Let's Talk About
Climate: Using Climate
Education to Support
Student-Centered Learning
Across Curricula

March, 1, 2022



## Webinar Tips



**Close all programs & browsers** to
maximize bandwidth



Use the Q&A feature to send questions to the panelists



**For technical assistance** use the Q&A feature



The recording, slides, resources & certificate will be sent by email





## What We'll Discuss Today



- The research that supports the importance of climate education to our students' futures
- How climate education across curricula can naturally utilize how students learn best
- Practical strategies to incorporate climate science across curricula
- Acal-life solutions through technology and innovation that reduce the impact of climate change
- Resources to support climate education across curricula





### Why should climate change be taught across curriculum?



Students today are "the first generation to feel the effects of the climate crisis, and the last who can do something about it."

~ former Seattle Mayor Mike McGin



#### Why should climate change be taught across curriculum?



If 16% of high school students in high- and middle-income countries were to receive climate change education, we could see a nearly 19 gigaton reduction of carbon dioxide by 2050.





### Climate Education & How Students Learn

## Students learn best when curriculum is:

- Inquiry-based
- Experiential
- Situated in real, local context





### **Practical Strategies**

- Provide emotional support
- Focus on the local
- Choose a relevant cross-curricular project theme
- Focus on solutions-based education







## Solutions-based approach











## Real-Life: Innovative Solutions











## Real-Life: Innovative Solutions





## Impact of Climate Change





## Real Life: Technology & Innovation





## Real Life: Technology & Innovation







## Real Life: Humanitarian Impact





### Subject-Specific Strategies

#### Art

Study what makes visual campaigns effective

#### **Social Studies**

- Broaden topics to include effects of human activities
- Explore legislative process of landmark environmental laws

#### **ELA**

- Create narratives based on climate change feelings and/or learning
- Explore persuasive writing through encouraging policy changes in local community
- Debate the pros and cons of new technology



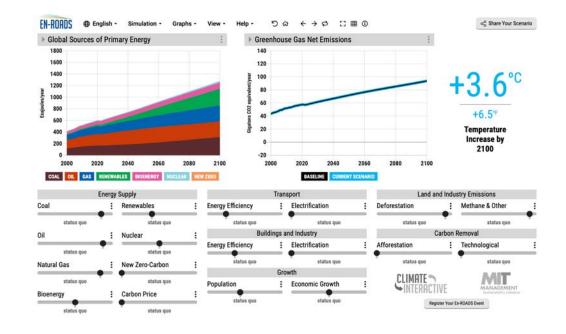




### Subject-Specific Strategies

#### Math:

- En-ROADS
- Statistical analysis to measure tree density like foresters
- Collect data of change students notice in community







#### **Educator Resources**

- Climate.gov's <u>Teaching Climate</u>
- NASA's Global Climate Change, Climate Kids, Climate Change Educator Resources
- NOAA's <u>Climate Education</u>
- One Step



# A video-based curriculum for climate education





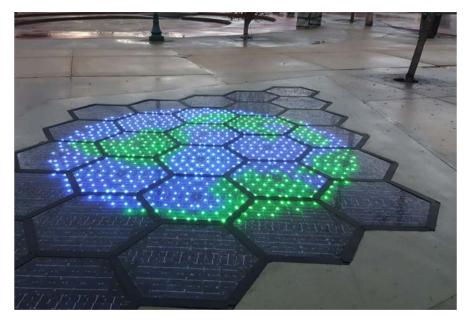
Climate solutions changing lives around the

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## A video-based curriculum for climate education









# A video-based curriculum for climate education







# A video-based curriculum for climate education





## **USE ONE STEP ACROSS THE CURRICULUM TO:**



Promote rich class discussions about science, technology, and the environment



Celebrate innovation and problem solving



Empower students to be changemakers



Give students the knowledge and skills they need to be creative scientific thinkers





### **Teaching Materials**

- 5E, standards-aligned lessons featuring climate and environmental science topics
- Projects, crafts, and experiments
- Scaffolds and vocabulary support for English learners
- Tools for students to track their sustainable activities





# ENGAGEMENT = ACTION



Inspiring the future, together with One Step

#StompOutCarbon





