



Supporting Climate Change Education in Your Summer Program

2020 Spring Webinar Series



Welcome!

- The webinar is being recorded
- Your phone line is muted
- Please use the Q&A box for questions



Welcome!



Leslie Gabay-Swanston
*Director of Program and Systems Quality,
National Summer Learning Association*

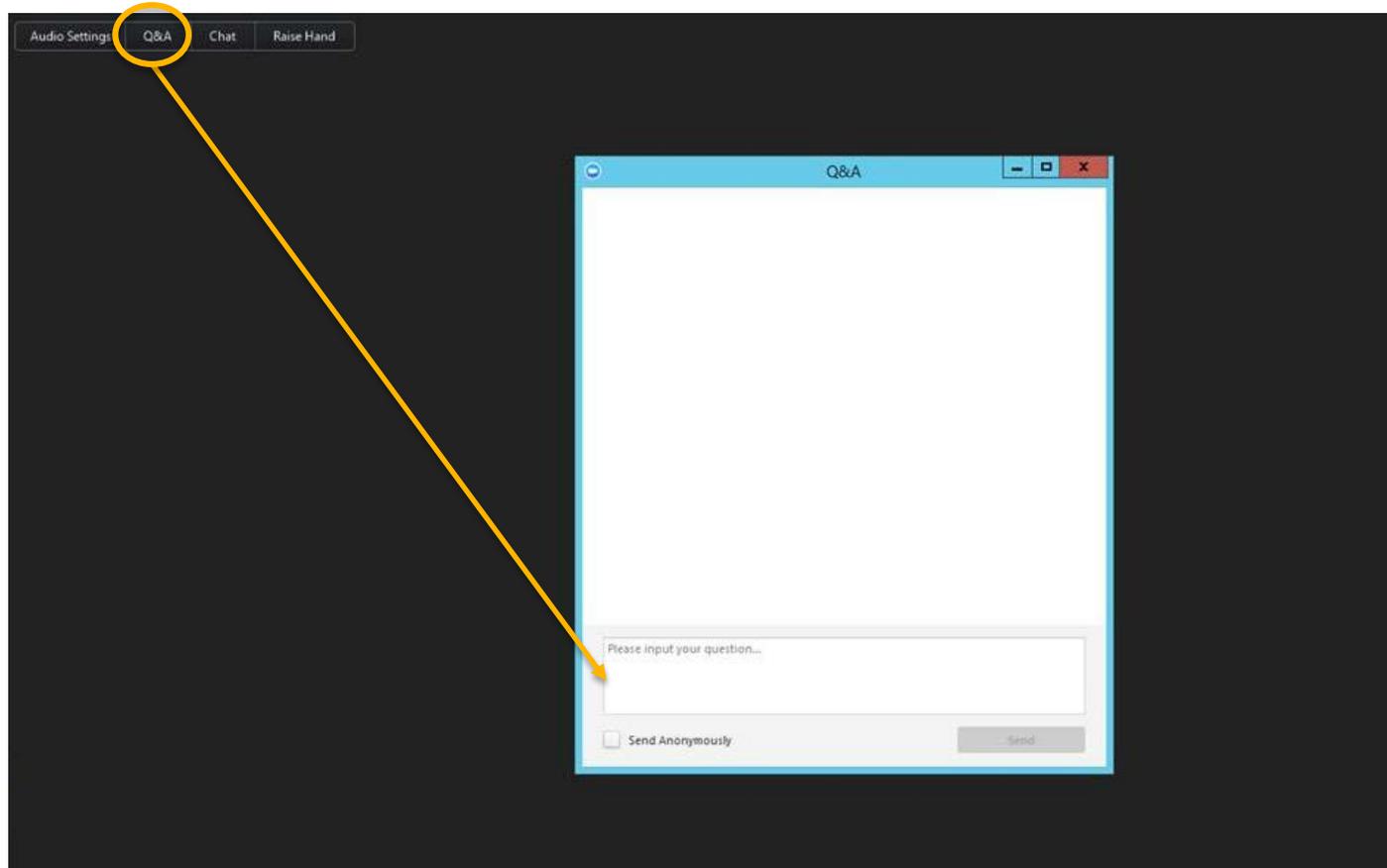


Webinar Overview

- About NSLA
- Mike Tritchler, San Diego Unified School District
Christine Tomlinson, Wilderness Inquiry
Rachael Van Schoik, California Academy of Sciences
- National Student Climate Action Competition
- Questions
- Announcements



