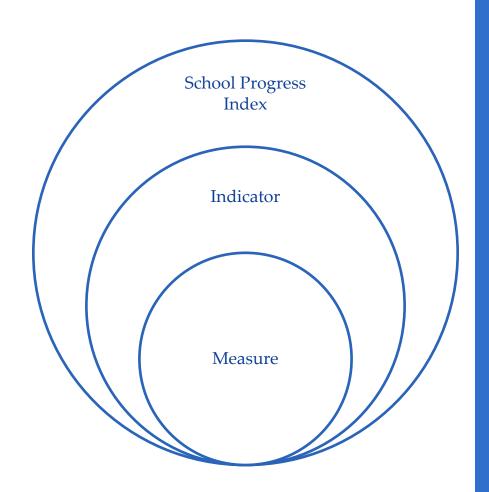
August 27, 2013

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ESEA FLEXIBILITY: SPI

- All schools should improve the learning of **all** students.

- Schools have different needs and operate in specific contexts - the strategies they adopt for improvement should reflect their needs.

- School performance targets should reflect the school's history of student performance.

What is the School Progress Index?

▶ Continuous scale based on indicators of adequacy:
  ‣ Achievement (E, M, HS)
  ‣ Growth (E, M)
  ‣ Gap Reduction (E, M, HS)
  ‣ College & Career Readiness (HS)

▶ Stakeholder Input (Standard Setting):
  ‣ Each indicator is individually weighted based on importance in assessing overall school progress
  ‣ Measures within indicators individually weighted

▶ Measured at the Elementary, Middle, and High School Levels (span)
  ‣ Combined schools with multiple span codes are measured at each level and then combined to create a single score

School Progress Index

Indicator

Measure

Maryland School Progress Index

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Grades PreK-8

Meeting Performance Targets (AMO)

Achievement* — 30%

- 33.3%- Mathematics Proficiency (MSA)
- 33.3%- Reading Proficiency (MSA)
- 33.3%- Science Proficiency (MSA)

Gap* — 40%

Gap between *lowest* subgroup and *highest* subgroup within a school:

- 33.3%- Mathematics Proficiency (MSA)
- 33.3%- Reading Proficiency (MSA)
- 33.3%- Science Proficiency (MSA)

Growth* — 30%

Percent of students making one year's growth:

- 50%- Mathematics Proficiency (MSA)
- 50%- Reading Proficiency (MSA)

*ALT-MSA is included in the index component

Grades 9-12

Meeting Performance Targets (AMO)

Achievement* — 40%

- 33.3%- Mathematics Proficiency (Algebra/ Data Analysis HSA)
- 33.3%- English Proficiency (English HSA)
- 33.3%- Science Proficiency (Biology HSA)

Gap* — 40%

Gap between *lowest* subgroup and *highest* subgroup within a school:

- 20%- Mathematics Proficiency (Algebra/ Data Analysis HSA)
- 20%- English Proficiency (English HSA)
- 20%- Science Proficiency (Biology HSA)
- 20%- Cohort Graduation Rate
- 20%- Cohort Dropout Rate

College-and Career-Readiness* — 20%

- 60%- Cohort Graduation rate
- 40%- College and Career Preparation (CCP)
  - Advanced Placement or International Baccalaureate
  - Career and Technology Education (CTE) Concentrators
  - Enrollment in College (2-Year, 4-year, and/or Technical School)

Indicator: Achievement

- Percentage of "all students" group scoring proficient or advanced on Maryland standardized assessments <u>progressing</u> toward targets
- This is about <u>progress</u> and performance
- PreK-8
  - MSA Math Proficiency
  - MSA Reading Proficiency
  - MSA Science Proficiency

Indicator: Gap Reduction

- Decrease in the performance gap between the highest and lowest performing subgroups

- Gap Score calculated for each subgroup category in each measured area

- PreK-8
  - MSA Math Proficiency
  - MSA Reading Proficiency
  - MSA Science Proficiency

Indicator: Growth

▸ The change in student performance for the "all students" group between the current year and prior year

PreK-8

- MSA Math Proficiency
- MSA Reading Proficiency

State Level <u>Achievement</u>
Annual Measurable Objectives (AMOs)

Span	Content	Baseline 2011	2012	2013	2014	2015	2016	2017
Elementary	Math	86.28	87.42	88.56	89.71	90.85	91.99	93.14
	Reading	87.90	88.91	89.92	90.93	91.94	92.94	93.95
	Science	66.96	69.71	72.47	75.22	77.97	80.73	83.48
Middle	Math	73.60	75.80	78.00	80.20	82.40	84.60	86.80
	Reading	83.15	84.56	85.96	87.37	88.77	90.17	91.58
	Science	69.00	71.58	74.16	76.75	79.33	81.91	84.50

State Level Gap Reduction (Inverse) Annual Measurable Objectives (AMOs)

