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TO: Members of the State Board of Education  
FROM: Nancy S. Grasmick, <sup>James</sup> State Superintendent of Schools  
DATE: August 25, 2009  
SUBJECT: 2009 Maryland School Assessment Science Results

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**PURPOSE:**

To provide Board members with a summary and overview of the statewide results of the Maryland School Assessment in Science, which were administered in spring 2009.

**BACKGROUND:**

The 2009 administration of the Maryland School Assessment in science included all state 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 are not included in the calculations determining Adequate Yearly Progress (AYP). This year's results serve as the second year for the science assessments. The results are being analyzed diagnostically and will be used to inform instruction in science.

**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 three through eight. Federal law also required the implementation of assessments at each of the levels as well. The state instructional frameworks cover content at each of the three grade bands (kindergarten through grade 2, grades 3, 4 and 5, and grades 6 through 8). Similarly, assessments covered across each of those grade bands (grades 5 and 8). The requirement for a high school science test is met through the use of the biology High School Assessment.

The Maryland School Assessments 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 either on-line or via paper and pencil. 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, almost seventy percent of the administrations were on-line, with twelve school systems testing more than 90 percent of their Grade 5 students on-line and sixteen school systems testing more than 90 percent of their Grade 8 students on-line. Students however take the exact same forms of the tests whether on paper or on-line.

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

The 2009 assessments are important because they provide the second year of data for science in grades 5 and 8 under the auspices of the new curriculum and assessments. Scores show no improvement at the elementary level and a modest gain at the middle school. Results of the assessments appear in the table and will be discussed in more detail at the Board meeting, along with how the results will be used to inform science instruction in the future.

**MSA Science 2008 and 2009 Proficient/Advanced by Subgroup**

	Grade 5			Grade 8		
	2009 % Prof/Adv.	2008 % Prof. Adv.	Growth	2009 % Prof/Adv.	2008 % Prof. Adv.	Growth
All Students	63.7	64.1	-0.4	65.3	61.4	3.9
American Indian	69.9	64.1	5.8	61.7	59.9	1.8
Asian	81.5	79.9	1.6	85.8	82.5	3.3
African American	44.7	45.7	-1.0	44.4	38.7	5.7
White	79.9	79.8	0.1	82.5	80.5	2.0
Hispanic	49.0	48.2	0.8	50.1	44.3	5.9
FARMS	42.7	43.3	-0.6	42.7	36.4	6.3
LEP	28.5	26.9	1.6	20.6	14.5	6.1
Special Education	34.6	35.5	-0.9	30.1	25.0	5.1

**ACTION:**

For information only.

NSG:law