From the Arctic Field into the Classroom with the PolarTREC Teacher Research Experience Program

State of the Arctic
4.3. Communicating Knowledge and Information

Elizabeth Eubanks M.Ed, St. Mark Catholic School
Dr. Steve Oberbauer, Florida International University
Presentation Outline

NOAA and PolarTREC
- Researchers
- Research/Expeditions

INTO THE CLASSROOM
- Before, During and
- After the Expedition
- Future plans
Teacher Researcher Experiences (TRE)

NOAA Teacher at Sea Program

Teachers get a clearer insight into our ocean planet, a greater understanding of maritime work and studies, and to increase their level of environmental literacy by fostering an interdisciplinary research experience.

Teachers and Researchers Exploring and Collaborating

The goal of PolarTREC is to invigorate polar science education by bringing K-12 educators and IPY researchers together through hands-on field experiences. PolarTREC is administered by ARCUS and funded by NSF.
Arctic Tundra Dynamics

Catch Rate using J hook vs. C hook

Dr. Steve Oberbauer, FIU
Paulo Olivas, FIU

Dr. Suzanne Kohin, NOAA
Students followed my journal while I was on the ship, when I returned we evaluated real data.
The Whole School is involved:
Shark Month

Shark-O-Ween
Before My Expedition to Barrow, Dr. Oberbauer visits St. Mark
Sharing and collaborating with students and community while in Barrow

Ask the Team and journal summaries

Webinars

Germinating alfalfa seeds
From Barrow to the Classroom

Thematic School Year Study

Polar Bears, Parrots, Penguins
Arctic, Tropics, Antarctic

- Freezing Fridays
- Daily morning announcements
- Monthly Themes

ie
- animals of the 3 areas
- earths rotation
- survival clothes
- glaciers, icebergs, ice sheets
- cultures
Polar Earth Day Extravaganza

Students teach students

- Alaska Games - ear pull
- Northern Lights
- Depth Hoar
- Blanket Toss
- Reindeer
“we learned about women scientists”

“although the ice is melting in the Arctic, it will affect living things everywhere”

“we will present a poster at the State of the Arctic Conference- a once in lifetime chance as a middle school student”
Where Do “WE” Go from Here…?

...to the Mangroves

Dr. Oberbauer

Paulo
State of the Arctic Conference with Students

Students of TRE’s

- Have been part of two TRE programs
- Collaborated on abstract for poster
- Submitted abstract together
- Creating the poster together
- Will attend conference for 2 days
- Will present poster
- Will help with conference
- Give up lunch and recess time to work together

- Realize:

Most kids never get this chance!
Winning the Super Bowl as a Science Teacher

It doesn’t get any better than this!
OR DOES IT ? ----->
Keep Barrow Beautiful!
Education and Action to maintain the “STATE of the Arctic”

The Beach Classroom
- Students from local day care
- Comparing West Palm Beach, FL to Barrow
- why beaches should be kept clean
- Fun supplies shared by Keep Palm Beach County Beautiful
- Beach Clean Up
Join the fun- Take the TRE Plunge!!

Thank you!

???'s

www.polartrec.com
http://teacheratsea.noaa.gov/
hoocaca@yahoo.com