#### **Oklahomans for Excellence in Science Education Oklahoma Science Teachers Association Press Release**

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# Science Advocacy Groups Respond to Recent Statements from Senators Sykes and Brecheen.

In a May 23<sup>rd</sup> Press Release, Senator Anthony Sykes (R-Moore) and Senator Josh Brecheen (R-Coalgate) extol the virtues of House Bill 3399, which repeals the Oklahoma Academic Standards for English/Language Arts and math, which are based on the Common Core State Standards. Besides containing a number of factual errors the release also raises a number of questions concerning the new Oklahoma Academic Skills for Science that Oklahomans for Excellence in Science Education (OESE) and the Oklahoma Science Teachers Association (OSTA) cannot allow to go unaddressed.

## Are Oklahoma's science standards the product of federal government and out-of-state interest groups?

The Oklahoma Academic Skills for Science (OASS) were developed by a committee of more than 50 Oklahoma science educators, scientists, engineers, business professionals and laypersons in a process that took over a year to complete. The process included a system of review and content vetting that involved an additional 450 people from school systems, universities, business organizations, and industry.

## Did the group that created the standards base their work on Next Generation Science Standards?

The Next Generation Science Standards (NGSS) served as a model for the new OASS, but for good reason. NGSS is the product of a five-year, privately produced effort to bring the best of what is known about high-quality STEM (Science, Technology, Engineering and Math) education together in one document for the voluntary use by states to improve science instruction and scientific understanding. They were developed to be 21<sup>st</sup> Century standards for 21<sup>st</sup> Century science students. NGSS is not a federal program and many states are actively engaged in adopting them in total, including our neighboring state of Kansas.

## Will going back to previous Oklahoma science standards mean going back to standards created by Oklahomans for Oklahomans?

Previous versions of the Oklahoma Science Standards were also heavily influence by the national standards projects of their time. The science Priority Academic Student Skills (PASS) were based on the 1990's production of Science for All Americans from the American Academy for the Advancement of Science and the National Research Council's National Science Standards. When writing science standards, PASS authors would have been negligent to not use these tools when trying to define what is best for Oklahoma science students.

#### Does OASS heavily promote global warming alarmism, as has been argued?

OASS standards contain very little in the way of standards about climate or climate change and certainly nothing that could be construed to promote global warming alarmism. The mechanisms of climate and weather are the focus of the OASS discussion and the understanding of those mechanisms are derived through data. The OASS writing team and subsequent advisory panels went to great lengths to insure the standards were free of politicization. Global Climate Change itself is not an area of study in upper grades of the Oklahoma Academic Skills for Science and lower grades concentrate on developing understandings of weather and it's relationship within climate.

### It's been said the rejected science standards did not prepare students for work in STEM fields. Is that true?

Engineering design and STEM integration is a major theme throughout the OASS standards and an attractive feature that sets the stage for the possibility of someday developing quality STEM integration program for children across the state of Oklahoma.

As organizations dedicated to advancing the cause of quality science education, OSTA and OESE believe that well designed standards are the starting point for building rigorous and demanding science curriculum and instruction. The new Oklahoma Academic Skills for Science certainly fit these criteria. We invite Senator Sykes and Senator Brecheen to join us in developing the training and finding the resources to bring the vision of exceptional STEM curriculum and instruction to fruition for all Oklahoma children.

#### For more information contact:

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Oklahomans for Excellence in Science Education, Inc. is a non-profit educational organization that promotes the education of the public about the methods and values of science and advocates excellence in the science curriculum. Activities include participation in educational and scientific organization conferences, workshops for science teachers, operation of a speakers' bureau, and related activities. <u>www.oklascience.org</u>

The Oklahoma Science Teachers Association is the statewide professional association specifically addressing the interests and concerns of science teachers. OSTA is a state affiliate of the <u>National Science Teachers Association</u>