

November 5, 2013

I am a mother of two young children, the oldest of which is in kindergarten this year. My husband and I believe that a good education is of major importance in the lives of our children and provides the basis of further post education, career choices and success. This success is as an individual, and collectively as a community, state and country. As a parent, I am charged with making the best decisions possible for my children. When it comes to their education, those making decisions as to what is taught to my children are also charged with that same responsibility. This responsibility, today as you vote, is yours! Let me assure you that this parent and many others take that responsibility very seriously. And we give it to you cautiously and with great trepidation. Please treat it as so.

Thus is my reason for writing to you regarding your vote on the adoption of the Next Generation Science Standards. These standards have many issues that should be examined carefully. In reviewing the NGSS, Fordham Institute shows concern at every level of K-12. I quote them throughout this statement cautiously as I do not routinely agree with them. I have reason to believe that they would be as positive as possible relative to NGSS and therefore when they express the concerns that they do, we should all take heed.

In regards to Physical Science Fordham states:

"NGSS physical science coverage is mediocre throughout grades K–5 and declines rapidly in middle school, and still further at the high school level. Overall, the physical science standards fail to lay the foundation for advanced study in high school and beyond, and there is so little advanced content that it would be impossible to derive a high school physics or chemistry course from the content included in the NGSS."

If it is impossible to have physics and chemistry courses in high school, how are we preparing our students for college? Many colleges and universities require these courses as prerequisites for acceptance and certainly for various courses of study. Therefore, the lack of these classes is detrimental to our students and not fulfilling the goal of college readiness. This would mean that the districts would need to write and add content in order to fulfill this need for our students and therefore increase cost and conflicts in implementation.

Next the reviews deal with the critical connection between science and math. They state:

"Among the serious challenges the analysts found in the NGSS was an acute dearth of math content, even in situations where math is essential to the study and proper understanding of the science that students are being asked to master."

"Much of the NGSS document was not written with mathematics in mind."

"In several cases where NGSS expectations require math in order to fully understand the science content, that math goes well beyond what students would have learned in classrooms aligned to the Common Core. In other words, the math in the NGSS and the math in the CCSSM are not fully aligned."

"(NGSS) misses several opportunities to build important links between grade- appropriate math and required science content."

"Given the critical overlap between science and math, as well as the NGSS authors' intention to align their science expectations with the Common Core math standards, these shortcomings signal a need for caution on the part of states that are serious about implementing the CCSS but that are also considering adopting the NGSS."

Each of these quotes express the bottom line that NGSS does not include the necessary and critical math content in order to grasp the science. Math and science are tied together in their understanding and application. Again, how does this make our children and students college and career ready? These following final quotes give a shocking summation of the standards that you are voting on today.

"Overview: The NGSS fall short of excellence in several ways, including: overemphasis on practices over essential context; omission of much essential content; and failure to integrate mathematics content that is essential to science learning; and use of assessment boundaries that put arbitrary ceilings on the content that will be assessed and therefore taught at each grade"

"Clarity and Specificity: The presentation of the NGSS is cumbersome and difficult to navigate. In addition, too many individual performance expectations

are vague and poorly worded, with broad references to concepts that lack specific guidance about what, precisely, students should know and be able to do."

Clearly this is not the definition of the standards Wyoming wants for our children. Your vote today as a Board is to determine the best course of science study for the children of our state. How can a standard that is vague, poorly worded, cumbersome and difficult to navigate be the best?

We are talking about the foundational blocks of our children's education. There is no doubt that as a state we need better/higher science standards. The process to change over to new standards will be financially costly and time consuming, but necessary. More importantly, any failure by the new standards will sadly be evidenced by the failure of our students. This is unacceptable. Our children deserve not just better, but the best. You can give them the best. It is your job to do so. I implore you to vote NO to the adoption of NGSS.

After voting no, I ask you to seek the best science standards for our schools. They should not stay the same as they are now. I would ask you to look at the standards of South Carolina as an option. They are among the highest in the nation. SC's standards are much better than the NGSS according to the top rating institutions. That higher standard is readily available just for the asking. There is no reason that when we adopt new standards that we can't make a change to make our students the top in the nation. We expect nothing less of you and our students.

Thank you for allowing me to speak to you today. I speak as both a parent and a taxpayer. As a parent, I want what is best for my children. As a taxpayer, I want what is best for our state of Wyoming and my money most wisely spent. I trust that you will put our children first and vote NO to NGSS.