

The role of informal education in climate change resilience: the Sandwatch model

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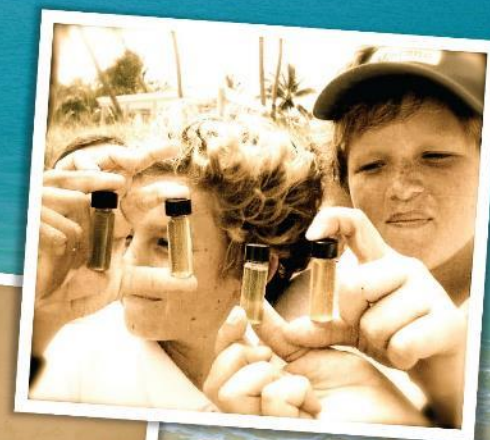
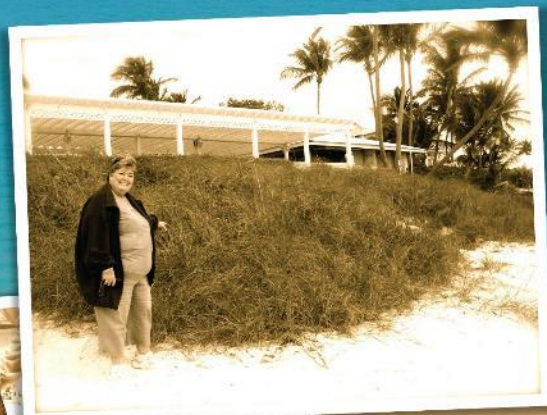
Presentation Overview

1. What is Sandwatch?
2. How we assessed the impact of Sandwatch
3. Final remarks



SANDWATCH

Children, youth and adults monitoring beaches, analyzing data,
sharing results, taking action



www.sandwatch.org

Countries participating: Australia, Bahamas, Barbados, Brazil, British Virgin Islands, Colombia, Cook Islands, Cuba, Dominica, Dominican Republic, Fiji, Gambia, Ghana, Guyana, Jamaica, Kenya, Malaysia, Maldives, Mauritius, Mayotte, Mexico, Montserrat, New Zealand, Puerto Rico, Sri Lanka, St. Croix, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Seychelles, Trinidad and Tobago, Turks & Caicos Islands, United Kingdom, Zanzibar

Decade of Education for Sustainable Development

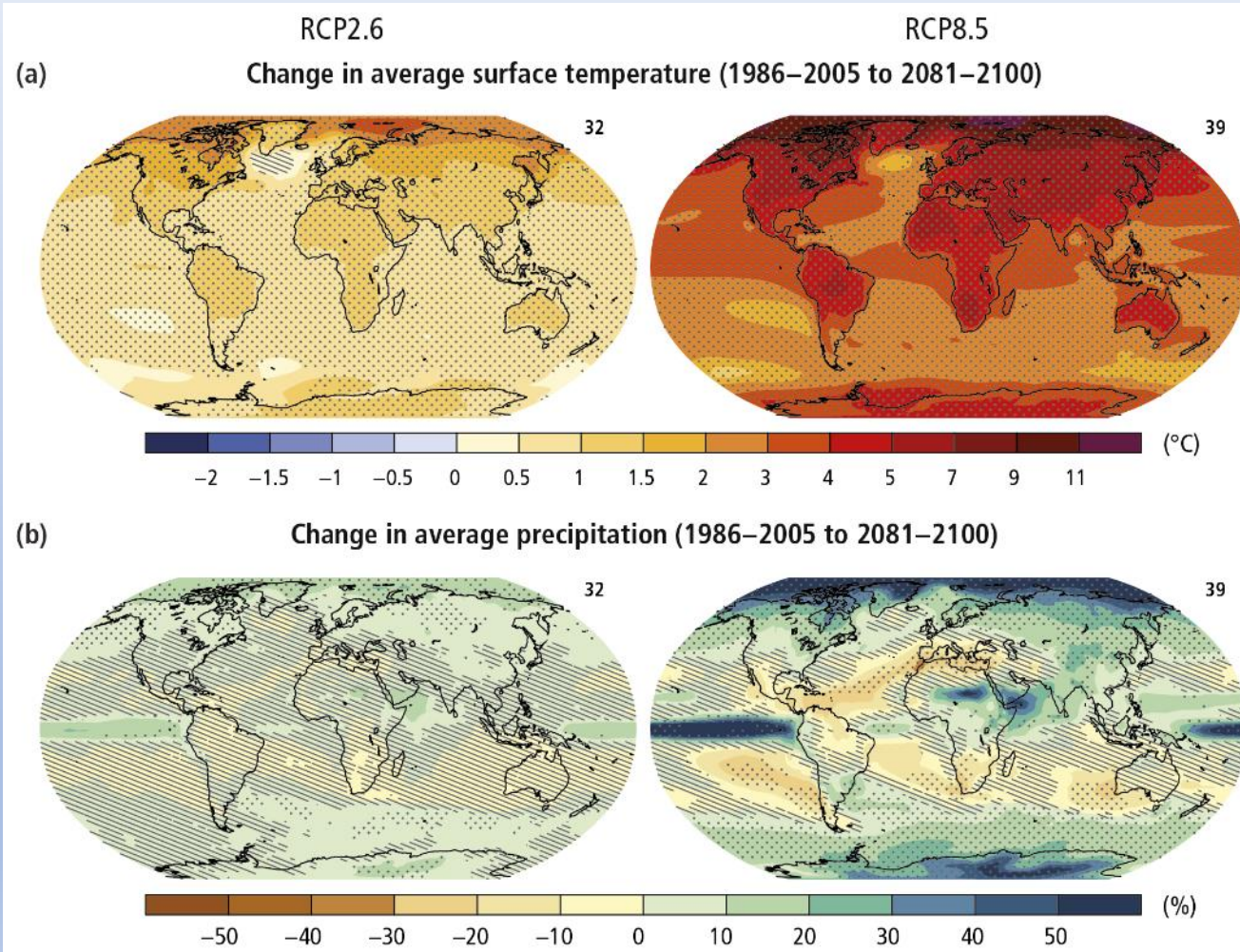
United Nations Decade of Education for Sustainable Development 2005-2014

