

SERead

*Scientific Educational Resources And Experience
Associated with the Deployment of Argo Drifting
Floats in the South Pacific Ocean.*

An activity supported by:

- ✧ NIWA
- ✧ NOAA
- ✧ U.S. Argo (SIO)
- ✧ UNESCO
- ✧ SOPAC (now SPC)
- ✧ IOC Perth and PIGOOS.



SERREAD began: *At the 2002 workshop on Practical Applications of Ocean Observations in the Pacific Islands, education was identified as the top priority (by the regional intergovernmental organization SOPAC).*

- ❖ *SERREAD is managed by J. Hall (NIWA)*
- ❖ *Key facilitators: Carol Young (Univ of Auckland) and Keith Hartle (Dargaville H.S.)*
- ❖ *Liaison assistance: PI-GOOS Coordinator (Sarah Grimes, Paul Eastwood, Philip Wiles)*

Goal : *To generate substantial knowledge, awareness and discussion among Pacific Island students, teachers and communities of the global ocean observing systems, climate change, sea level rise, global warming and the local impacts of these dynamics.*

Objectives:

- ❖ *Provide a teaching resource that complements the current teaching curriculum and demonstrates the value of scientific knowledge through realistic and locally relevant applications.*
- ❖ *Teach students the fundamental measurements that describe the physical state of the ocean (temperature, salinity, ocean current), and the exchanges between the ocean and atmosphere of heat, water, and momentum.*
- ❖ *Facilitate the interactions involving scientists with students and teachers.*

Key Principles:

Develop teachers' knowledge of climate change science and the role of the ocean.



Use workshops that provide opportunities for exploration and discussion:

Focus on how students learn: experience and experimentation.



Build capacity of SEREAD
support people in the country



Give teachers the opportunity to try a variety
of learning experiences that will work in their
classrooms

Provide teachers with
practical materials to use in
their classrooms.



Resource Material



- **What is Weather?**

Lower Primary School - Years 3 - 6

- **What is Climate?**

Upper Primary School - Years 6 - 10

- **Oceans Rising?**

Lower Secondary School - Years 9 – 11

- **Teaching and Learning Strategies – Years 3- 13**



Teacher Training Workshops

- Cook Is 2002, 2003
- Samoa 2004, 2005, 2006
- Cook Is November 2007
- Samoa 2008, 2009
- Tonga 2009, 2010
- Samoa 2010, 2011, 2012

The Feedback



The Feedback

The background image is a collage of a classroom or meeting room. It shows several people, mostly men, sitting at wooden tables. Some are looking at papers, others are talking. There are windows in the background showing greenery outside. The room has a blue wall with some posters. The overall scene suggests a collaborative learning or discussion environment.

"Activities that were challenging and fun."

"Helpful for literacy - able to familiarise in vocabulary and useful information."

"Activities for students and doing the activities for myself."

"The materials were useable in schools, light and readily obtainable"

"Good demonstrations and discussion which helped understanding."

"Language understandable"

"Greater understanding teaching these concepts to children."

"I learned more about climate change."