Welcome!



ABOUT NSLA

NSLA is a national, non-profit organization focused on the powerful impact of one achievable goal: investing in summer learning to help close the achievement gap. NSLA uses the power of research, advocacy, training, and policy to transform America's neighborhoods and communities, one child at a time.

Our work is based on the simple idea that summer—a time that is easily overlooked yet critical to educational development—is bursting with possibility, and instrumental in closing the achievement gap between privileged children and our most vulnerable children.



WHY SUMMERS MATTER



Summer is the time of greatest inequity for young people. When schools are closed, many low income young people lack access to meals, books and other learning resources, and physical activity.

From Zanzibar to San Diego – Climate Change Adaptation for the Next Generation

March 11, 2020

*Presented by: J. Michael Tritchler, Engineering
Teacher, Madison High School, San Diego*



My Background

- Physics Teacher and U.S. Peace Corps Volunteer – Pemba Island, Zanzibar, Tanzania
 - 2006-2010
- Non-Profit Co-founder and Director – Community Forests Pemba, Zanzibar, Tanzania
 - 2008-2019
- Environmental Engineering Teacher – Madison High School, San Diego, CA
 - 2019-Present

Where is Pemba Island, Zanzibar?



Value of Interactive Education

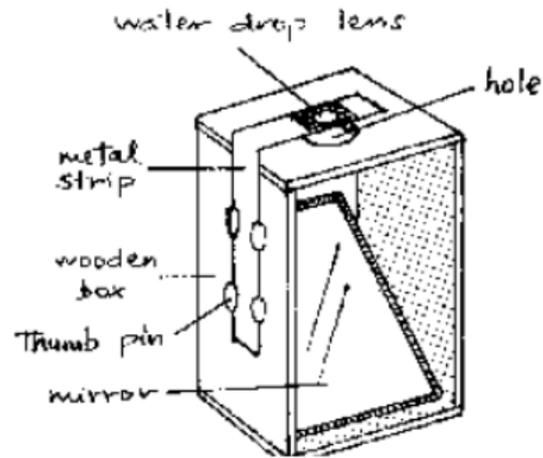


Value of Interactive Education

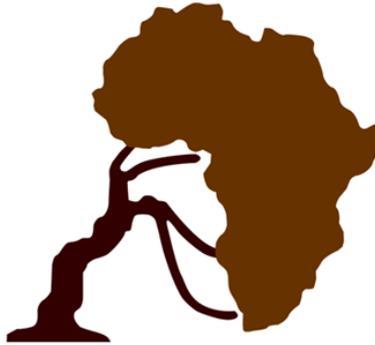
- Sharing the Knowledge
- *Shika Na Mkono* is a document of interactive lessons using common household items
- Chemistry – Kinetics and Equilibrium, ...
- Biology – Photosynthesis, Respiration, ...
- Physics – Principle of Moments, Hooke's Law, ...
- Available at
 - <https://maktaba.tetea.org/study-aids/Shika%20Na%20Mikono%20v4-2.pdf>

