



To: Members of the Committee on Education and Cultural Affairs

From: Dr. Ruth Kermish-Allen, Dr. Katahdin Cook Whitt, Rebecca Clark Uchenna, Adrienne Hanson, Leonard Kenyon, Dr. Lisa Kenyon, Maranda Chung

Testimony on LD 2182

Dear Senator Rafferty, Representative Brennan, and members of the EDU committee,

This testimony is prepared **collaboratively between members of the MMSA science education team & myself the executive director of the Maine Mathematics and Science Alliance (MMSA).**

As current staff members of the Maine Mathematics and Science Alliance (MMSA), we neither oppose nor support the revisions of the science and engineering standards in Maine. As an organization, we are fully supportive of the inclusion of the Next Generation Science Standards Performance Expectations as written in these Maine Science Learning Standards. We are concerned about the risk of unintentional outcomes from adding socioscientific issues to the extension statements without careful review and appropriate support for teachers.

MMSA worked with more than 1700 educators last year, listening actively to their concerns and passions about how standards drive their practice and instruction. When the review process began, we highlighted a sincere desire to not add, change, or refocus the science standards in the hopes that educators would not be forced to align to more or new broad-ranging reforms. In our conversations with educators across Maine, they ask that this revision process stay the course of the current science standards, which are adopted from the NGSS. This new version of the science standards for Maine only came into being a short time prior to the beginning of the pandemic. Even with the best intentions, pandemic-era education was very difficult for every educator and student. Given COVID restrictions, many educators were not able to utilize the full impact of their teaching practice. Their energy was spent on keeping children safe and healthy, not on realizing the vision of Maine's new science learning results.

Regularly reviewing and revising our learning standards ensures that our students are reaping the benefits from the most recent research findings and best practices in education. At the same time, we want to stress that Maine's educators have only had 5 years, with a pandemic during that time, to shift their practice to the NGSS on which Maine's science standards are modeled.

We applaud the revision team's commitment to preserving the fundamental vision and intentions of the NGSS that Maine's educators and so many others worked hard to create. Keeping these performance expectations consistent and unchanged has been, and will continue to be, extremely important as educators begin to implement the 3-dimensional science teaching into their practice. As stated above, educators need more time with these new standards to be able to implement them fully in their classrooms.

We are concerned about the inclusion of extremely complex and sensitive topics, such as genocide, within the revisions presented. The additional content that these revisions have worked within the science standards can create a host of extremely problematic situations for educators and their students. Placing this additional burden on teachers without proper training in both implementing science standards alone and now adding in extremely sensitive and triggering topics without training is simply disrespectful to teachers. Further, some of the revised language in the assessment endpoints runs the risk of leading to potential issues of reinforcing misunderstandings about core science ideas. **While we appreciate the inclusion of expansive ways of knowing and doing science, we are concerned about the potential harm of doing so in an unsupported or unaudited way.** Specifically, we noted that there is the chance that individuals representing the communities of interest outlined in the revisions were likely not present for the revision process. We encourage the Maine DoEd to engage in a substantive diversity, equity, inclusion, justice, and belonging (DEIJB) review with partners, specifically representing the communities of interest, to ensure any revisions are appropriate, sensitive, and do not create unnecessary harm.

Districts have just begun finding methods to integrate the standards and science practices into their classrooms. Only in the past year have we seen these reform initiatives start to bear fruit. Research in educational change suggests that change initiatives take time and focused attention, and educators in Maine are only just beginning this journey. Only after multiple years of implementation will our state have any supporting data to inform a standards revision process.

Further, in a climate where we are already experiencing teacher shortages, the impact on teachers would be substantial if they were asked to make yet another set of major changes without having had the opportunity to see through the current initiative. We anticipate that this would lead to distrust and frustration on the part of teachers, schools, and districts.

Sincerely,



Dr. Ruth Kermish-Allen
Executive Director
MMSA