# SB 854 Comprehensive Climate Education

Presented by Steering Committee Members from the Oregon Educators for Climate Education

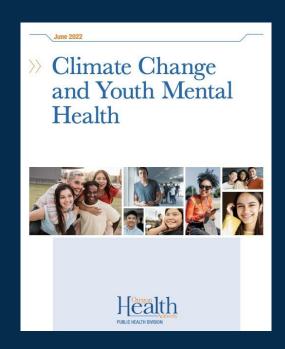


Oregon Educators for Climate Education (OECE) is a statewide group of educators working toward Oregon legislation that would integrate and infuse PK-12 climate change education across all core subject areas.

# Oregon Health Authority June 2022 report

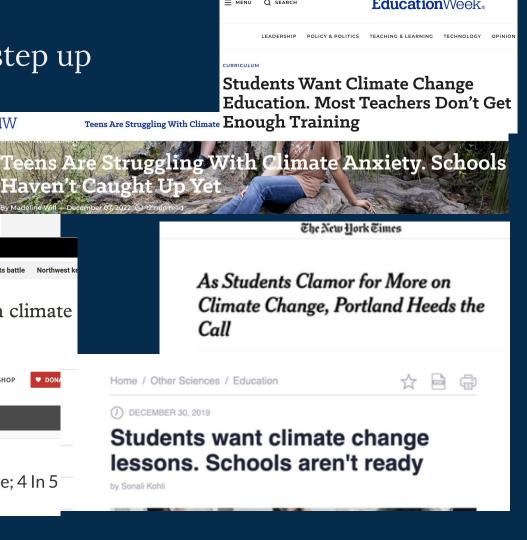
## Oregon youth feel

- Anxiety, frustration, despair, hopelessness about climate change
- Dismissed by older generations
- Angry that not enough is being done to protect their future



## US Students want schools to step up

**Ed**W



American Kids Aren't Learning About Climate Change

Italian students will soon be required to learn about global warming. American kids? Not so much.

Portland equity director resigns Radicchio revolution Water rights battle

THINK OUT LOUD

change

■ NEWS → CULTURE → I MUSIC → Ω PODCASTS & SHOWS → Q SEARCH

Parents Wish They Did

EDUCATION

Oregon youth demand action on climate

Most Teachers Don't Teach Climate Change; 4 In 5

Adventure > Environment

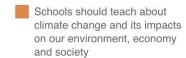
#### Recent national surveys on climate education

- Vast majority of parents support teaching of climate change (NPR/IPSOS 2019)
- Vast majority of administrators & teachers feel climate education is schools' responsibility (NAAEE 2022)

#### Barriers for teachers:

- aren't aware how climate relates to their subject, (NAAEE 2022; NPR/IPSOS 2019)
- fear parent, education policy-maker, or administrator complaints (NAAEE 2022)
- need access to training on climate education and high quality climate teaching resources ((EdWeek Research 2022; NAAEE 2022)

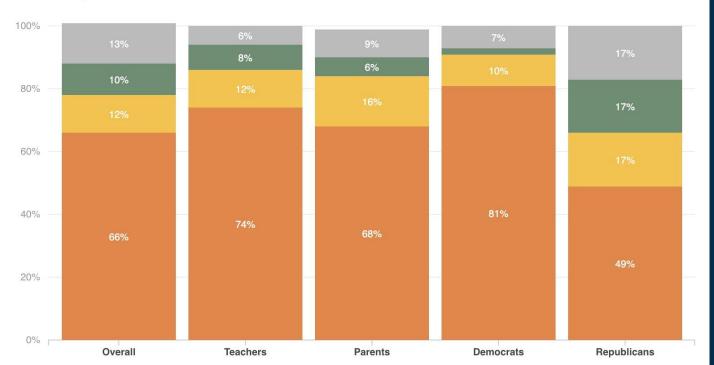
#### Should Climate Change Be Taught In School?



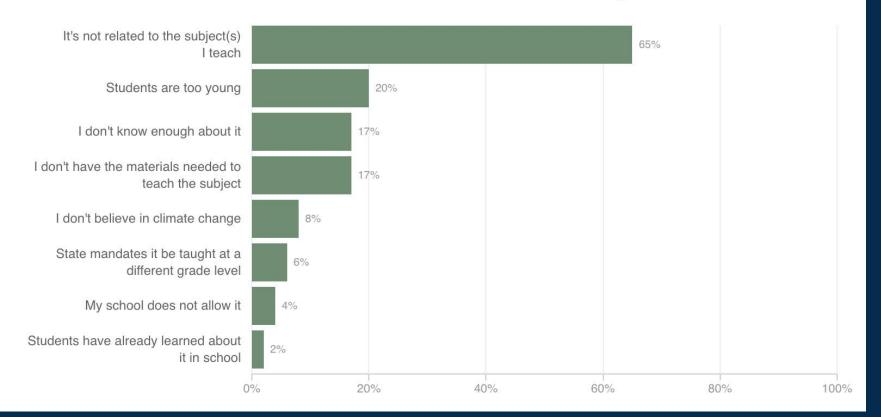
Schools should teach that climate change exists, but not the potential impacts