Shika Na Mkono (Hand in Hand) Excerpt

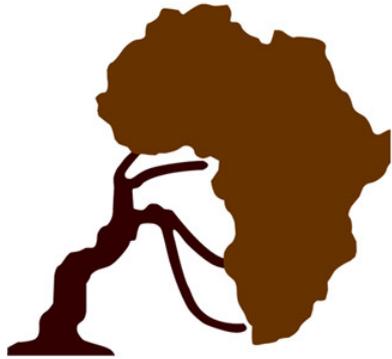
25.5.2 Simple Microscope



Construct a small wooden box from plywood as shown (or use a small cardboard carton such as a light bulb box). Make a round hole of 2 cm di-

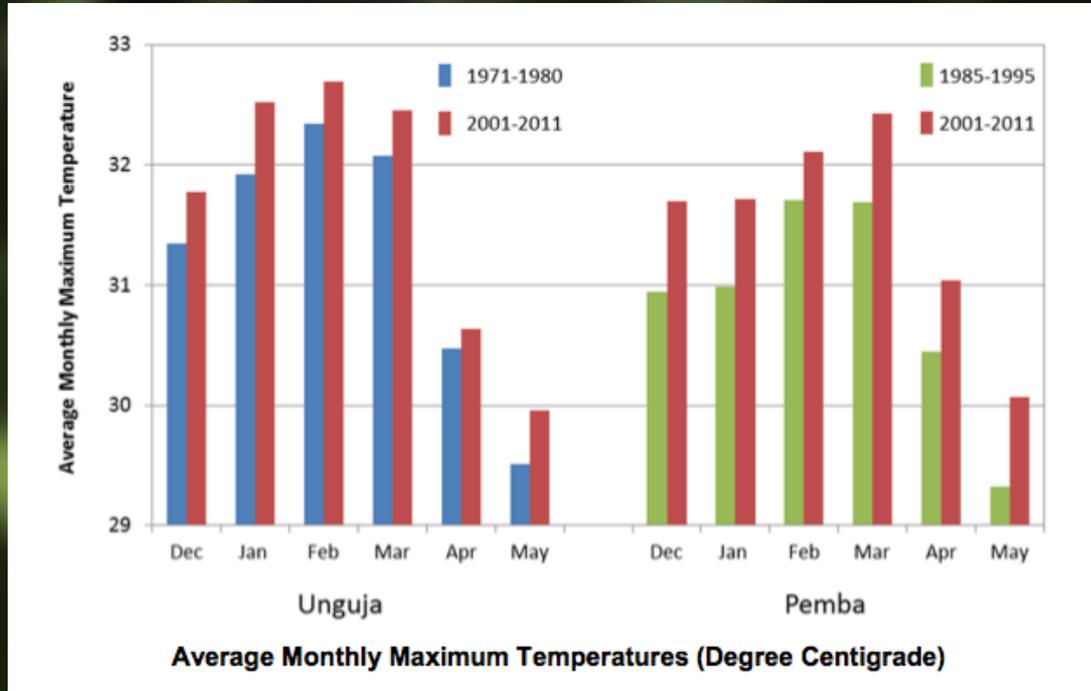


