

Submitter: Breck Foster

Committee: Senate Committee On Education

Measure: SB 854

My name is Breck Foster and I live and work in Lake Oswego. I teach social studies and Spanish at Lake Oswego High School. My classroom and Green Team students have worked with staff, district and community partners to make our school and by extension our community and world, more sustainable.

I strongly support SB 854, which seeks to significantly expand and integrate climate change instruction across all K-12 core subject areas. According to the University of Minnesota's Center for Climate Literacy, climate education is about "helping young people develop understanding, values and attitudes aligned with how we should live to respect our planetary home...(It) is a wider competence than the knowledge of climate science. A multidisciplinary skillset, it includes numbers and facts, but centers emotions, care and behavioral change necessary to create sustainable futures... (Students) have a right to knowledge that builds their resilience and capacity for transformational adaptation advocated in IPCC reports" ([University of Minnesota, 2022](#)).

### **K-12 Climate Education in the United States**

In recent years, there has been an incremental growth in the area of climate change education, with states like [New Jersey](#), [Minnesota](#), [California](#), [Connecticut](#), and [Maine](#) charting different paths through both grassroots and government created legislation and policies to create frameworks for K-12 interdisciplinary or multidisciplinary climate change education or environmental literacy. In the case of SB 854, this would look like a set of learning concepts to be integrated into updated standards, followed by an ODE-developed instructional plan that school districts--with support from Educational Service Districts, community partners, etc.--can use to determine professional development and resources that speak to their economy, bioregion or climate needs. Some Oregon districts, like my own of Lake Oswego, have responded to the call of youth, with committed staff and community groups developing a system for integrated [climate change and sustainability education](#) across grade levels K-12. At the same time, nationally, universities, private organizations and governments have collaborated and created open source curriculum and professional development for teachers. In Oregon, [Subject to Climate](#), who worked with New Jersey to create their [Climate Change Education Hub](#), is working with OECE to create our own hub which will provide open source, place-based lesson plans, many created by Oregon educators.

## Standards Integration and Applications

In public schools, standards “outline the knowledge and skills that the state expects students to learn K-12 within particular subject areas”, including learning targets and key competencies for each subject” ([Aspen Institute](#)). Standards guide materials and other curricular choices as well as educator lesson planning, but it is largely left up to the professional decision-making of the teacher to decide what the instruction looks like in the classroom. These standards are regularly updated as society changes. What jobs will exist in 20 years are different in many ways than today or 20 years ago. New information shapes our way of thinking and broadens our understanding of what students need to know to have a strong working knowledge of our representative democracy, and a breadth of multidisciplinary knowledge to prepare them for beyond high school.

Oregon currently requires climate change and sustainability education in [science](#) and to some degree in [social studies](#). The [updated 2022 Science standards](#) include the national Next Generation Science Standards that Oregon adopted in 2014 but elevated the role of climate change in student learning targets. In the area of social studies, there are already, across elementary and secondary levels, standards that include language of climate change, sustainability and human-environment impacts. Looking at science and social studies standards combined, it is my belief that they are still too limited as well as siloed in such a way that students may fail to see how climate change does and will continue to impact all facets of life.

Since 2017 students, educators and communities have asked for learning concepts, updated learning standards and in some cases curriculum in a series of powerful education bills (HB 2845, SB 13, SB 513, SB 664). All of those bills – the [Holocaust and other Genocides Bill \(2019\)](#) which requires relevant learning concepts to be integrated into social science standards K-12; the [Tribal History/ Shared History bill \(2017\)](#), which requires “every school district in Oregon implement (K-12) historically accurate, culturally embedded, place-based, contemporary, and developmentally appropriate Native American/Alaska Native curriculum” in all grades and across core subject areas; the [Civics bill \(2021\)](#) that requires all students receive civics education for a “functioning representative democracy”; and the [Ethnic Studies bill \(2017\)](#) that center historically marginalized groups in social studies standards – all align beautifully with SB 854. The fact that these new educational requirements, coming from multiple perspectives, build off of and support one another speaks to how we are in a time of great transformation and that schools play a critical role. Schools are places where we can foster a functioning and just democracy that respects all people and different ways of knowing; help prepare for a strong and regenerative economy; expand our thinking about humans’ place in the natural world so that we can learn to better value the nonhuman world and be better stewards of our shared resources.