Span	Content	Baseline 2011	2012	2013	2014	2015	2016	2017
Elementary	Math	69.38	71.93	74.48	77.04	79.59	82.14	84.69
	Reading	76.32	78.29	80.27	82.24	84.21	86.19	88.16
	Science	57.19	60.76	64.33	67.89	71.46	75.03	78.60
Middle	Math	55.78	59.46	63.15	66.83	70.52	74.20	77.89
	Reading	65.99	68.83	71.66	74.49	77.33	80.16	83.00
	Science	48.45	52.75	57.04	61.34	65.63	69.93	74.23

Growth AMOs Elementary and Middle

Span	Content	Baseline 2011	2012	2013	2014	2015	2016	2017
Elementary	Math	65.91	68.75	71.59	74.43	77.27	80.11	82.95
	Reading	86.94	88.02	89.11	90.20	91.29	92.38	93.47
Middle	Math	75.23	77.29	79.36	81.42	83.48	85.55	87.61
	Reading	71.75	74.10	76.46	78.81	81.16	83.52	85.87

State AMO Status - Elementary

Year	Achievement			Gap			Growth	
	Math	Read	Sci	Math	Read	Sci	Math	Read
2012	87.68% Met	88.21%	68.62%	69.95%	77.45%	55.68%	71.18% Met	86.99%
2012 AMO	87.42%	88.91%	69.71%	71.93%	78.29%	60.76%	68.75%	88.02%
2013	83.85%	86.30%	66.97%	60.75%	71.51%	51.99%	63.20%	84.27%
2013 AMO	88.56%	89.92%	72.47%	74.48%	80.27%	64.33%	71.59%	89.11%

State AMO Status - Middle

Year	Achievement			Gap			Growth	
	Math	Read	Sci	Math	Read	Sci	Math	Read
2012	76.06% Met	81.85%	70.25%	56.60%	62.91%	47.13%	78.04% Met	69.91%
2012 AMO	75.80%	84.56%	71.58%	59.46%	68.83%	52.75%	77.29%	74.10%
2013	72.10%	83.01%	70.65%	46.44%	59.12%	43.66%	65.79%	74.11%
2013 AMO	78.00%	85.96%	74.16%	63.15%	71.66%	57.04%	79.36%	76.46%

Strand Categorization

Strand	Overall Score	Number of Indicators Met		
		E, M, H	EM, MH, EH	EMH
1	1.0 or greater	All 3	All 6	All 9
2	Greater than or equal to 0.9	2 of 3	4-5 of 6	6-8 of 9
3		1 of 3	2-3 of 6	3-5 of 9
4		0 of 3	0-1 of 6	0-2 of 9
5	Less than 0.9	0-2 of 3	0-4 of 6	0-6 of 9

- Number of Indicators Met includes:
    - Indicators for which the Percent Proficient of Target for the weighted indicator composite = 1.00 or greater
    - Indicators that were not evaluated due to small population

- E, M, H defines a particular grade span for a school.
    - E – Elementary
    - M – Middle
    - H – High
  Some schools may have multiple grade spans (i.e. a school containing grades 6-12 would be a MH school).

2013 versus 2012 Elementary SPI

2012	Number of Schools			2013 Strand Changes					
Strand	2012	2013	Diff	1	2	3	4	5	Total
1	255	47	-208	26	85	85	31	28	255
2	357	220	-137	15	111	130	33	68	357
3	205	309	104	6	22	78	35	64	205
4	52	115	63	0	1	11	12	28	52
5	23	201	178	0	1	5	4	13	23
Total	892	892		47	220	309	115	201	892

2013 versus 2012 Middle SPI

2012	Number of Schools			2013 Strand Changes					
Strand	2012	2013	Diff	1	2	3	4	5	Total
1	24	3	-21	3	6	9	2	4	24
2	69	23	-46	0	13	30	6	20	69
3	72	64	-8	0	2	25	9	36	72
4	44	31	-13	0	1	0	8	35	44
5	21	109	88	0	1	0	6	14	21
Total	230	230		3	23	64	31	109	230

Strand	Maryland State Department of Education (MSDE) and Local Education Agency (LEA) Support
1	The school will identify the professional development and training that can lead to additional improvement in achievement. The LEA may provide this resource or the school can seek training beyond their on LEA.
2	It is expected that the LEA will assure that lower-performing subgroups and other particular needs the school may have (specifically in the Indicator that was missed) are addressed in the School Improvement Plan (SIP)/School Performance Plan (SPP). Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.
3	The school will develop a School Improvement Plans (SIP)/School Performance Plan (SPP) that will address the specific Indicators that are missed. Progress on improvement of the Indicators will be monitored by the LEA. Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.
4	The LEA will examine the existing supports in the school to determine effectiveness of the current path for increased progress and monitor necessary changes to address all instruction as well as those ancillary supports, like classroom management training, that can prevent other problems from interfering with instruction. Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.
5	The LEA will provide intensive, sustained support and technical assistance through onsite monitoring for the school. It may include, but is not limited to, examining existing supports, curriculum, instruction, assessment, professional development with accountability, school culture and climate, family and community support, organizational structure and resources, and comprehensive and effective planning. Title I schools that fail to make the AMO in Mathematics or Reading will be eligible to apply for 1003(a) School Improvement Grant (SIG) funds.

Questions?