**COMMUNITY
FORESTS
PEMBA**



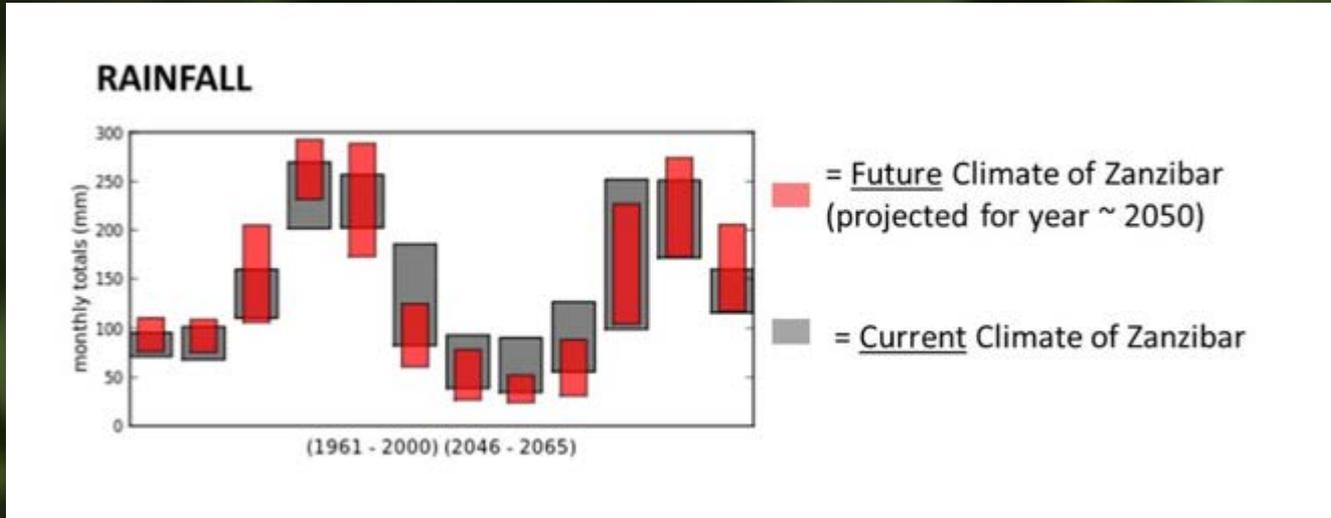
**COMMUNITY
FORESTS
INTERNATIONAL**

Temperature Rise



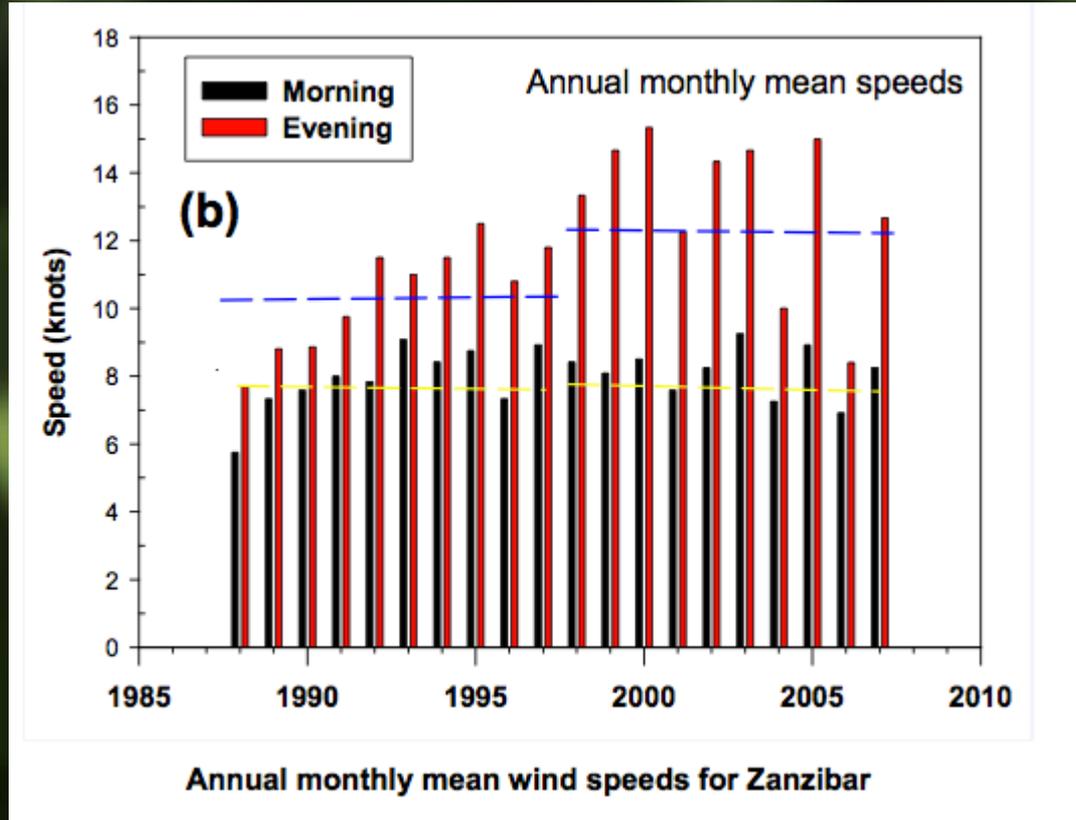
Strong increase in average and maximum temp over the last 30 years (over 39 degrees in 2007)