Schools should not teach anything about climate change

Don't know



#### Reasons Teachers Don't Teach Climate Change



#### Climate Education efforts in other states

## **New Jersey**

- K-12, all disciplines
- Climate education incorporated in state standards



## Connecticut

- Legislative mandate for 5-12, starting 2023
- Partnership with Dept of Env protection



### Climate Education efforts in other states

# Washington

- 2017 K-12 Science budget proviso
- Connects teachers with environmental orgs
- U Washington partner

# CLIME SYEARS CLIMATE SCIENCE LEARNING

### California

- Collaboration b/t UCs,
   CSUs, K-12 schools
- Pre-service teacher education
- In-service teacher PD
- K-12 lessons and support



# In response to student voices across Oregon

# The Register-Guard

# 4J teachers, students come together to create climate change curriculum

Jordyn Brown jbrown@registerguard.com

Published 4:00 a.m. PT Feb. 3, 2020 | Updated 9:54 a.m. PT Feb. 2, 2020







- 4J Climate Change Summit (Jan 2020)
- Presentations at ODE and <u>Council of State</u>
   <u>Science Supervisors</u> (2020, 2021)
- Well-illustrated by the <u>City Club of Eugene -</u>
   <u>Student Leadership in Climate Education</u> (2022)

# How was the Bill drafted?

- Crowd-sourced by educators and students across Oregon
- Modeled after:
  - SB 13 (Tribal History | Shared History / Indigenous Studies)
  - SB 664 (Genocide/Holocaust Studies)
- <u>Place-based</u>, integrated across subjects
- Solution-oriented, hope-inspiring, age appropriate





What does integrated Climate Education look like?

- Informational Reading
- ELA Integration
- Mathematical Modeling & Data Analysis
- CTE and Career Pathways
  - Community Resilience
  - Stewardship
  - o Innovative Economic Solutions
  - Natural Resource Management
  - Public Health



# **Bill Basics**

- Learning Concepts
  - Idea borrowed from 2019's SB 664
  - o LCs woven into future standards of all content areas
  - o Integration of different LCs varies in regards to courses & disciplines
- ODE & ESDs create models at state & regional levels
  - o Involve other governmental agencies & stakeholders
- Districts & teachers autonomous: implement by making connections through already-adopted materials and curricula
- Permission, expectation, and encouragement to teach about climate change and how it relates to other topics



# Intro to the Learning Concepts

- As LCs are integrated into standards, different subject areas and grade levels will integrate differently
  - ODE can complete this as part of their regular standards updates

#### LC Examples:

Equip students with the knowledge, tools and skills to address psychological and mental health challenges associated with ongoing changes to the climate and natural resource availability.

Explore ways to build resilience in communities, and societal systems and practices, in response to climate change.

Inform students about historic and contemporary Indigenous practices and principles for approaching environmental sustainability and ecological knowledge.

# Further Logistics & Considerations

- OECE's Current Version of the Bill (12/20/22)
  - "all subject areas"
  - o no SIA funding penalty for non-compliance
  - additional core learning concepts
- Bill's implementation & related professional development would be aided by future funding, to be identified later
  - e.g., CAT Tax, Inflation Reduction Act, or future acts of the Oregon Congress or Educator Advancement Council

## Oregon Climate Lessons Hub

Examples of Open Resource **Teacher Created** Lessons

Oregon Specific



Climate Change Lessons By Teachers > Water Is Life: Living in Reciprocity With Local Waterways (Past, Present, and Future) [Option #2]



Photo by kazuend via Unsplash

#### VIEW LESSON PLAN

Physical Geography

GRADES

6th, 7th, 8th

SUBJECTS

Social Studies, Geography

DURATION

90 minutes

REGIONAL FOCUS

North America, United States, USA - West

Google Docs, Google Slides

This lesson plan is licensed under Creative Commons.



#### Water Is Life: Living in Reciprocity With Local Waterways (Past, Present, and Future) [Option #2]

Created By Teacher: Marie Middleton | Last Updated: Mar 9, 2023 | Ask a Question

☆ No reviews yet

Oregon Educators for Climate Education

#### Synopsis

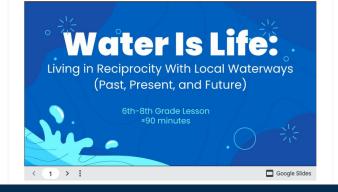
In this lesson, students learn about the importance of water to Indigenous Peoples and the need to protect water today.

