Supporting Climate Change Education in Your Summer Program

2020 Spring Webinar Series
Welcome!

- The webinar is being recorded
- Your phone line is muted
- Please 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!
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.
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
Teacheer, 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](https://maktaba.tetea.org/study-aids/Shika%20Na%20Mikono%20v4-2.pdf)
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-
Strong increase in average and maximum temp over the last 30 years (over 39 degrees in 2007)
Models vary widely but it is clear that change will be eminent and unpredictable.
Increases in Wind Speed

Annual monthly mean speeds for Zanzibar

Speed (knots)

Annual monthly mean wind speeds for Zanzibar

(b)
Monthly mean high water level shows sharp increase since 1984
As a small, vulnerable Island, climate change leads to devastating effects on Pemban Communities, especially in the coastal region.
Afforestation and Agroforestry
Alternative Fuels
Improved Cook Stoves
Spice
Forests
Sharing with our Students
Sharing with our Students
Thank you
CANOE MOBILE: 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.
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.

https://www.youtube.com/watch?v=ntKVIBPb4I
Canoemobile’s Reach covers...

23 states
100+ communities
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”
BEFORE: 56%, AFTER: 97%

“I feel prepared to help youth build STEM identity”
BEFORE: 60%, AFTER: 94%

“I feel prepared to help youth connect with the natural world”
BEFORE: 59%, AFTER: 96%

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”
BEFORE: 45%, AFTER: 69%

“Science is fun”
BEFORE: 80%, AFTER: 87%

“I’m interested in the natural world”
BEFORE: 80%, AFTER: 87%
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
Climate Change Leadership Newsletter

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

[Website Link: https://www.summerlearning.org/summer-learning-day/]
Annual National Conference

www.summerlearning.org/national-conference
Find NSLA on social media to keep updated on #summerlearning

@SummerLearning

@SmarterSummers

@SmarterSummers

@SummerLearning
Thank you!

www.summerlearning.org