Variability of Rainfall

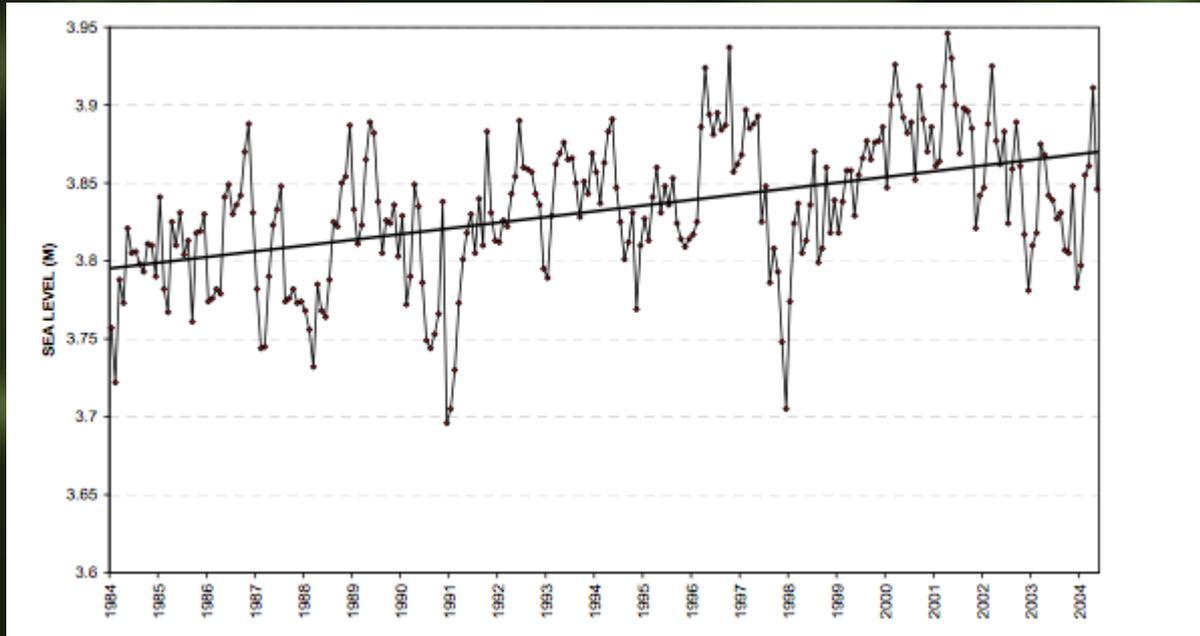


Models vary widely but it is clear that change will be eminent and unpredictable

Increases in Wind Speed



Rise of Water Levels



Monthly mean high water level shows sharp increase since 1984

Climate Impacts

As a small, vulnerable Island, climate change leads to devastating effects on Pemban Communities, especially In the coastal region





Afforestation and Agroforestry











Rainwater Harvesting



AL ARIZ
AL USMAN KUMARSA
PROJECT
KABUPATEN GORONTALO



Alternative
Fuels



Improved Cook Stoves







Permaculture





Sustainable Beekeeping







Renewable Energy









Spice
Forests







Drone Mapping

Sharing with our Students



Sharing with our Students



The image features a soft-focus background of lush green foliage. A prominent, slightly out-of-focus stem runs vertically along the left side of the frame. The leaves are various shades of green, with some appearing brighter due to light filtering through. Centered in the middle of the image is the text "Thank you" in a clean, white, sans-serif font.

