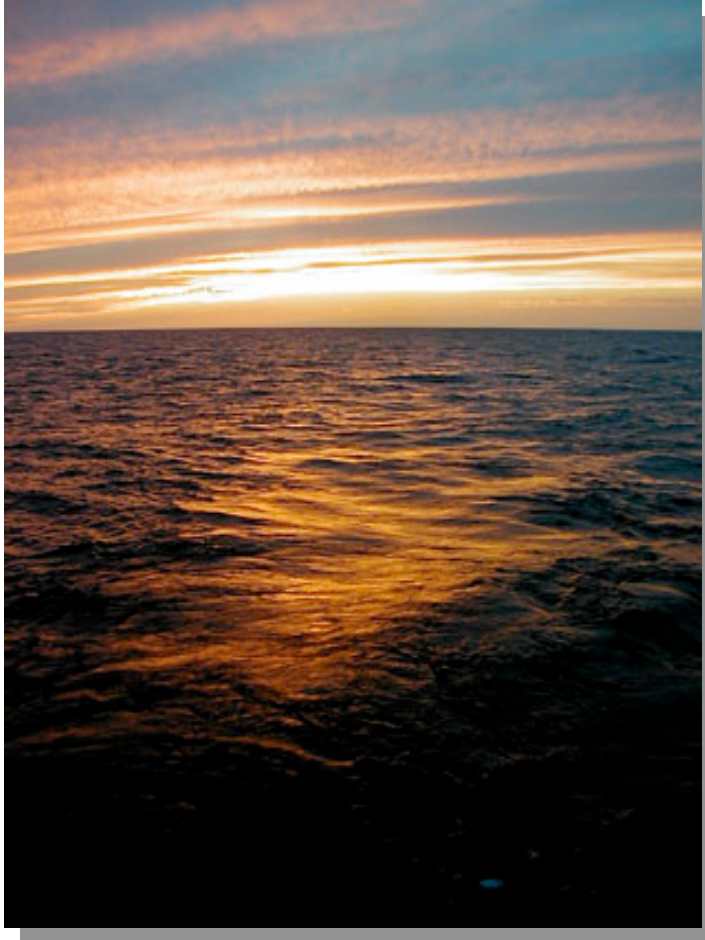# IOOS Education Planning Workshop

- March 22-24, 2004
- At NOAA Coastal Systems Center in Charleston, S.C.
- ~65 participants from all regions and disciplines
- NANOOS "representatives" Susan Cowles, Jon Luke, Jan Newton, and Fritz Stahr

All graphics gratefully borrowed from Annette deCharon, Director of Outreach, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine - presenter at Education workshop
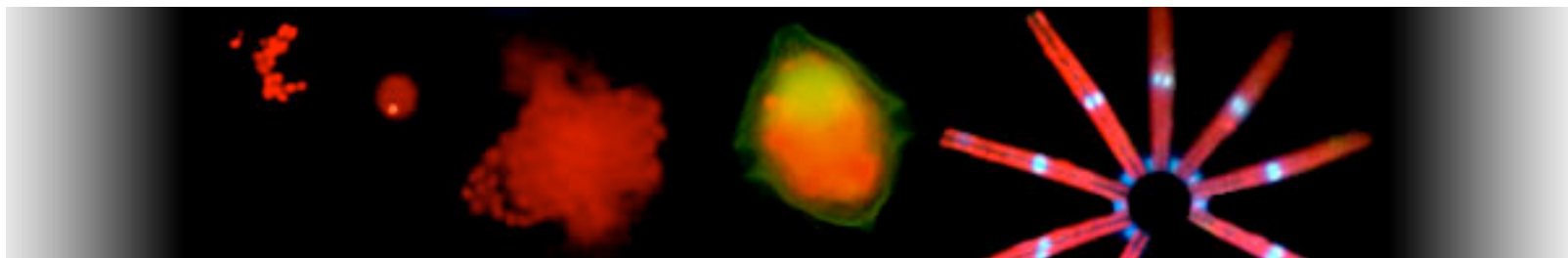
IOOS Education Planning Workshop

OBJECTIVES:

- Produce a set of community recommendations for education efforts associated with IOOS.

- Develop strategies and recommendations for integrating both formal and informal education into IOOS operations at both regional and national scales (i.e., COOS *and* IOOS).

IOOS Education Planning Workshop

ACTIVITIES: A mix of -

- Presentations regarding IOOS plans and other program's current activities (e.g., COSEEs, NMEA, GoMOOS, Bigelow, DLESE)

- Evaluation of currently available web-based tools & programs

- Breakout sessions to identify needs, develop strategies and make recommendations - matrix of needs and strategic areas
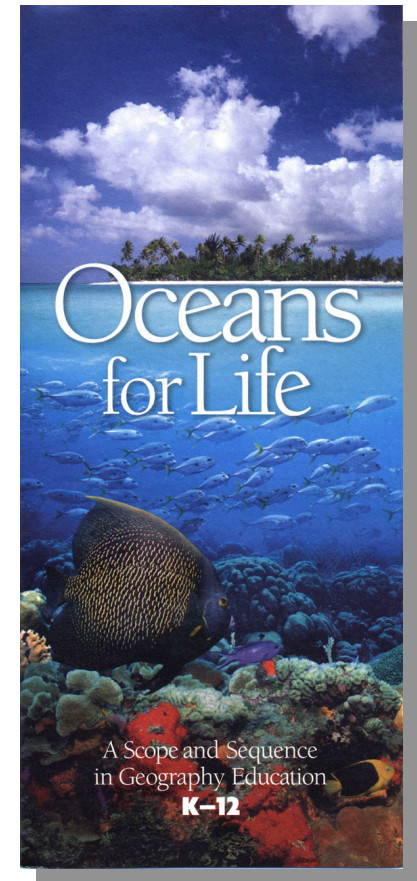
- Good food!

