







## *Identifying Ocean Literacy in New England*

*Please help us fill in this chart...*

<b>Ocean Literacy (OL) Efforts State by State</b>	<b>Maine</b> 	<b>New Hampshire</b> 	<b>Vermont</b> 	<b>Massachusetts</b> 	<b>Connecticut</b> 	<b>Rhode Island</b> 
1. Working toward getting ocean science topics integrated into state science standards (not necessarily the Ocean Literacy principles verbatim)	?	?	?	?	?	√
2. Working with individual school districts to integrate OL into curriculum	?	?	?	√	√	√
3. Integrating OL principles into teacher professional development / workshops	√	√	?	√	√	√
4. Informal marine education programs are aligned with and integrate OL	√	√	?	√	√	√
5. Linking OL to academic pre- and in-service teacher training programs	√	?	?	?	?	√
√ = there are known, ongoing efforts happening to further Ocean Literacy ? = at present we are unaware that there are efforts of this kind happening, if you have information please bring it to our attention						

Learn more about the details of these efforts by attending Session D – *Incorporating ocean sciences into state standards: New England case studies* or contact chart creator Abby Manahan, COSEE – Ocean Systems, [amanahan@bigelow.org](mailto:amanahan@bigelow.org)

## **Session D –Incorporating ocean sciences into state standards: New England case studies**

The above chart was included in the NEOSEC Ocean Literacy Summit (November 4, 2006) participant packet. This chart inventories what is happening around New England with respect to five specific efforts in ocean literacy. Below are brief highlights from each state in the form of anecdotal information from colleagues. Contact information for each of the reporting individuals is located at the end of this document.

### **1. Working toward getting ocean science topics integrated into state science standards (not necessarily the Ocean Literacy principles verbatim) -**

Rhode Island is the only state that weighed in for this category. Gail Scowcroft provided some information on the efforts in Rhode Island and she reports that she and one of her staff members was appointed to serve on the RI Governor's advisory panel for science education and they have succeeded in making a formal recommendation in the panel's report that the RI science grade span expectations be integrated with ocean science concepts.

### **2. Working with individual school districts to integrate OL into curriculum -**

Reporting on MA, Bob Chen and Kim Frashure indicate that there are eight identified school districts that have ocean science curriculum as a result of the COSEE – New England sponsored *Ocean Science Education Institute* where the ocean literacy principles are disseminated and presented for integration.

Lauren Rader and Diana Payne spoke for CT and while their state is struggling with having a water strand in their state frameworks, they report that those teachers who “see the light” find ways to teach water and ocean content and do so using OL to guide their curriculum design.

Gail Scowcroft is working with two RI school districts to integrate OL into their curriculum. One of the districts targets grades 3 & 4. Efforts with another district for a full K-12 spectrum of OL integration, that they hope will serve as a state model, are just beginning.

### **3. Integrating OL principles into teacher professional development / workshops –**

All of the coastal states are providing teacher professional development workshops that highlight ocean literacy and model ways to integrate the principles. If you're interested in specific sponsors and institutions facilitating see names and contact information listed at the end of this document.

#### **4. Informal marine education programs are aligned with and integrate OL –**

Again we see all of the coastal states represented. There are a lot of informal institutions participating in the OL effort. These types of organizations and institutions have the freedom and flexibility to help lay the groundwork for Ocean Literacy. Again if you are interested in specific organizations see names and contact information listed at the end of this document.

#### **5. Linking OL to academic pre- and in-service teacher training programs –**

Maine and Rhode Island have active programming directed at the level of teacher training.

Gail Scowcroft in Rhode Island reports that in her graduate oceanography courses that she teaches, which target educators, she has her students spend time linking the essential principles and the RI grade span expectations in science with the course content to create adaptable curriculum for their classrooms

COSEE- Ocean Systems, lead by PI Annette deCharon and located at the UMaine Darling Marine Center, has paired with the University of Maine College of Education and created a seminar course targeting both science education students and marine science students. Modeled after a pilot workshop that was held this past summer, *Teaching Science through Ocean Inquiry* will be offered as a semester long course in Spring '07. The OL Essential Principles have been used to guide the course and participating students will be introduced to the brochure.

#### **Vermont –**

We can't ignore the fact that our inland neighbor has been quietly left out of the mix. Pat Fitzsimmons a Science Assessment Coordinators with the VT Dept of Education reports that oceans as a topic, is not a concept that gets much attention. However, water is a major conceptual topic addressed at all grade levels. There is an interest in using oceans to teach concepts identified by the VT Science Grade Expectations, but it's a hard sell and they admit that they certainly don't foster ocean science as a topic.

## Contact Information

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