In order to address sustainable development themes such as climate change, sustainable consumption, disaster risk reduction, among others, “ESD requires participatory teaching and learning methods... to empower learners to take action for sustainable development.”

(UNESCO, 2014, p. 20)



Climate Change



“Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems.”

Beach Ecosystems and Climate Change

A beach in trouble



A healthy beach





Sandwatch – Historical Timeline

Using MAST to conserve beach and coastal environments around the world since 2001



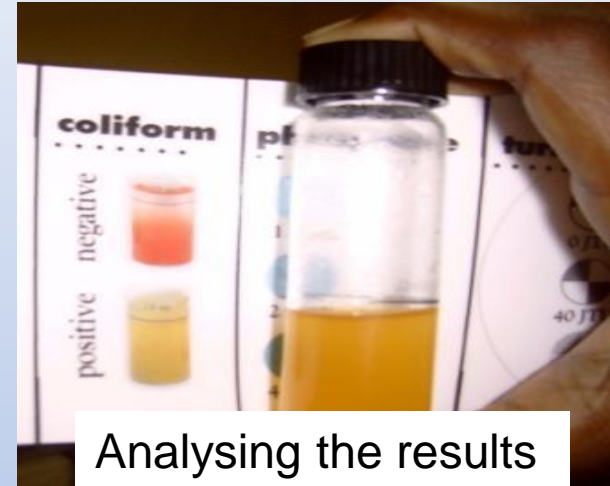
Sandwatch Around The World



Learning by doing: M.A.S.T.



Monitoring the environment



Analysing the results



Sharing the findings



Taking action

2. Impact Assessment of Sandwatch

Quantitative vs. Qualitative

How do you assess the contribution of the Sandwatch programme to ESD?

The 'Most Significant Change' (MSC) Technique

A Guide to Its Use

by

Rick Davies and Jess Dart



Funded by
CARE International, United Kingdom
Oxfam Community Aid Abroad, Australia | Learning to Learn, Government of South Australia
Oxfam New Zealand | Christian Aid, United Kingdom | Exchange, United Kingdom
Ibis, Denmark | Møllefolkeligt Samvirke (MS), Denmark
Lutheran World Relief, United States of America

Version 1.00 – April 2005

WHAT was the change?

WHO was involved?

WHEN did it happen?

WHY is it significant?

WHAT was the impact of the change and why is it significant?

Most Significant Change Stories

THE SANDWATCH VISION

Sandwatch seeks to change the lifestyle and habits of children, youth and adults on a community wide basis to develop awareness of the fragile nature of the marine and coastal environment and the need to use it wisely; and to adapt to climate change by building ecosystem resilience.

The stories are presented and discussed using the 3 major outcomes of the DESD:

- participatory teaching,
- empowering learners, and
- taking action for sustainable development

Participatory Teaching and Learning Methods

"I have been exposed to this programme for just about three years now and I can say that I have changed immensely due to this programme. From my experience of doing beach clean-ups, I have learnt the importance of keeping the environment clean and the impact of pollution to life on earth. I have also seen hands on learning taking place, as students are actively involved in activities. I now see things differently and think differently as I am more confident and empowered to participate in activities and speak out at things that are wrong. I have learnt and adapted new and innovative teaching techniques. I have also learnt that education goes beyond the traditional paper and pencil technique."

Mrs. Ali, Teacher at Mayaro Government Primary School, Trinidad and Tobago.



Students from IPVCE Comandante Ernesto Ché Guevara, Santa Clara, Cuba preparing an inventory of the beach vegetation

Empowering Learners

- *"I have loved everything ocean-related since I was little. Once I started working on the Sandwatch programme, I saw the ocean from a different perspective. The Sandwatch programme experience led me to become interested in oceanography as an academic career path. I entered the University of Puerto Rico in the Geology major. However, during my time in the university, I realized that the only way to preserve nature is by educating others. So I changed majors and am currently studying educational psychology. The objective is still the same: save the ecosystems, but this time, I will reach it by helping create a generation more conscientious about the environment. In the future, I hope to have my own school, with my own educational system, in which I'll foster education through projects like Sandwatch, in which children learn by having the most direct contact possible with nature."* (Edited version)

Nayrobie Lee Rivera Estévez, University student, Puerto Rico



Taking Action for Sustainable Development



Students from the Hope Town Primary School in Abaco, Bahamas, planting sea oats on eroded dunes.



Students from King George V school in Kiribati conducting a beach clean-up

3. Where to from here?

- The Sandwatch programme is still relevant today
- Value of participatory teaching and learning methods
- The future of Sandwatch
 - Expand Most Significant Change stories
 - Young Sandwatchers Network and Advisory Board



www.sandwatchfoundation.org



Thank you

Photo credit: R. Chaparro