MARYLAND STATE DEPARTMENT OF EDUCATION
Preparing World-Class Students

Bernard J. Sadusky, Ed.D.
Interim State Superintendent of Schools

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

**TO:** Members of the State Board of Education

**FROM:** Bernard J. Sadusky, Ed.D.

**DATE:** February 28, 2012

**SUBJECT:** Update: Next Generation Science Standards

---

## PURPOSE:

To provide an update on the history and progress of the development of the Next Generation of Science Standards and Maryland's role in this process.

## HISTORICAL BACKGROUND:

Development of *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas* was begun in 2010. The final version was released by the National Research Council (NRC) in July 2011. The framework identifies the key scientific ideas and practices ***all*** students should know and be able to do by the end of high school. It now serves as the foundation for new K-12 science education standards, which are being developed by a group of states, and will replace standards issued more than a decade ago. This framework was also developed to be useful for curriculum and assessment designers, teacher educators, and others who work in K-12 science education.

Through a collaborative, state-led process, these new K–12 science standards are being developed that will be rich in content and practice and arranged in a coherent manner across disciplines and grades in order to provide all students with a rigorous, internationally benchmarked science education. Maryland is one of the 26 states in the state-led collaborative that is being coordinated by the nonprofit organization, Achieve Inc. This collaborative is developing the Next Generation Science Standards (NGSS) based on the NRC Framework. The NGSS should be completed in late 2012.

## EXECUTIVE SUMMARY:

The board will be provided an update on the history and progress of the development of the Next Generation of Science Standards and Maryland's role in this process. The board will also continue to receive updates on the development of the NGSS and have an opportunity for discussion on the draft NGSS when released to the public. Then, the board will consider adoption and the implementation of associated accountability issues. The risks related to different possible decisions will be discussed, as well.

Based on these discussions that will most likely occur after the spring draft release, the board members will be poised to make a recommendation related to the adoption of the Next Generation of Science Standards.

**ACTION:**

For information and discussion.

BJS:mc

Attachment:

- Maryland Lead State Committee members
- A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas: http://www7.nationalacademies.org/bose/Standards_Framework_Homepage.html
- Next Generation Science Standards: http://www.nextgenscience.org/

| | A | B |
|---|---|---|
| 1 | SLT-NGSS Members | Affiliation |
| 2 | Benson, Dr. Spencer A. | Director (H E) Center for Teaching Excellence , UMCP |
| 3 | Clem, Donna | STEM Coordinator, DOI MSDE |
| 4 | Finan, Dr. Mary Kay | Professor of Education, Frostburg University, MSBE member |
| 5 | Gates, Jr.,Dr. S. James | Physics Professor, UMCP, MSBE member |
| 6 | George,Deborah | Science Instructional Specialist, Caroline County Public Schools |
| 7 | Hapka, Alison | Biology Teacher, Cecil County Public Schools, MAST President |
| 8 | Hedges,Gary | Science Specialist, DOI MSDE |
| 9 | Herrmann,Ann | Section Chief, DAAD MSDE |
| 10 | Holocker, Dr. Angie | Principal, Matapeake Middle School ,Queen Anne's County Public Schools |
| 11 | Imes, Ted | Director for Education Outreach, Northrup Grumman |
| 12 | Lavin, Jody | Resource Teacher, Special Education, Office of Science , Baltimore County Public Schools |
| 13 | Martirano, Dr. Michael | Superintendent, St. Mary's County Public Schools |
| 14 | Morse,George | Science Specialist, DOI MSDE |
| 15 | Newberry, George | Director of Science,PreK-12, Baltimore County Public Schools |
| 16 | O'Neill, Anita | Supervisor of Science, Technology and Engineering, Montgomery County Public Schools |
| 17 | Reed, Kara | Supervisor of Elementary Science & Math, Washington County Public Schools |
| 18 | Renzulli, Andrew | Supervisor of Science, Harford County Public Schools |
| 19 | Rhine,Luke | CTE Specialist, MSDE |
| 20 | Shearer,Michelle | Chemistry Teacher, National Teacher of the Year 2011, Frederick County Public Schools |
| 21 | Stylinski, Dr. Cathlyn (Cat) | Senior Agent, Appalachian Laboratory, UMCES |
| 22 | Streckfus, June | Executive Director , Maryland Business Roundtable for Education (MBRT) |
| 23 | Thomas, Dr. Don | Hackerman Academy of Mathematics and Science, Towson University |
| 24 | Thurlow, Mary - Lead | Coordinator for Science, DOI MSDE |
| 25 | Trout, Charlotte | Curriculum and Instructional Specialist ,Washington County Public Schools |
| 26 | Weller, Mary | Coordinator, Secondary Science, President of Maryland Science Supervisors Association |
| 27 | Winsky, Renee | CEO, Tech Council of Maryland |
| 28 | Yancone, Pete | Education Director , Maryland Science Center |
| 29 | Yohe,Brad | Secondary Science Supervisor , Carroll County Public Schools |
| 30 | Zenker,Stephanie | G & T Education Specialist, DOI MSDE |