Thank you



Wilderness
Inquiry



**CANOEMOBILE: CREATING FUTURE
GENERATIONS OF ENVIRONMENTAL STEWARDS**

Christine Tomlinson
Wilderness Inquiry



WILDERNESS INQUIRY **MISSION**

Connect people of all ages,
backgrounds, and abilities to the
natural world and *each other* through
shared outdoor adventures.



CANOEMOBILE

What is Canoemobile?

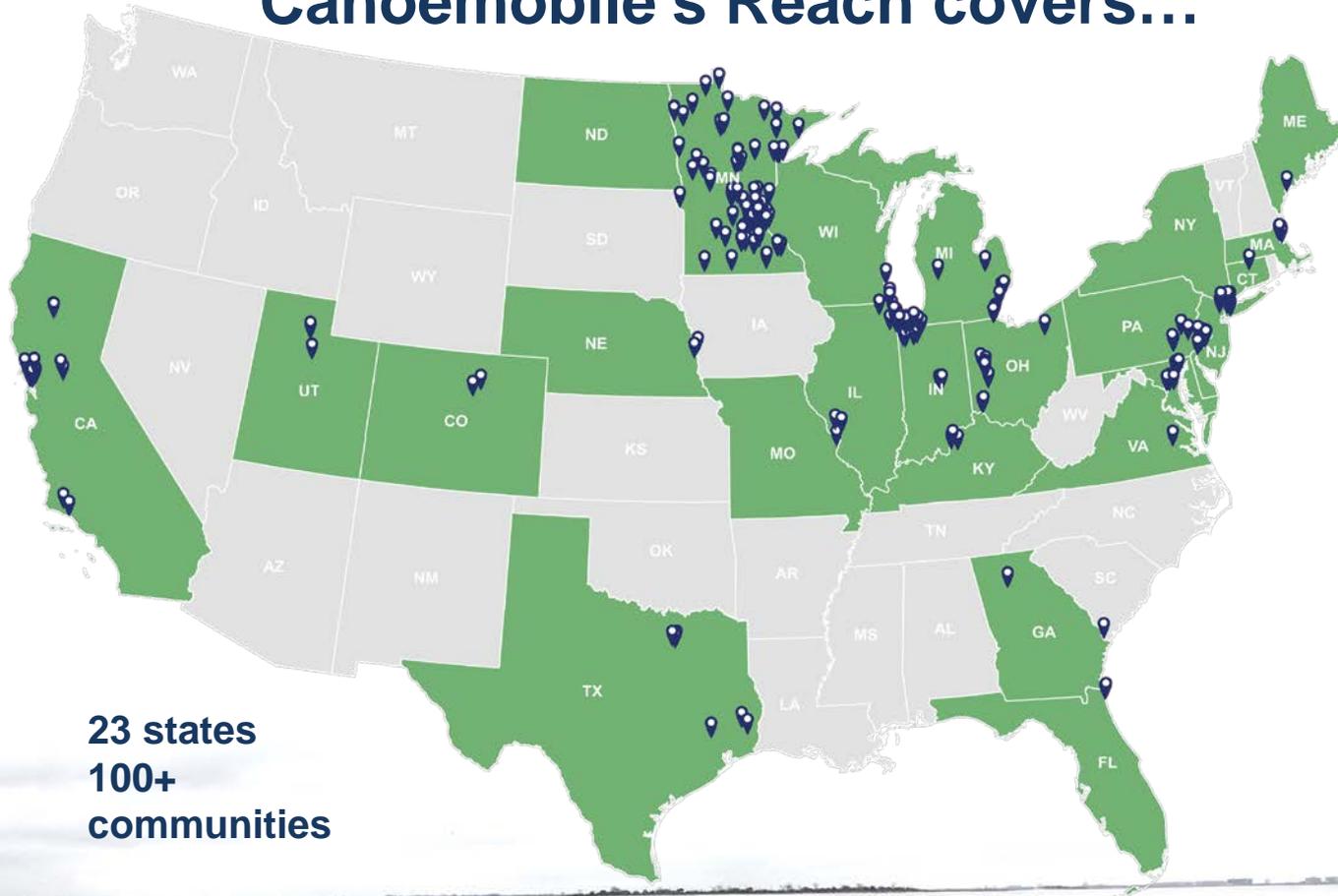
Canoemobile brings place-based education and recreation to underserved communities. 24-foot Voyageur canoes serve as “floating classrooms,” bringing learning to life for science, social studies, math, history, and more.

