

## **NMAS Statement for Public Hearing on NM PED STEM Ready Science Standards 10/16/2017**

The members of the New Mexico Academy of Science urge you to reject categorically any deviations from the national Next Generation Science Standards (NGSS) and its Framework for K-12 Science Education.

The proposed deviations, particularly regarding evolution, the age of the Earth, and climate change, show disrespect for the whole of science, for the work of millions of scientists during the ages by injecting religious and political views in what should be factual Science Standards.

The changes to the NGSS in the proposed PED revisions reflect negatively on the strong science industry housed in New Mexico including Sandia National Laboratories, Los Alamos National Laboratory, and the Air Force Research Laboratory. These laboratories and associated technology businesses depend on a state that has a strong science education focus, and the proposed changes would cast doubt on the quality of that education as well as hamper future business and industry from investing in New Mexico.

The deviations from the NGSS are negative for our students who would be given an error-filled education that would hamper their employment and their worldview. It puts students at an insurmountable disadvantage for entering scientific fields of study in their secondary education, but will also send high school graduates into the changing modern world unprepared.

The revised PED Stem Ready Standards negatively affect classroom teachers. These revised standards remove the Framework of K-12 Science Education from the Standards. The “LOST” NGSS Framework provided for the integrated and consistent use of the Science and Engineering Practices more publicly recognized as the scientific method. Students lose the mandate for *the actual doing of science or engineering. (Problem, hypothesis, test, analysis, evaluation)*

The PED revised standards remove the NGSS Framework’s Crosscutting Concepts which links common concepts across all the disciplines of Biology, Chemistry, Physics and Earth Sciences. Examples include patterns, cause and effect, models, proportion and scale.

Every deviation by PED causes teachers to lose access to the multitude of free resources based on the NGSS. This includes not only curriculum materials and textbooks, but plans for professional development, implementation of new practices, and materials for evaluations or student testing. NGSS Deviations means lost access to alignment with the Common Core Math and English Language Arts in use across all New Mexico classrooms.

The New Mexico Academy of Science denounces the revised Public Education Department Science Standards. **It recommends adoption of the Next Generation Science Standards as written.** PED should provide professional development and an implementation plan.