



**BOARD OF EDUCATION OF HOWARD COUNTY  
MEETING AGENDA ITEM**

**TITLE:** Results of the 2007 Maryland School Assessments in Science      **DATE:** March 27, 2008

**PRESENTER(S):** Dr. Terry Alban, Executive Director, Strategic Planning, Assessment and Program Evaluation

**OVERVIEW:**

Results of the 2007 Maryland School Assessment (MSA) in Science for elementary and middle schools were released in February and are summarized in this report. The MSA science test was given for the first time in 2007 to students in Grades 5 and 8 as a pilot test. Some students took the paper/pencil version of the test while other students completed the online version. Since this was a pilot test, the results will not be presented on the state website. We were pleased that 78 percent of our 5<sup>th</sup> grade students and 82.8 percent of our 8<sup>th</sup> grade students scored proficient or advanced on the first administration of this test. According to limited information released by the MSDE, the percent of students across the state scoring proficient or advanced was 59.8 percent for Grade 5 and 61.4 percent for Grade 8.

**~~RECOMMENDATION~~/FUTURE DIRECTION:**

Schools have received a summary of their Science MSA results as well as individual scores. As with any baseline measure, schools can use this information to guide improvement efforts. We are also hoping that schools will move to having 100 percent of students complete the online version of the science test in spring 2008.

**Submitted by:** \_\_\_\_\_  
Theresa Alban  
Executive Director, Strategic Planning  
Assessment and Program Evaluation

**Approval/  
Concurrence:** \_\_\_\_\_  
Sydney L. Cousin  
Superintendent

\_\_\_\_\_  
Sandra J. Erickson  
Deputy Superintendent

## Introduction

---

The Maryland School Assessment (MSA) in Science was administered for the first time in 2007 to comply with federal *No Child Left Behind (NCLB)* mandates. Unlike the reading and mathematics portions of the MSA which are administered every year in Grades 3-8, the science tests are scheduled to be given once at the elementary, middle, and high school level. The Grade 5 science test includes content from the Voluntary State Curriculum (VSC) for both Grades 4 and 5. The Grade 8 science test includes content from the VSC for Grades 6 through 8. The biology High School Assessment will be used as the science test for the high school level. At this time, NCLB does not require the science test be used as part of Adequate Yearly Progress calculations.

The MSA in Science was administered in both a paper/pencil version and as an online assessment. The Maryland State Department of Education (MSDE) conducted studies to evaluate the comparability of the paper/pencil version to the online version and found no significant difference. The Howard County Public School System (HCPSS) administered the paper/pencil version to about 50 percent of the students in Grades 5 and 8, while the other half of the students took the online version. Since this was a pilot year for the Science MSA, the MSDE will not be releasing results on the state website. Parents and schools will receive results for individual students.

## Results for the 2007 Science MSA

---

The results for the 2007 Science MSA serve as a baseline measure for both the schools and the school system. Overall, 78 percent of Grade 5 students scored proficient or advanced and 82.8 percent of Grade 8 students scored proficient or advanced on the Science MSA. According to limited information released by the MSDE, the percent of students across the state scoring proficient or advanced was 59.8 percent for Grade 5 and 61.4 percent for Grade 8.

Table 1 presents the countywide 2007 Science MSA performance for students overall across the proficiency levels.

Table 1: Countywide Performance on the 2007 Science MSA

	<b>Percent Advanced</b>	<b>Percent Proficient</b>	<b>Percent Basic</b>
Grade 5	13.5	64.4	22.0
Grade 8	9.0	73.8	17.2

The results by student group are presented in Table 2.

Table 2: Countywide Performance by Student Group on the 2007 Science MSA

	<b>Percent Proficient/Advanced Grade 5</b>	<b>Percent Proficient/Advanced Grade 8</b>
Overall	78.0	82.8
Asian	81.1	89.0
African American	56.1	60.2
White	86.9	90.4
Hispanic	51.6	62.7
FARMS	42.6	47.3
ELL	25.0	32.1
Special Education	43.8	43.8

\*There were fewer than 5 students in the American Indian racial/ethnic group, thus results are not reported.

## School Results

---

While there are no targets established for the Science MSA by either the MSDE or HCPSS, there were many schools that achieved outstanding results. Table 2 offers a summary of results across HCPSS elementary and middle schools. Results for each school are presented in Attachment A.

