

Lillian M. Lowery, Ed.D.
State Superintendent of Schools

200 West Baltimore Street • Baltimore, MD 21201 • 410-767-0100 • 410-333-6442 TTY/TDD

TO: Members of the State Board of Education
FROM: Lillian M. Lowery, Ed.D. *Lillian M. Lowery*
DATE: August 27, 2013
SUBJECT: 2013 Maryland School Assessment Science Results

PURPOSE:

To provide Board members with a summary and overview of the statewide results of the Maryland School Assessment in Science, which was administered in spring 2013.

BACKGROUND:

The 2013 administration of the Maryland School Assessment (MSA) in science included all students in grades 5 and 8. The results of the assessments were required to be reported under No Child Left Behind (NCLB) beginning with the 2007-2008 school year, but were **not** included in the calculations determining Adequate Yearly Progress (AYP). Beginning in 2012 and forward, MSA Science scores must be reported and included as a component of the elementary and middle school performance index. The index meets the requirements of Maryland's new Flexibility Plan, which replaces NCLB.

EXECUTIVE SUMMARY:

Beginning in 2005, Maryland like many other states began development of a State assessment in science under the federal No Child Left Behind Act of 2001. The curriculum was revised to identify specific content to be included in instruction and state assessments grade-by-grade for students in grades 3 through 8. Federal law also required the implementation of an assessment at each of the levels (elementary, middle and high). The current state instructional frameworks cover content at each of the 3 grade bands (kindergarten through grade 2, grades 3, 4 and 5, and grades 6 through 8). The assessments administered in Grade 5 and 8 covered those grade bands. The requirement for a high school science test is met through the use of the biology High School Assessment.

The Maryland School Assessments in science include selected response (multiple choice) items and items requiring students to produce a written response—some requiring short one- or two-sentence responses, some requiring longer responses. The assessments were designed to be administered on-line with an option for paper and pencil administration. The on-line and paper and pencil forms are identical in content. The method of administration is dependent upon school system capacity to test students on-line, as well as school choice and student needs. This year, 59.6 percent of the administrations were on-line. Fourteen of Maryland's 24 school systems tested more than 90 per cent of their fifth grade students on-line, and 17 systems tested more than 90 per cent of their eighth graders on-line.

The assessments were administered in April and results were returned to local school systems in late June. Local school systems have been notified of the school and system results for the MSA science, as well as individual student scores.

The 2013 results provide a sixth year of data for science in grades 5 and 8. Scores show some improvement both at the elementary level and at the middle school. Statewide results of the assessments appear in the table and will be discussed in more detail at the Board meeting.

MSA Science 2012 and 2013 Proficient/Advanced by Subgroup

	Grade 5			Grade 8		
	2012 % Prof/Adv.	2013 % Prof. Adv.	Change	2012 % Prof/Adv.	2013 % Prof. Adv.	Change
All Students	68.5	67	-1.5	70.7	71.4	0.7
Hispanic	59.2	56.7	-2.5	60.3	60.9	0.6
American Indian	66.5	64.2	-2.3	68.6	70.5	1.9
Asian	85.2	84.8	-0.4	88.8	89.2	0.4
African American	48.9	48.2	-0.7	51.0	53.1	2.1
Hawaiian	54.0	66.7	12.7	64.1	71.7	7.6
White	84.2	81.9	-2.3	86.3	86	-0.3
2 or More Races	77.2	75.3	-1.9	80.9	79.7	-1.2
FARMS	50.8	49	-1.8	51.6	53.2	1.6
ELL	29.7	30.3	0.6	23.2	24.1	0.9
Special Education	35.0	30.8	-4.2	31.8	31	-0.8

The instructional implications of these results will be discussed at the Board meeting.

ACTION:

For information only.

