

WTE Column of April 22, 2014. Editor's Headline: "Politics of ignorance prevail"

"I don't understand why Matt Mead would oppose climate science," a Casper friend commented on the eve of Friday's meeting of the State Board of Education (SBE). "He's an intelligent person with a fine education."

My friend's remarks pertained to the infamous Footnote 3 that Governor Mead refused to veto. Of course the footnote, which amends the state budget with directives forbidding state funds to implement Next Generation Science Standards (NGSS), came into being only because a legislator and the governor kowtowed to the head-in-the-sand ignorance that mar Wyoming politics.

At the State Board meeting a coalition of "Climate Parents," "Teachers for NGSS," and similar groups passionately pleaded with the board for implementation. "There's leeway in the footnote," argued Marguerite Herman, pointing out that the directive pertains to the next fiscal year, which begins the first of July; hence, the standards could be adopted right now.

An impressive number of teachers and retired teachers weighed in, who understand the disadvantages to students, should these standards be withheld. Now that they've been tested and formulated, NGSS should be put into practice, said Teacher Josh Thompson, who brought a group of junior high and high school students to address the board. The youngsters pleaded the case for up-to-date standards that would help close the gaps in their knowledge. Mr. Thompson pointed out that NGSS integrate well with other subjects and, hence, are helpful in curriculum development.

In his capacity a science-instruction facilitator, Physics and Science Teacher Roger Spears—of Goshen County, seat of Footnote Legislator Matt Teeters—over the past three years has worked up a model integrating the standards in the county's curriculum. He is enthusiastic about this up-to-date path to problem-solving, critical thinking, and student-preparedness. The standards "apply to real-world problems," he said to the board. Mr. Spears noted possibilities for integrating science in K through 5 curricula, where previously teachers had no tools, teaching "no science at all."

John Friedrich wrote the board "as the father of a 2nd grader" excited about NGSS, which teaches the big ideas in science with "highest quality standards" and via practices that scientists use every day. NGSS "literally brings science to the next generation" of Wyoming students, he noted, adding that the board received more than 14,000 comments urging NGSS adoption.

Academics, too, had their say. Science Consultant Jim Verley of University of Wyoming, who gave repeated updates to the board as he helped develop NGSS over many years, remarked to SBE and attendees that he appreciated the board's difficult position as education turned into "a political football." He commented on the strength of the standards' architecture, pointing out that the standards have nothing to do with federal regulations but were implemented by scientific, educational, and public entities whose work and input has been

stellar. The standards are well thought-through, age-appropriate, and educationally sound, he explained as he urged the board to adopt NGSS and not have everyone start again from scratch.

Professor Emeritus Duane Keown submitted comments from UW Nobel laureates Gabor Vali and Jason Shogren. Professor Vali is a member of the Intergovernmental Panel on Climate Change, a body that recently issued dire warnings about our warming planet. Dr. Keown also added a statement by Professor Emeritus Jason Lillegraven, “probably the best spokesperson at UW on the importance of learning about evolution as the central organizing idea of the biological sciences.”

It’s of utmost importance to teach about the climate disruptions we are experiencing, say the UW scientists. Their comments argued that “excluding a topic from education because the existing knowledge on the subject is not 100% is a mistake;” that science is “the human endeavor that tests and examines facts” and needs to be decided by scientists, as free from politics as possible, and that the overwhelming majority of scientists in the atmospheric sciences (and beyond) have concluded that our climate is affected by human activities.

Milton Garret, speaking of his work with international clients in Russia, Australia, and elsewhere, pointed out that countries all over the globe acknowledge human contribution to climate change. He spoke of horrific instances of climate chaos he witnessed, particularly in Russia. He argued that understanding how climate and human activities are linked is paramount if the next generation is to participate in decisions about everyday life.

Then the opposition had its say, which consisted mostly of mothers of young children who gathered under the banner to “Take Back Wyoming.” The group objected to the standards’ absence of creationism, their “non-theistic” teaching, their religious neutrality on evolution, and their “federal-government” origins. It argued that Louis Pasteur himself was a “creationist scientist,” that the standards were guilty of fostering population control, and that God had commanded humans to “be fruitful and multiply.” It mentioned a legal challenge to NGSS in Kansas and urged the board to wait until the court case was resolved. The group’s sole elementary-school teacher claimed that “Wyoming citizens are opposed” to NGSS and Common Core, period.

The group’s arguments might not have carried much weight, had it not been for two legislators, Reps Hutchings (R-Laramie) and Reeder (R-Natrona) who warned that the intent of Footnote 3 is to stop NGSS right now. The subtext of their comments: Governor Mead will refuse to sign off on implementation, should the board submit it. When Superintendent of Public Instruction Cindy Hill warmly greeted Tom Reeder at lunch break, her gesture was duly noted. To no avail had teachers, students, and scientists urged the board to stand its ground. Because of gubernatorial / legislative objections to a handful of climate-science and evolution discussions embedded in 140 standards, a politics of ignorance continues to prevail—to the detriment of Wyoming students.