Table 2: Percent of Students Scoring Proficient or Advanced on the 2007 Science MSA by School Level

	<b>&lt; 60 Percent</b>	<b>60-69 Percent</b>	<b>70-79 Percent</b>	<b>80-89 Percent</b>	<b>90-99 Percent</b>
Number of Schools for Grade 5	4	9	7	13	6
Number of Schools for Grade 8	0	4	4	5	6

## SUMMARY AND NEXT STEPS

---

The baseline data for the 2007 Science MSA is very encouraging for most schools and the school system with more than 3/4<sup>th</sup> of all students reaching proficiency. As school staff members analyze the results and gain more familiarity with the science test, improved performance will likely follow. Feedback from School Accountability Coordinators regarding the pilot Science MSA was very positive, and they were particularly impressed by the students' enthusiastic response to online testing.

The online version of the Science MSA is the format preferred by the MSDE, and eventually will be the standard format for all state assessments. Therefore, the HCPSS is encouraging schools to increase the percent of students taking the online Science MSA to 100 percent in spring 2008. Most schools are striving to meet this goal, with the logistics of scheduling computer lab time being the greatest obstacle faced. With increasing demands for online assessment being mandated by the MSDE, a committee of staff members from many departments and schools are meeting to outline a plan for online assessment in the HCPSS.

## 2007 Science MSA Results

School	% Proficient/ Advanced	Number of Students Prof/Adv	Total Number Students
<b>All Schools Grades 5</b>	<b>78.0</b>	<b>2891</b>	<b>3707</b>
Atholton Elementary	79.7	59	74
Bellows Spring Elementary	73.1	87	119
Bollman Bridge Elementary	63.8	60	94
Bryant Woods Elementary	53.3	32	60
Bushy Park Elementary	88.1	111	126
Centennial Lane Elementary	94.9	112	118
Clarksville Elementary	87.4	90	103
Clemens Crossing Elementary	83.0	73	88
Dayton Oaks Elementary	84.3	91	108
Deep Run Elementary	64.0	64	100
Elkridge Elementary	78.9	97	123
Forest Ridge Elementary	75.7	84	111
Fulton Elementary	86.2	106	123
Gorman Crossing Elementary	86.3	63	73
Guilford Elementary	65.3	49	75
Hammond Elementary	84.9	90	106
Hollifield Station Elementary	72.6	106	146
Ilchester Elementary	83.3	85	102
Jeffers Hill Elementary	67.1	47	70
Laurel Woods Elementary	51.4	38	74
Lisbon Elementary	77.8	84	108
Longfellow Elementary	68.7	46	67
Manor Woods Elementary	86.7	117	135
Northfield Elementary	91.6	109	119
Phelps Luck Elementary	48.9	44	90
Pointers Run Elementary	91.5	130	142
Rockburn Elementary	82.6	95	115
Running Brook Elementary	64.9	24	37
St. John's Lane Elementary	76.7	99	129
Stevens Forest Elementary	67.2	43	64
Swansfield Elementary	61.3	49	80
Talbott Springs Elementary	63.9	46	72
Thunder Hill Elementary	93.0	53	57
Triadelphia Ridge Elementary	95.7	67	70
Waterloo Elementary	81.0	64	79
Waverly Elementary	89.5	102	114
West Friendship Elementary	86.0	49	57
Worthington Elementary	92.9	92	99
Cradlerock Grade 5	42.5	31	73
Cradlerock Grade 8	64.7	99	153

## 2007 Science MSA Results

School	% Proficient/ Advanced	Number of Students Prof/Adv	Total Number Students
<b>All Schools Grade 8</b>	<b>82.8</b>	<b>3305</b>	<b>3991</b>
Bonnie Branch Middle	83.4	196	235
Burleigh Manor Middle	91.7	199	217
Clarksville Middle	96.0	239	249
Dunloggin Middle	79.2	133	168
Elkridge Landing Middle	82.2	166	202
Ellicott Mills Middle	88.6	218	246
Folly Quarter Middle	96.9	155	160
Glenwood Middle	93.0	213	229
Hammond Middle	83.3	199	239
Harpers Choice Middle	72.2	127	176
Lime Kiln Middle	94.3	216	229
Mayfield Woods Middle	76.9	130	169
Mount View Middle	91.1	236	259
Murray Hill Middle	64.7	139	215
Oakland Mills Middle	68.7	114	166
Patapsco Middle	88.2	216	245
Patuxent Valley Middle	76.4	175	229
Wilde Lake Middle	69.3	131	189