Maine's Science And Technology Standards Review

My name is Julia Bemis, I live in Old Orchard Beach, Maine and have been a physics teacher at Bonny Eagle High School for the past five years.

Our goal as science educators is to help students become scientifically literate, to question what they are hearing, look for good sources of information, know how to analyze given information, and draw conclusions from it. The Next Generation Science Standards (NGSS) provide a foundation for teaching science that aids us with this goal and provides an interconnective narrative of skills, practices, and standards which can be taught at any level. These goals focus on students doing science and learning about the world around them, more than just memorize a set of facts. The broad approach to the standards and how they build upon each other at each level provides educators with the time and guidance to have the student participate in science more than the previous Maine Learning Results (MLRs).

The NGSS were created by teachers and scientist are based on research and best practices, they are exactly what we should be using in order to educate our students. In MSAD 6 we adopted these standards at a district level and the Science and Engineering Practice standards are currently used by the high school as our science graduation standards. At the high school, we have to take the time to write rubrics to address these and worked to adapt our curriculums to these best practices. Personally, my Physics curriculum is driven by both the physics disciplinary core ideas, science and engineering practices and crosscutting concepts provided by the NGSS. Students have done well and enjoyed working under these standards, it provides room to modify topics to meet their interest and learning abilities as well as holding each student to a high standard. Students are willing to ask questions, make predictions, create and perform experiments in order to test these predictions, as well as being able to make connections from one science to the next. We’ve moved away from only working within our specialties and take the time to discuss best practices for teaching science, not just teaching physics. These discussions and connections have made our teaching better for both us and our students.

By Maine adopting the Next Generation Science Standards, we will be following researched best practices and providing our students with the best and most useful science education. We will be able to use resources already provided by the National Science Teacher Association and collaborate with teachers from around the United States, who have already adopted these standards. As many districts have already chosen to adopt these standards and worked towards integrating into their curriculum, it just makes sense that these standards get adopted at the state level.

Thank you for your time.

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