This is the first outdoor experience for 80% percent of participants.

Canoemobile addresses a critical first step in connecting youth to the outdoors—the introduction.



Canoemobile's Reach covers...



23 states
100+
communities







WILDERNESS INQUIRY





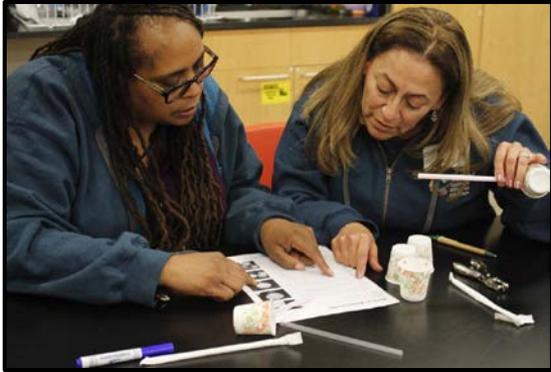
86% of students report that they are likely to try a new outdoor activity following their Canoemobile experience. CAREI, 2019

Science Action Club

Rachael Van Schoik | scienceactionclub@calacademy.org



Science Action Club's Approach



Quality professional development



Kits of materials



STEM identity & citizen science

Science Action Club and Citizen Science

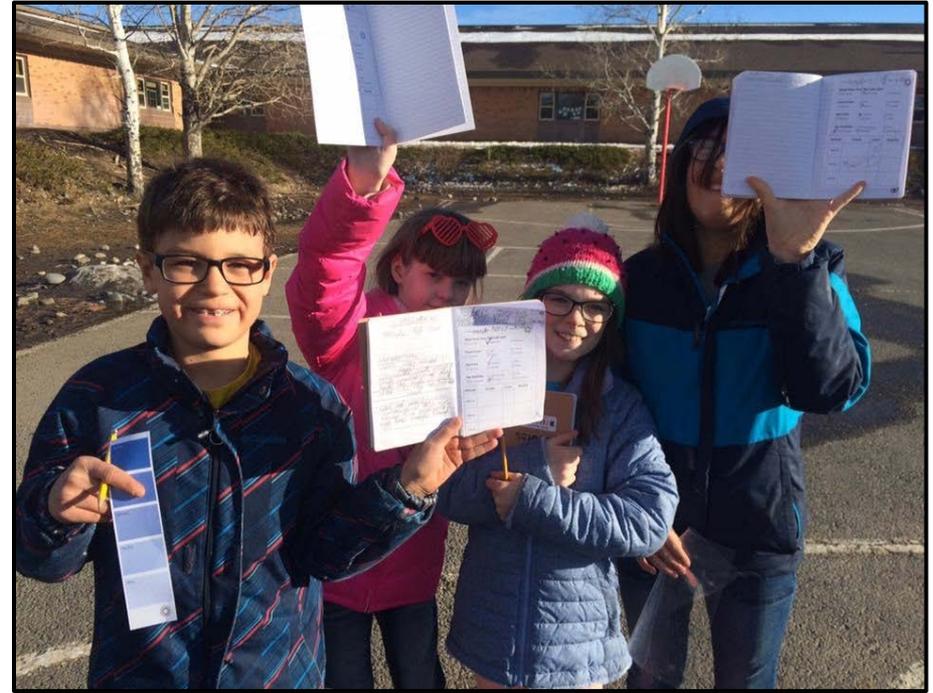


Cloud Quest



Cloud Quest explores the impact of clouds on weather and climate. Using the GLOBE Observer citizen science platform, youth identify sky conditions and report their discoveries to NASA. Researchers map these observations against satellite image data to study how clouds influence the flow of energy through Earth's atmosphere.