Step 1 - Inquire: Students describe their personal experiences with local waterways.

Step 2 - Investigate: Students investigate the importance of water to the Indigenous Peoples of the Americas, reflect on the need to live in reciprocity with rivers, and explore ways to be water protectors.

Step 3 - Inspire: Students create a One-Pager to demonstrate their learning and explain how they can ally with the Indigenous Peoples of Oregon to protect local waterways.

#### Accompanying Teaching Materials



# **OECE** Support and Media

#### Video about OR Climate Hub



### In the news

**Eugene Weekly** (Educating for the Climate)

**OPB** (Oregon Teachers, Students Lead Push for Sweeping Expansion of Climate Change Curriculum)

The New York Times (Many States Omit Climate Education.

These Teachers Are Trying to Slip It In)

<u>The Oregonian</u> (A Climate Education Bill, Spearheaded by Teachers and Students)

# **Endorsements**

- Oregon Educators Association (OEA)
- Beyond Toxics
- Gray Family Foundation
- Oregon Jewish Museum and Center for Holocaust Education
- Oregon Council of Social Studies
- Center for Geography Education in Oregon
- Educational Equity Now
- Oregon Sierra Club



# In response to student voices across Oregon

Students Spoke, Teachers Listened By Teachers, For Teachers

Comprehensive, Integrated

Hope Inspired, Forward Thinking

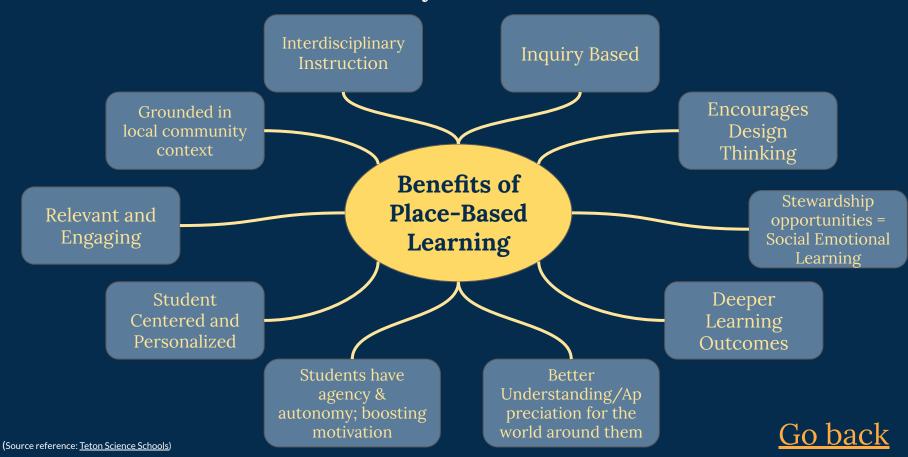
- ClimateEducationSummit
- Students
   asking for
   climate
   change in all
   subjects,
   grade levels

- Teachers on the steering committee
- Cognizant of teacher workload
- Teacher led workshops

- K-12, All Subjects
- Utilize existing PD Structures
- Learning in context;Place-based

- Solution Oriented
- Community Resilience
- Careers and economies based on innovation

# Relevance and Community Resilience



# **Key Questions**

#### Examples of Open Resource Teacher Created Lessons Oregon Specific Example

Will this make more work for teachers?

No. Instead of "more work," it's more a matter of reframing what already gets taught. There are ongoing shifts in standards and legislation in all subjects areas. Teachers, with guidance and tools from their school districts, regional education service districts, and the Oregon Department of Education, will be equipped to make local connections to climate change topics.

How is it different from NGSS?

Climate Change Education is more than just the Science. It involves policy, community impacts, health, math modeling and data analysis. SB 854 will bolster and amplify NGSS, teaching students how their regions of Oregon are affected by climate change, exploring adaptations/solutions that preserve the Oregon way of life, building resilient, sustainable, profitable economies.

Will this require new K-12 standards

No. Modifications to current standards or additional standards would be required. In most cases, key concepts like "sustainability" and "climate change" can be integrated into current standards as examples, topics, or themes for classroom teachers to explore.

How will teacher training happen?

Integration with existing professional development provided annually to teachers and is within all districts' budgets. With ODE guidance, ESDs, STEM Hubs, RENs, etc partner with agencies to provide the necessary PD. Possible, existing sources to explore: **CAT tax**, Federal grants (Inflation Reduction Act), CTE funding, NPO grants, Oregon Lottery.

