# DC Students' Science and Biology Scores Rise on 2009 DC CAS 

"Our nation's economic future depends upon improving the pipeline into the science, technology, engineering and math (STEM) fields. We want DC's students to be a part of the next generation of STEM experts.
-Dr. Kerri Briggs, State Superintendent
The final results of the 2009 DC Comprehensive Assessment System (DC CAS) in Science show more 5th and 8th grade students reaching higher levels of science and biology. In grades 5 and 8 combined, $33 \%$ of students across the city scored Proficient or Advanced, an increase of 6 points from 2008. Also, the percent of 8 th grade students scoring Below Basic decreased by 5 points from 2008 to 2009.

|  | $5{ }^{\text {th }}$ Grade Science |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 |  | 2008 | 2009 |  | 2008 | 2009 |  | 2008 | 2009 |  |
|  | Below Basic | Below Basic |  | Basic | Basic |  | Proficient | Proficient |  | Advanced | Advanced |  |
| State (all DC) | 18\% | 19\% | $\uparrow$ | 49\% | 45\% | $\downarrow$ | 28\% | 29\% | $\uparrow$ | 4\% | 6\% | $\uparrow$ |
| DCPS | 20\% | 21\% | $\uparrow$ | 47\% | 45\% | $\downarrow$ | 28\% | 27\% | $\downarrow$ | 4\% | 7\% | $\uparrow$ |
| PCS | 13\% | 14\% | $\uparrow$ | 55\% | 49\% | $\downarrow$ | 28\% | 32\% | $\uparrow$ | 4\% | 5\% | $\uparrow$ |


|  | $8^{\text {th }}$ Grade Science |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 |  | 2008 | 2009 |  | 2008 | 2009 |  | 2008 | 2009 |  |
|  | Below Basic | Below Basic |  | Basic | Basic |  | Proficient | Proficient |  | Advanced | Advanced |  |
| State (all DC) | 49\% | 44\% | $\downarrow$ | 29\% | 26\% | $\downarrow$ | 20\% | 27\% | 个 | 1\% | 3\% | $\uparrow$ |
| DCPS | 55\% | 54\% | $\downarrow$ | 27\% | 24\% | $\downarrow$ | 17\% | 20\% | $\uparrow$ | 1\% | 3\% | $\uparrow$ |
| PCS | 38\% | 31\% | $\downarrow$ | 34\% | 29\% | $\downarrow$ | 26\% | 36\% | $\uparrow$ | 1\% | 3\% | $\uparrow$ |

## 5th and 8th Grade Science Highlights

- 5th grade students gained 3 points from the previous year - 35\% scored Proficient or Advanced compared with 32\% in 2008.
- Gains were particularly large in 8th grade - $30 \%$ scored Proficient or Advanced compared with 22\% in 2008 for a gain of 8 points.
- Students with disabilities almost nearly doubled their proficiency rates, from 8\% in 2008 to 15\% in 2009.
- $34 \%$ of DCPS 5th grade students were Proficient or Advanced; 37\% of charter school 5th grade students were Proficient or Advanced. 7\% of DCPS 5th grade students scored Advanced while 5\% of charter school 5th grade students scored Advanced.
- In the 8 th grade, $23 \%$ of DCPS students scored Proficient or Advanced and 39\% of charter school students scored proficient or advanced.
- Participation increased from 91\% to 95\%.

Biology is administered in grades 9-12. $36 \%$ of high school students who participated in the Biology assessment scored proficient or advanced.

| High School Biology* |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Below Basic | Basic | Proficient | Advanced |
| State (all DC) | $38 \%$ | $26 \%$ | $33 \%$ | $3 \%$ |
| DCPS | $39 \%$ | $22 \%$ | $35 \%$ | $4 \%$ |
| PCS | $37 \%$ | $31 \%$ | $31 \%$ | $1 \%$ |

- $39 \%$ of DCPS students scored proficient or advanced; $32 \%$ of charter school students scored proficient or advanced.

In 2008, Biology scores were only reported for students in grades 9 and 10. In order to provide the public with a more clear picture of how all students in high school Biology are achieving, OSSE is reporting this year on the proficiency of all students, regardless of grade level, who participated in the Biology assessment.

In 2008, reporting only on 9th and 10th grade students, $34 \%$ of students scored proficient or advanced.