## Teacher Workload

Educators fluidly shift between our roles as teacher, administrator, custodian, or educational assistant to learner/student. We are constantly asked to adapt our teaching to incorporate new ideas and best practices. This can feel challenging at times and more than one person has said to me, this bill is important, but won't this just be more work for teachers? I understand the concern that another bill will place a burden on educators and schools. Teaching is a lot of work. Most of us work well beyond the school day. That being said, adapting our curriculum and instruction by seeking out learning opportunities and new materials is a pretty natural process for teachers. Lifelong professional development, a core value in education, is a constant and iterative process. My way of thinking evolves based on the professional development I attend or the conversation I have in the lunchroom with teachers where they share a strategy or a resource that helped them, or from a student's comment in class that helps me better understand or explain something. That said, teachers have real constraints both personal and professional, and for some the updated standards may feel more daunting than for others. The good news is, to what extent a teacher chooses to transform some of their curriculum is up to them. Using the standards as a guide, this could look like integrating a new concept throughout the year or into a single lesson or a whole unit. Absolutely, though, teachers will need the right scaffolding and support through professional development and access to resources to be able to expand their own learning and that of their students. Teachers can be supported by ODE, ESDs, our districts as well as a host of community groups and nonprofits that are experts in this area and that will and already are rising to meet this moment. Just like we have had to do with Covid-19, or when we experience a severe weather event or natural disaster, we will have to shift some of our practices and policies to mitigate and adapt to climate disruptions. For the education world, this could look like instilling principles of resilience and systems thinking, through comprehensive climate education, to create more equitable and sustainable communities.

In my World History and Geography classes, composed mostly of 9th graders, we revisit themes throughout the year, connect to and try to build on students' prior knowledge through reflection and feedback. In this way they become better writers and historical thinkers. Besides historical thinking skills, we learn geography, economics; practice democratic norms; develop critical-thinking, collaboration, creativity and communication skills. I emphasize the ways in which the past informs the present and how we can and must use both to shape our future. As a social studies teacher, collectively these updated standards simply reflect growing awareness that we can't keep learning in the same way. There is a [skepticism about our ability to tackle climate change](#) that is dangerous in my opinion because it prevents us from doing the work of creating common sense solutions that can help everyone. As educators, partly this may stem from not knowing ourselves enough about climate change to feel

equipped to teach it effectively. An [NPR Ipsos 2019 study](#) showed that 80% of parents and 86% of teachers interviewed believed schools should teach climate change, but only just over 40% of teachers do. The reasons given were that teachers said they don't see it as relevant to their subject area, that kids are too young, that they don't know enough about it or don't have the materials. According to another study, the [2021 Yale Program on Climate Change Communication](#), 77% of Oregonians (the same as the national average) believe "schools should teach about the causes, consequences, and potential solutions to global warming". Hopefully if SB 854 passes it will provide teachers the support we need to educate our students. Schools should provide factual knowledge as well as creative opportunities to learn and explore in a way that prepares them for the changing world and, I would argue, to help shift the direction we go as a state and as a planet as a consequence. This is not to imply that the work of shifting our priorities, policies and practices to create a greener, more equitable regenerative economy is the responsibility of young people, by the way. It's up to all of us and is why I am writing this letter and urgently doing this work. Scientists and many lay people like myself who stay apprised of the news and [IPCC reports](#) around climate change would argue that how we mitigate and adapt to climate change is perhaps the biggest and most important challenge we face currently. So for me, it is imperative that I seek out opportunities to fill in the gaps in my knowledge around basic climate science and more importantly, learn how, within my fields of social studies and World Language, I can best educate myself and my students.

In my social studies class I have chosen to focus on the standards around human impacts on the environment. I ask my students to make connections between humans and the larger ecosystem, by showing our interdependence and breaking down the notion of us and them. We are interconnected and interdependent. One entry into this topic in a social studies class is considering how sustainable economic development has been since the time of the Industrial Revolution. I also provide the [UN Sustainable Development Goals](#) as a roadmap. My goal for climate change education is to help students imagine a healthier relationship with the land and each other. Environmentalist Aldo Leopold said "When we see land as a community to which we belong, we may begin to use it with love and respect." Franklin D Roosevelt said "The nation that destroys its soil destroys itself."

As a teacher I am trying to broaden the language I use in class, for example, to talk about our economy in terms of "*ecosystem* goods and services" instead of just "goods and services". According to the [EPA](#) they "produce the many life-sustaining benefits we receive from nature—clean air and water, fertile soil for crop production, pollination, and flood control." Simply by adding "ecosystem" to the conversation of goods and services shifts the focus and widens kids' understanding of how we get the stuff we want and need.

## Conclusion

Green Team students in Lake Oswego explore real world problems like how to prevent food waste, how to care for the grounds around the school, and how to educate others around responsible consumption and waste. SB 854 would significantly expand the number of students who are working toward these practices in school and in their communities.

It is up to the public and private sectors to make systemic changes that support a sustainable planet. We need to understand the regional nature of climate change and the regional needs of communities as we seek to transition to a resilient green economy. There are careers that students can be prepared for by learning to think critically, to feel comfortable talking about climate change, not scared of it. It is already affecting us, how can we have a common language and knowledge so that we are not polarized but rather united in this work.

When I was in high school in the 1980s I learned of the Ozone Hole. I was scared by this concept. But I had teachers and family who talked to me about it and instilled in me a sense of what could be achieved through policy changes. The [Montreal Protocol \(1987\)](#) outlined a path to phase out ozone-depleting chemicals, and governments and corporations responded. Today, a generation later, as my kids are exiting high school and in college, there is [evidence](#) that the ozone is recovering because people came together to demand policy changes. Having teachers, in addition to my family, to inform me and provide opportunities for discussion on that issue at that time in my life helped shape who I am today. Let's provide the same opportunities for our young people to envision solutions to our biggest challenges. Thank you.