

Embedding Climate Change Education in Maryland

PRESENTATION BY

Director of Education, Bryce Coon

Education Coordinator, Dennis Nolasco



**CLIMATE
EDUCATION**



TABLE OF CONTENT

01 Introduction & Purpose

02 Urgency of Climate Education

03 Current State

04 Scientific & Societal Context

05 Maryland's Opportunity to Lead

06 Defining Climate Education

07 Examples of State Climate Education Policies

08 Key Asks For Statewide Implementation

09 Closing and Next Steps

INTRODUCTION & PURPOSE



Bryce Coon
Director of Education

Dennis Nolasco
Education Coordinator

- Advocate for statewide implementation of interdisciplinary climate education in Maryland's K-12 public schools.
- Highlight the importance of embedding climate change education across various subjects.
- Emphasize the need for a coordinated approach to prepare students for climate challenges.
- Support the development of standards and resources to ensure effective climate education.

DEFINING CLIMATE EDUCATION

Cross Curricular Approach

- Climate change is not limited to science classrooms; it is a cross-disciplinary issue impacting multiple subjects.
- The need to approach climate change from a variety of perspectives is crucial.

Standards Aligned Content

- Curriculum designed to meet state educational standards ensures consistent, measurable learning outcomes.
- Climate education content is age-appropriate, progressively building knowledge from Kindergarten through 12th grade.
- Standards alignment enables educators to integrate climate topics seamlessly within existing subject frameworks.

Examples by Subject

- Math: Using real climate data to improve students' data analysis and interpretation skills.
- ELA: Reading and writing assignments that explore climate fiction and persuasive environmental advocacy.
- Social Studies: Exploring policy debates, environmental justice issues, and the historical context of climate change.
- Arts: Visual arts projects that help students visualize and emotionally process climate futures and sustainability.

Standards Aligned Content

- Content is tailored to developmental stages, ensuring comprehension and engagement at each grade level.
- Early grades focus on foundational concepts and awareness, while upper grades tackle complex climate science and policy issues.
- This approach supports long-term climate literacy and empowers students to act as informed citizens.

EXAMPLES OF STATE CLIMATE EDUCATION POLICIES

2022

Maine launched a pilot program providing resources and training to encourage climate education in public schools, focusing on teacher capacity building.

2023

California passed an omnibus education finance bill supporting climate change education as part of its curriculum and funding framework.

2025

Oregon is on the brink of passing an interdisciplinary climate education bill with it having passed both chambers.

2023

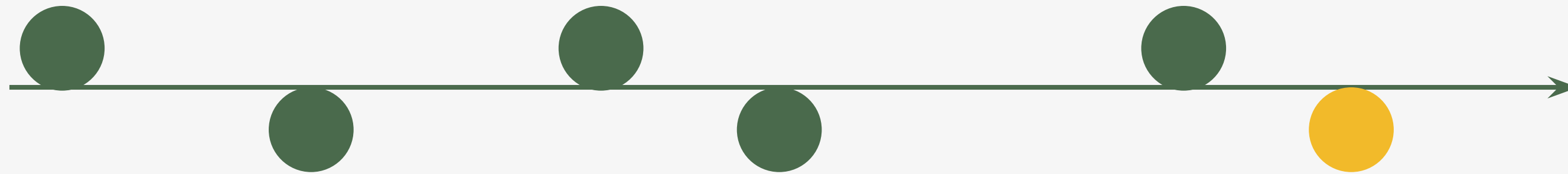
New Jersey became the first state to require interdisciplinary climate education across all subjects and grade bands, setting a comprehensive standard.

2023

Washington State funded professional development programs specifically designed to equip teachers with climate education skills and resources.

2025

Maryland is positioned to lead by integrating climate education into its existing climate goals and educational strategies, learning from other states' successes.

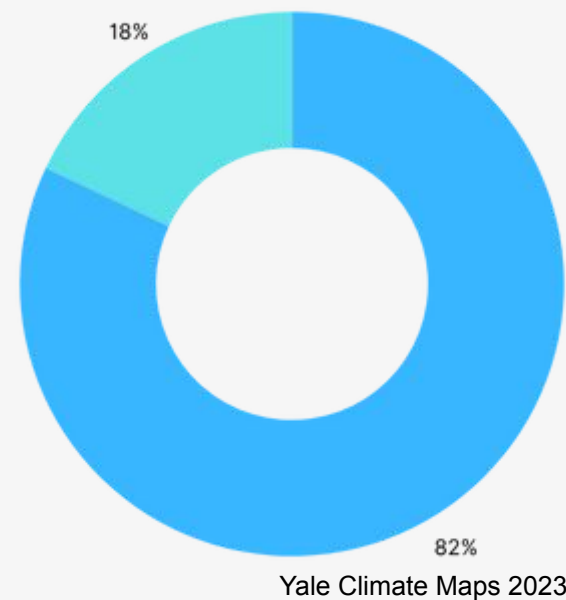


URGENCY OF CLIMATE LITERACY

Key Points:

78% think that global warming is happening, but only

40% discuss global warming occasionally



82% of adult Marylanders think that global warming should be taught in schools

- Maryland's climate vulnerabilities include rising sea levels in the Chesapeake Bay and increased flooding events impacting communities.
- Youth mental health is affected by eco-anxiety as students are increasingly aware and concerned about climate change.
- National polls show **76%** of parents support climate education in schools, reflecting widespread public backing.
- **70%** of Maryland residents are worried or somewhat worried about global warming, higher than the 63% national average.
- **84%** of Marylanders believe that climate change should be taught in schools, reinforcing strong local demand for education.