Sky Survey - the GLOBE Protocol in



In Their Own Words



The Anaheim YMCA offered the Science Action Club curriculum during our Jr. High day camp program and the response was amazing! Because it was summer, students had the opportunity to spend more time exploring their environment and digging into the curriculum. **What started out as moans as groans quickly turned into wows and wonders.** It was wonderful to watch the students get excited about nature and engage thought provoking conversations. I would highly recommend Science Action Club to any summer program looking for a fun and educational experience to offer their students.

SAC Builds Educators' Capacity to Teach STEM

98% of SAC educators felt the training increased their interest in teaching science

"I feel prepared to lead SAC with youth"



"I feel prepared to help youth build STEM identity"



"I feel prepared to help youth connect with the natural world"



SAC Boosts Youth Interest & Engagement in STEM

86% of youth feel more confident in their science skills since joining SAC

79% of youth said being in SAC makes them want to learn more about science

"I feel like a scientist"



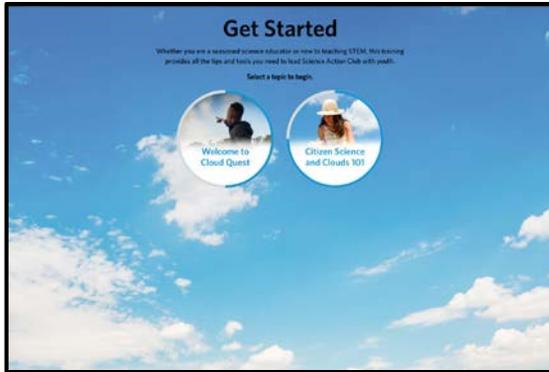
"Science is fun"



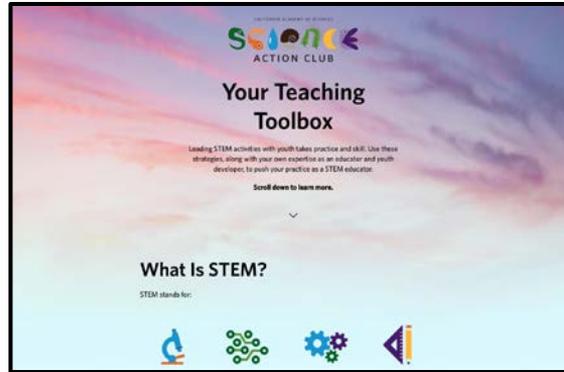
"I'm interested in the natural world"



Our online and blended training



Content overview



Teaching Toolbox



Interactive activity exploration

Connect with Science Action Club!

Visit our program page:

www.calacademy.org/sac

Set up a time to chat:

scienceactionclub@calacademy.org



National Student Climate Change Video Competition

- Elementary, Middle, High School
- Submit a 60 second video answering the following prompt:
What are you doing to limit the impacts of climate change and influence others to take action?
- Summer 2020
- Sign-up: <https://www.surveymonkey.com/r/W57QM5H>



Questions



Climate Change Leadership Newsletter



Highlight resources, opportunities, events, and other information relevant to the summer programs.

National Summer Learning Day



National Summer Learning Day is a national advocacy day aimed at elevating the importance of keeping kids learning, safe and healthy every summer – all so students return to school ready to soar!

<https://www.summerlearning.org/summer-learning-day/>



Annual National Conference



www.summerlearning.org/national-conference



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@SmarterSummers



@SmarterSummers



@SummerLearning



Thank you!

www.summerlearning.org

