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MEMORANDUM

TO: School District Superintendents

FROM: Pam Stewart

DATE: May 31, 2013

SUBJECT: Florida Public Review of Next Generation Science Standards

Through a collaborative, state-led process managed by Achieve, new K-12 science standards have been developed. We are pleased to announce that the Next Generation Science Standards (NGSS) are ready for public review and consideration by Florida stakeholders and constituents for statewide adoption.

Please share the revised NGSS with appropriate personnel and community members in order to provide feedback to the department. The link to review the final draft of the NGSS and to provide feedback can be found at http://www.cpalms.org/standards/NGSS_Public_Opinion_Survey.aspx. This review will be open from May 31 – June 30, 2013.

The NGSS are based on the *Framework for K-12 Science Education* developed by the National Research Council. The *Framework* provides a sound, evidence-based foundation for standards by drawing on current scientific research - including research on the ways students learn science effectively - and identifies the science all K-12 students should know. The *Framework* describes a vision of what it means to be proficient in science, including science as both a body of knowledge and an evidence-based model and theory-building enterprise that continually extends, refines and revises knowledge. It presents three dimensions that are combined to form each performance expectation.

PAM STEWART
CHANCELLOR OF PUBLIC SCHOOLS

- Dimension 1 – Practices: The practices describe behaviors that scientists engage in as they investigate and build models and theories about the natural world and also describe practices that engineers use as they design and build models and systems.
- Dimension 2 – Crosscutting Concepts: These seven concepts apply across all domains of science. Providing links among the domains, they include patterns, similarity and diversity; cause and effect; scale, proportion and quantity; systems and system models; energy and matter; structure and function; and stability and change.
- Dimension 3 – Disciplinary Core Ideas: These are core scientific ideas that must meet at least two, but preferably all four, of the following criteria:
 - Have broad importance across multiple sciences or engineering disciplines or be a key organizing concept of a single discipline;
 - Provide a key tool for understanding or investigating more complex ideas and solving problems;
 - Relate to the interests and life experiences of students or be connected to societal or personal concerns that require scientific or technological knowledge; and/or
 - Be teachable and learnable over multiple grades at increasing levels of depth and sophistication.

The NGSS were developed collaboratively with stakeholders in science, science education, higher education and industry. Additional review and guidance was provided by advisory committees composed of nationally recognized leaders in science and science education as well as business and industry. As part of the development process, the standards underwent multiple reviews from many stakeholders including two nationwide public draft reviews.

If you have questions or need additional information, please contact Jackie Speake, science curriculum specialist, at Jackie.Speake@fldoe.org or via telephone at 850-245-5068.

PS/js

cc: School District Assistant Superintendents
District Science Curriculum Supervisors
Principals