

October 16, 2017

Ms. Jamie Gonzales
Policy Division, New Mexico Public Education Department
Room 101
300 Don Gaspar Avenue
Santa Fe, New Mexico 87501

Submitted through: rule.feedback@state.nm.us

Ref: Public Comment on Proposed Rulemaking Title 6, Chapter 29, Part 10

Dear Ms. Gonzales:

In reference to the call for public input on the Notice of Proposed Rulemaking to obtain input on the proposed repeal of 6.29.10 NMAC, Science, to be replaced by 6.29.10 NMAC, New Mexico Stem-Ready Science Standards, the New Mexico Business Roundtable (NMBR) does not support the modification of the Next Generation Science Standards (NGSS) Standards as proposed, and instead would request the New Mexico Public Education Department (NMPED) to strongly consider the full adoption of the NGSS, unchanged, for the following reasons:

- The NMBR has met with a diverse group of individuals and organizations across New Mexico, including credentialed scientists, public school science teachers, university administrators and faculty, federal agency personnel in high technology organizations, and high-technology and other business owners and employees. In all of those meetings, NMBR has not found a single voice of support for the changes that have been proposed.
- NMBR believes the multi-year process that created the NGSS, including the engagement of 26 states, the National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve, as well as significant public input from across the U.S., represents a significant, and unquestioned level of expertise and formality of process to create science standards for our public schools for the 21st Century. An undocumented process that appears to be have been implemented by NMPED resulting in the proposed modifications to those standards carries no credibility with the business community.
- By specifically excluding well-proven foundational scientific elements including the age of the earth, evolution, and climate change science, New Mexico will be held up for ridicule by the science institutions across the U.S. and internationally. This will result in New Mexico being viewed as an undesirable location for the high-technology companies of the 21st Century to locate and/or grow their businesses here. In particular, public input already provided during this period from entities such as the Los Alamos National Laboratory Foundation, the Los Alamos Commerce and Economic Development Corporation, various science teacher and other education groups, and the three major research Universities in New Mexico has echoed the potential negative impact these proposed modified standards will have on their success in growing New Mexico's economy and research



infrastructure. Previous efforts by Kansas and Louisiana to effect the same types of changes in their standards has demonstrated the "black balling" of those states by scientific organizations with memberships of tens of thousands of individuals, as well as the negative publicity associated with such initiatives that impacted those State's images.

- By modifying the NGSS standards that are now approved by 18 states and the District of Columbia, New Mexico will not be able to take advantage of significant efforts underway by major educational publishing houses to prepare curriculum, textbooks, and assessment tools. As a result, New Mexico will have to incur substantial costs (100's of thousands, or \$M's of dollars) in creating their own unique tools for implementation. And, as a stand-alone "New Mexico" Standard, we would not be able to effectively benchmark the progress that we are making against other states. These are business decisions that our membership would not make an analogy would be if one of members decided they did not like some of the features of Microsoft Office, and instead undertook an effort to create their own software, going through an expensive process, and suffering the possibility of not being compatible with the rest of the world. This is simply an unacceptable waste of public funds that are already too scarce in our current Fiscal environment.
- Our understanding of the proposed timeline for implementation is impracticable. In other states, estimates of 3-5 years for implementation, with adequate funding and resources applied to the transformation of the standards and related professional development for teachers in the pedagogy is considered to be aggressive. Our understanding, based on public comments, is that NMPED anticipates implementation to occur in two years, with assessments beginning the following year this is not a reasonable timeline for the dramatic changes incorporated into the NGSS. As stated in the "Guide to Implementing the Next Generation Science Standards" by the National Research Council, this should be a multi-year effort with adequate resources:

"Successful implementation of the Next Generation Science Standards (NGSS) will take a sustained and coordinated effort. It will take multiple years to transition instruction in all classrooms in all schools in a district or state. To be successful, leadership at all levels needs to carefully consider the changes and timeline that will be necessary to move toward the vision for science education laid out in "A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas" (National Research Council, 2012; hereafter referred to as "the Framework") on which the NGSS are based."

NMPED's own Math and Science Advisory Council, comprised of highly-credentialed education experts, has recommended an aggressive four-year plan for implementation (Math and Science Annual Report, May, 2016, Addendum Included), and, since 2013, has recommended the adoption of the NGSS Standards, as written in its entirety.

Our Executive Committee would be happy to meet with NMPED personnel to discuss these issues more fully at your convenience.

Sincerely,

Laurence Langley
Chief Executive Officer, New Mexico Business Roundtable