Blending Ocean Research & Education
A View from the Bottom of the Food Web

IOOS Education Planning Workshop

(Proposed) DELIVERABLES:

- Report that will evolve into IOOS Education Strategic Agenda and Implementation Plan

- Recommendations for data manipulation, analysis and visualization tools for education - ID exemplary efforts.

- Create and sign community resolution to facilitate communication, stimulate development and use of IOOS for formal and informal education.

Oceans for Life

A Scope and Sequence in Geography Education

K–12

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DELIVERED (to date):

- Signed resolution.
- Report draft that includes recommendations on:

a) Building awareness of OOS among the education community
b) Application of IOOS assets to education
c) Workforce development and diversity
d) Contribution to science education improvements
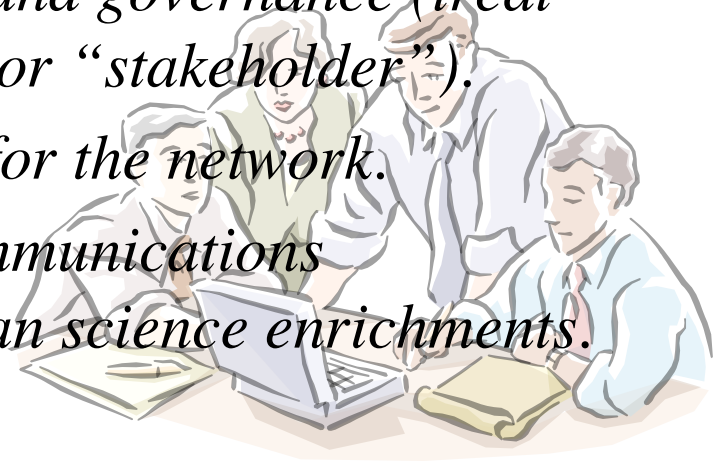e) Participation of IOOS/COOS members in education

IOOS Education Planning Workshop

REPORT contains specific recommendations related to the goal of:

1. Create a vibrant and highly effective education and communications network that fully integrates into ALL components of IOOS.

Including:

a) *Create a collaborative educ/comm IOOS network with offices or personnel in each of the regional associations.*

b) *Participate in IOOS planning, design and governance (treat education at least as well as a "user" or "stakeholder").*

c) *Create a national coordinating office for the network.*

d) *Support development of education/communications professionals using IOOS derived ocean science enrichments.*

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REPORT contains specific recommendations related to the goal of:

2. Using IOOS, contribute to the development of an ocean-literate society that practices good ocean stewardship.

Including:

a) *Articulate a set of key messages and themes based on the 7 pillars that address the value of IOOS to society, including the scientific, applied and education value.*

b) *Craft an education development strategy and implementation plan including (among other things) sustained training of educators in use of OOS products.*

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REPORT contains specific recommendations related to the goal of:

3. Create useful education products using IOOS assets.

Including:

a) *Create data and technology protocols for education working group.*

b) *Establish a MOU with all IOOS partners for open access to data, tools, and products.*

c) *Establish a clearinghouse to provide mechanism for sharing data, tools and products.*
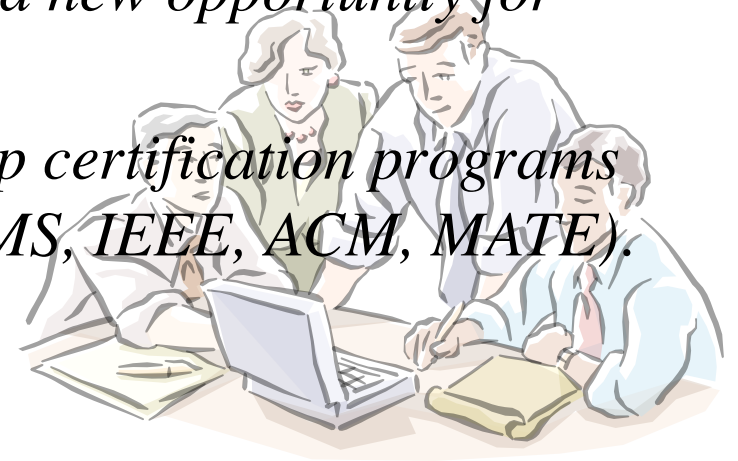
IOOS Education Planning Workshop

REPORT contains specific recommendations related to the goal of:

4. Create a technically trained workforce that reflects diversity and possesses the unique skill sets required to develop and sustain IOOS assets.

Including:

a) *Conduct a thorough workforce analysis to identify the operational and developmental needs of IOOS.*

b) *Educate industry to recognize IOOS as a new opportunity for business.*

c) *Engage professional societies to develop certification programs to meet IOOS needs (e.g. TOS, MTS, AMS, IEEE, ACM, MATE).*

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Take home messages:

- Education & communication are critical to success of IOOS (*and, by extension, regional COOS*)

- Development of IOOS must include educ/comm at high level and at start up.