State Board of Education

Maryland School Assessment (MSA) 2013 Science Results

Henry R. Johnson, Jr., Ed.D.
Assistant State Superintendent
Curriculum, Assessment and Accountability

August 27, 2013

2013 MSA Science Results

- MSA Science meets the requirement to test students in science at least once in elementary, middle and high school (HSA Biology)
- Sixth reported year
- Tests administered in grades 5 and 8
- Science results are reported and included in the School Performance Index

2013 MSA Science

- Multiple choice and constructed response
- On-line assessment with paper/pencil option
- Just under 122,200 students tested
- 56.8% of Grade 5 and 62.5% of Grade 8 tests were administered online

Science Comparison 2012 to 2013

Grade 5

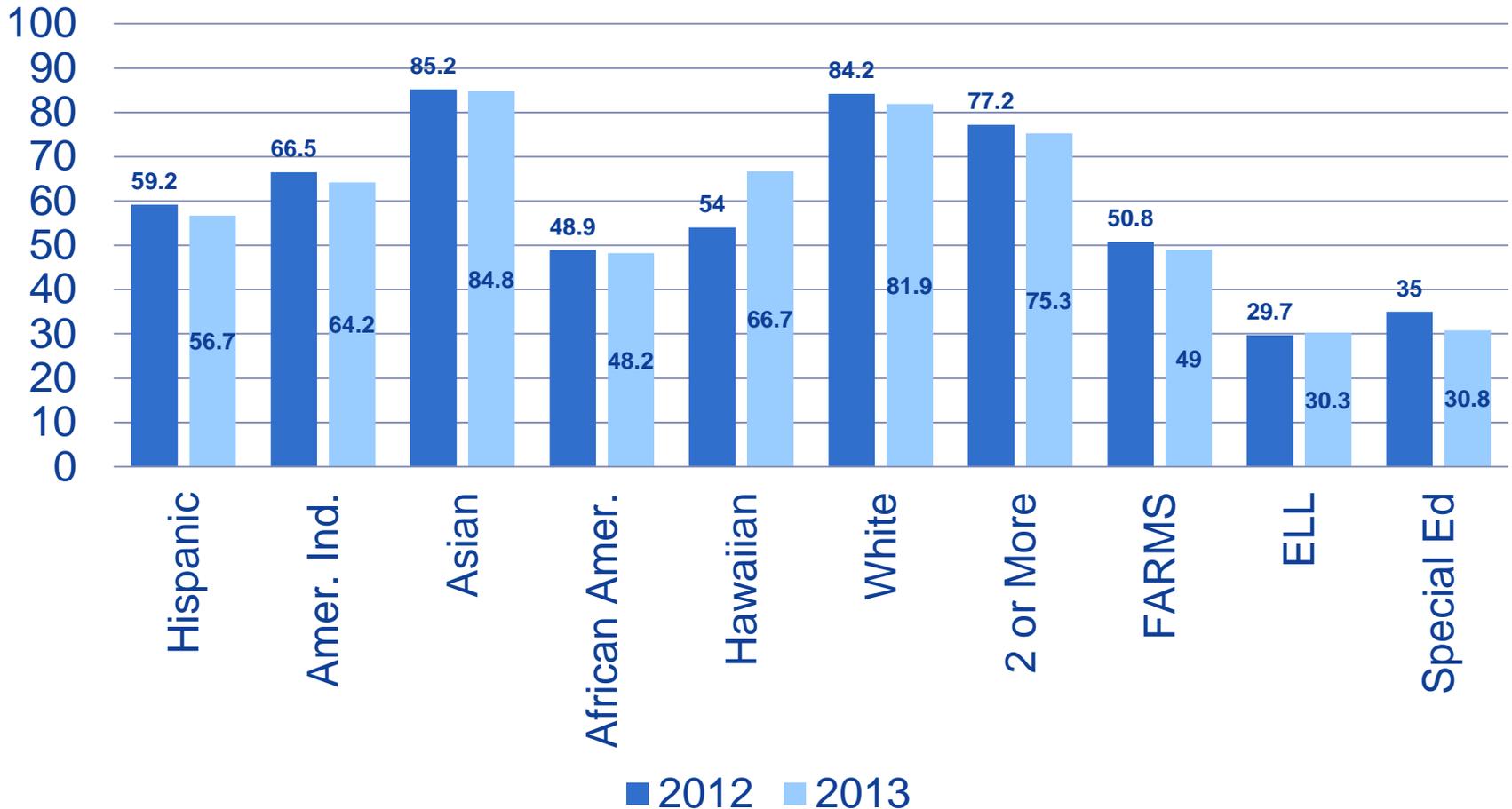
- Scores declined 1.5%
- FARMs declined 1.8%, ELL showed progress .6%, Special Ed declined 4.2%