Maryland faces significant climate vulnerabilities including rising sea levels and increased flooding, which directly impact communities. Youth are experiencing climate anxiety as they become more aware of these challenges. Public support for climate education is strong both nationally but especially within Maryland, highlighting the need for immediate educational action.

SCIENTIFIC & SOCIETAL CONTEXT

Maryland faces significant climate vulnerabilities including rising sea levels and increased flooding which impact communities statewide. Youth are already experiencing eco-anxiety and mental health challenges related to climate change awareness, reflecting a societal need for informed climate education. Public awareness and concern about climate change are high, underscoring the importance of integrating climate literacy across education.

Maryland's Climate Vulnerabilities

- Rising sea levels in the Chesapeake Bay threaten coastal communities and ecosystems.
- Increased frequency and intensity of flooding disrupt infrastructure and daily life.
- Climate impacts affect agriculture, public health, and biodiversity in the state.
- Scientific data shows accelerating changes requiring urgent response and adaptation.

Youth Mental Health & Eco Anxiety

- Students are increasingly aware and concerned about climate change impacts.
- Climate anxiety affects youth well-being, causing stress and uncertainty about the future.
- Educators report growing demand for climate-related discussions and support in schools.
- Addressing mental health alongside climate education is critical for student resilience.

CURRENT STATE OF CLIMATE EDUCATION

Standards and Framework

- There is an Environmental Literacy Specialist at MSDE
- Currently is mentioned as “environmental change” in Science, Environmental Literacy, Social Studies, and Comprehensive Health standards.
 - ELA, Art, and Math are largely left out
- There is currently an Environmental Literacy Graduation Requirement for all students attending public school in Maryland.
 - Inequitable implementation across the state

Climate Education Week Bill

- Introduced by Delegate Stein in 2024
- Would establish a designated week for K–12 schools to focus on climate education and civic engagement opportunities.
- Passed the House almost unanimously (100-3)

MARYLAND'S OPPORTUNITY TO LEAD

Maryland's Climate Goals

- Maryland has established clear climate goals focused on reducing emissions and adapting to climate impacts, such as sea level rise and flooding.
- Education is a key component of the state's climate action plan to prepare future generations.
- Embedding climate literacy across disciplines supports these broader environmental objectives.
- Integrating climate education helps align school curricula with Maryland's sustainability and resilience targets.

Local Case Studies

- Prince George's County has developed initiatives to incorporate climate education into public schools, providing a model for statewide adoption.
- Montgomery County's sustainability policy includes climate education as part of its comprehensive environmental strategy.
- These case studies demonstrate practical approaches and successful implementation examples within Maryland.
- They highlight the benefits of localized curriculum integration and community engagement.

Maryland is positioned to integrate climate education into its broader climate goals, leveraging local case studies and existing efforts to set a statewide example. Education is a critical part of Maryland's strategy for climate action and sustainability.

KEY ASKS FOR STATE IMPLEMENTATION

Adopt Statewide Climate Literacy Standards

Key Activities

- Integrate climate change education content across all disciplines in Maryland College and Career-Ready Standards.
 - Ensure standards are developmentally appropriate and aligned with existing curricular goals.
 - Create clear guidelines for K-12 climate literacy to promote consistent statewide education.
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Support Teacher Professional Development

Key Activities

- Provide funding and infrastructure for ongoing, high-quality professional development on climate topics.
 - Offer training that spans multiple subjects to support interdisciplinary teaching.
 - Develop accessible resources and workshops tailored to varying educator needs and skill levels.
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Encourage Interagency Collaboration

Key Activities

- Facilitate partnerships between Maryland State Department of Education (MSDE), the Climate Commission, higher education, and community organizations.
- Coordinate efforts to share resources, best practices, and policy alignment.
- Build a network to support educators and sustain momentum for climate education initiatives.

Deliverables

- Statewide climate literacy standards document
- Curriculum integration framework
- Guidelines for age-appropriate climate content

Deliverables

- Professional development programs
- Funding allocation for teacher training
- Resource and workshop materials

Deliverables

- Interagency collaboration agreements
- Joint resource sharing platforms
- Ongoing coordination meetings and networks

CLOSING AND NEXT STEPS

Call to Action and Partnership Opportunities

- Ask for a formal recommendation from this Workgroup to the full Commission to support integrated climate education across Maryland schools.
- Request support from Delegate Stein and other policymakers for legislative or regulatory action to embed climate education in state standards.
- Offer to partner with organizations like EARTHDAY.ORG that are ready to support implementation through teacher training, curriculum resources, and outreach.
- Emphasize that climate literacy prepares students for the future and transcends partisan divides.
- Highlight the opportunity for Maryland to lead by example in climate education and workforce readiness.

Equipping students with climate literacy is not a partisan issue — it's a preparation issue. Let's make Maryland a model by embedding climate education statewide through collaborative action and policy support.