

The Maine Heritage Policy Center Testimony to Oppose LD 14 "An Act To Improve Science and Engineering Education for Maine's Students"

Senator Millett, Representative Kornfield, and distinguished members of the Education and Cultural Affairs Committee, my name is Jacob Posik and I serve as the Director of Communications for The Maine Heritage Policy Center. Thank you for the opportunity to provide testimony regarding LD 14, "An Act To Improve Science and Engineering Education for Maine's Students."

Mandating that the Department of Education adopts the Next Generation Science Standards (NGSS) is unproductive and misguided. The proposed standards would squander the ability of each district to decide their curriculum to enhance student learning and suit the needs of Maine's economy. In addition, the standards would likely be expensive. The ability to adopt NGSS is dependent on the state or the school districts picking up the tab to create and obtain materials necessary to comply with the proposed standards.¹ When Montana considered adopting these standards, the expected cost burden on school districts made the state introduce an alternative set of standards. NGSS was too "cost and resource prohibitive" for small and rural districts to implement, especially the engineering standards.²

In addition, local control of public school curriculum and instruction has historically driven innovation and reform in education. A one-size-fits-all, centrally controlled set of standards like NGSS hinders efforts to develop academically rigorous curricula, assessments, and standards that meet the unique challenges Maine faces. While proponents of these standards often claim that local school districts are still free to choose their curriculum, the truth is that they severely limit local flexibility regarding curriculum selection. Furthermore, state and local leaders cannot change Next Generation Science Standards content, and there is no evidence that these standards lead to higher academic results.

In fact, since the State of Rhode Island adopted NGSS in 2013, the percentage of students proficient in science has dropped.³ In 2013, roughly 34 percent of Rhode Island students were proficient in science whereas approximately 29.1 percent were proficient in 2017.⁴ It would be unfortunate if these standards were implemented in the State of Maine and the same results occurred.

Furthermore, The Fordham Institute, a highly respected non-partisan organization that supports and publishes research on education policy, gave the proposed standards a "C" grade.⁵ NGSS received this grade for several reasons. For example, important content is missing or implicit, leaving students unprepared to move

¹ <u>https://www.victoryprd.com/blog/?p=4820</u>

² <u>https://www.cabinetreport.com/curriculum-instruction/cost-can-be-a-barrier-to-new-science-standards</u>

³ <u>https://www.providencejournal.com/news/20160927/ri-science-scores-continue-to-slide</u>

⁴ <u>http://www.ride.ri.gov/LinkClick.aspx?fileticket=qlqKlrE4lj0%3D&portalid=0</u>

⁵ http://edex.s3-us-west-2.amazonaws.com/publication/pdfs/20130612-NGSS-Final-Review_7.pdf



on to the next grade level or to college. Also, a cap is put on what is taught and learned which results in students who excel in school from achieving new heights. To boot, the use of mathematics is rare in these standards, which would not adequately prepare students to study physics and chemistry in college. While most would agree there is room for improvement regarding the state's science standards, it would be an injustice to Maine's students to adopt standards that are merely average, will likely be costly to the state or school districts, are unable to prepare students in grades K-12 for college, and could actually lower student achievement in science in Maine.

To conclude, implementing the proposed standards would not be an improvement to Maine's education system. Not only will the proposed standards likely be costly but they ensure control is taken out of the school districts and put into the hands of a central authority. Also, These standards have not proven to be fruitful in increasing science proficiency in other states. I urge the committee to vote "Ought Not To Pass" on this bill. Thank you.