

# Strengthening Climate Change Education in the United States

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### Who are we?



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# Who is here today?

- We would love to know who is here! If comfortable, please add your name, role, and location in the chat.
  - Work in a school or district?
  - Work with schools or district?
  - Formal school time or informal school time?
  - Focus on marginalized populations?



# **About the Study**

Identify terms Refine criteria

• "education" AND (using "OR") Climate change, environmental, sustainability, climate, environmental science, conservation, climate science, climate empowerment, green skills, green learning

- 2015-2022
- English language
- US-based for K-12 student population

Search

- 5 academic databases
- 4 content journals
- 3 grey literature sites

Clean

• 3265 -> Remove duplicates + non-English = 2723 references

Screen

• 175 articles and white papers



# **About the Study**

#### Coding:

- What are the student-focused solutions?
- Teacher-focused solutions?
- Systems-focused solutions?

#### Results:

- What would support climate change education program development?
- What should future research focus on?
- How can we currently support schools, policymakers, foundations, and community organizations in advancing climate change education?





## **Climate Change Education White Paper**



Strengthening Climate Change Education in the United States



- FHI 360's first investigation of domestic (US) climate change education
- Understanding the current context of research in K-12 climate change education
- Establishing goals and potential avenues for future projects and collaboration
- Specific interest areas:
  - Youth-led advocacy
  - Environmental justice



# Youth-led advocacy

- Exciting examples of youth designing their own projects, programs, and movements
  - Also examples of mental health challenges, anxiety around climate change
- School districts can (and must) support and nurture climate advocates

#### YOUTH IN ACTION: Support student leaders.

Young people are reforming their education systems by running for offices and campaigning for climate action. Idaho student Shiva Rajbhandari was elected to the Boise School District Board of Trustees 2022 on a campaign based on equity, climate education, mental health, and youth empowerment. 137

Throughout high school, Shiva worked to increase access to climate change education opportunities for himself and his classmates. He even wrote to actress and environmentalist Jane Fonda to request funding for a class, and she agreed. 138 As a board member, Shiva aims to reduce his school's greenhouse emissions, integrate climate education across all grade levels, and improve access to mental health resources. 139







# 1. Enact policy to support climate change education at national, state, district, and school levels.

Every tier of education systems must act to improve students' climate change education. Government agencies, economic systems, and political structures must also adapt to better support climate change educators and young people.

### **Recommendation 1: Policy to support CC Education**

#### Challenge:

State and district curricula policies vary significantly

- Opportunities for national coordination
- States offering funds for climate change PD (e.g., Washington)
- Districts and schools taking advantage of their own responsibilities





# 2. Provide access to high-quality curricula and materials that are grounded in scientific evidence..

Climate change education must be grounded in evidence to provide young people with a foundational scientific understanding. It should build their knowledge, skills, and commitment to participating in ongoing efforts to design solutions for a changing world.



## **Recommendation 2: High quality teaching materials**

#### Challenge:

 Many districts/educators use low-quality materials or lack time to find highquality materials

- Supports for selecting educational materials (e.g., CLEAN)
- Strategies for teaching climate change
- Interdisciplinary curricula





# 3. Support educators with training and professional development.

In addition to quality curricula, education leaders and policymakers need to provide educators with effective professional development, so they have the training, resources, and confidence they need to effectively teach about climate change.

## Recommendation 3: Educator supports and PD

#### Challenge:

Many (most!) science teachers lack formal training in climate change education

- Pre-service AND in-service professional development
- Peer networks to support ongoing learning





# 4. Scale up out-of-school time and work-based learning models.

To ensure equitable and systemic access, climate education should be a core topic within standards-based classroom learning. It must also be interdisciplinary and integrated into informal and out-of-school programs, as these outlets provide youth with hands-on opportunities to learn and develop understanding in different contexts.



# **Recommendation 4: OST and Work-based learning**

#### Challenge:

In-school climate change education is not available or well-suited for all students

- Out-of-school time (OST) programs: summer camps, afterschool programs, mentoring
- Work-based learning: apprenticeships, internships



# Areas in need of further study

- What is the role and power of youth-led climate change initiatives?
- What are the most important factors influencing the implementation of climate education?
- How can we expand and scale up the successful work happening?
- How can we apply an environmental justice lens to research and practice?



# **Contact Us & Download the Full Paper!**

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Reach out to us if you'd like to chat or collaborate!







# **Thank You!**

#### **FHI 360 Headquarters**

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