Grade 8

- Scores showed small progress of .7%
- FARMs showed progress of 1.6%, ELL showed progress of .9%, Special Ed declined .8%

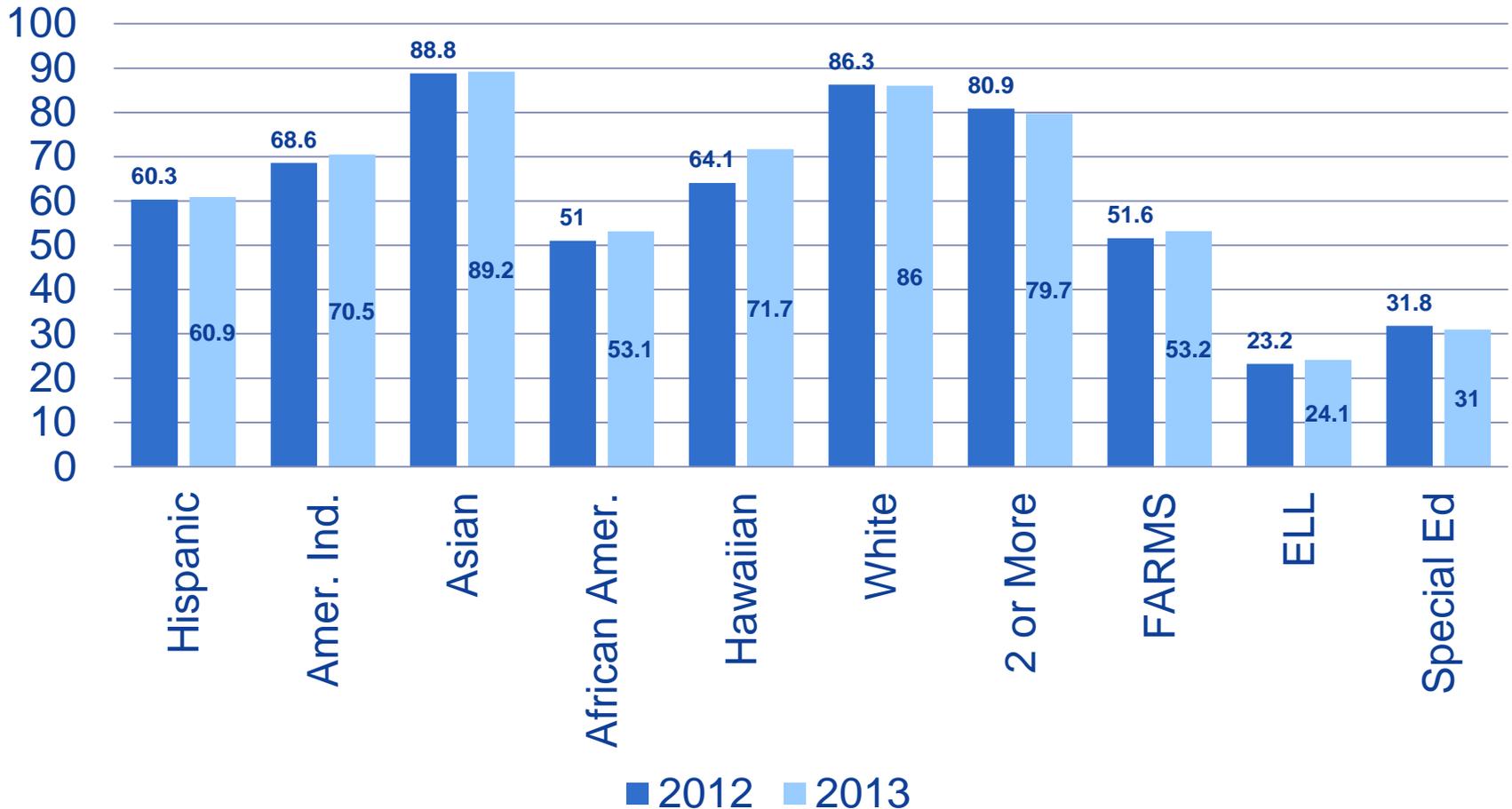
MSA Science Results by Subgroup

Grade 5



MSA Science Results by Subgroup

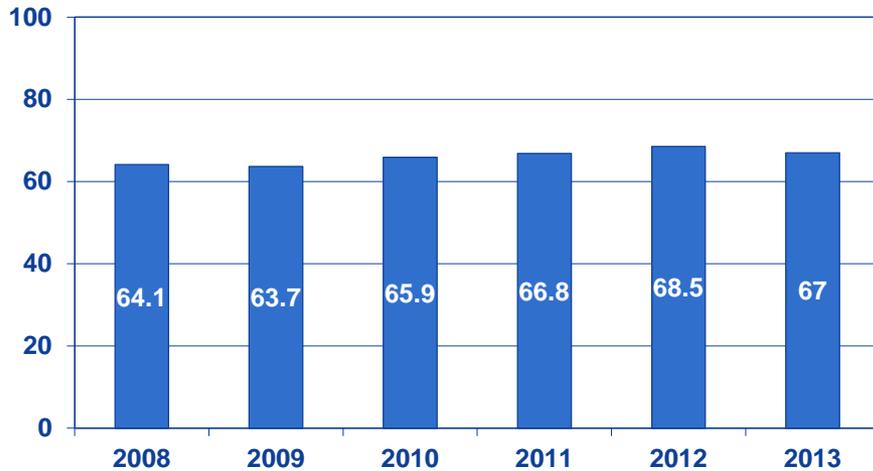
Grade 8



Science

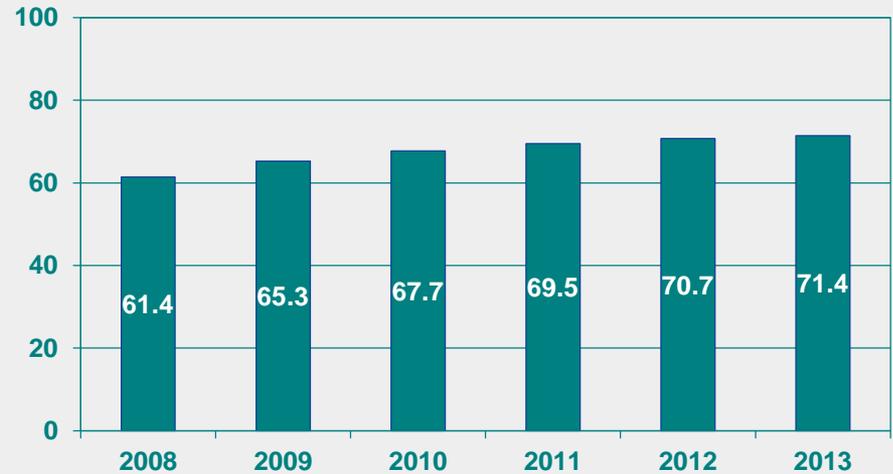
Percent Proficient and Advanced

Grade 5 2008-2013



2.9-point gain

Grade 8 2008-2013



10 point gain

2008-2013 Gap Reductions

Group	Grade 5	Grade 8
FARMS	0.1	-5.9
ELL	0.1	0.4
Special Education	8.6	4.5

2011-2013 Gap Reductions

Group	Grade 5	Grade 8
African American	-0.9	-2.2
Hispanic	-0.7	-2.3

School System Observations

- Compared to 2012
 - 4 systems improved at Grade 5
 - 12 systems improved at Grade 8
 - 2 systems improved at both grade levels
 - Sixteen school systems tested more than 95 percent of students on-line.

Questions & Discussion