Vision Paper for the COSEE Network

Submitted on behalf of the 31 two-year college faculty who participated in the workshop on *The Role of Two-year Colleges in Geoscience Education and Broadening Participation in the Geosciences**

The science faculty at community colleges play an important role in providing ocean science education for undergraduates. The community college science curriculum serves a large number of non-science students, and a smaller number of students who enter the ocean science work force. The community colleges provide access to a diverse audience; nationally 53% of Hispanics, 45% of African Americans, 52% of Native Americans and 40% of first generation college students in higher education are enrolled at community colleges. Community college courses are taught by two categories of faculty; those who are full-time instructors and those who are adjunct and receive few of the benefits and opportunities afforded to the full-time faculty. Nationally over half of the community college faculty have adjunct status. Classes that include ocean science topics are taught in a variety of departments by faculty who may or may not be ocean scientists. Our vision for the COSEE network is that community colleges are fully integrated into all of the COSEE centers and that the community college faculty and students from all areas of the US are afforded opportunities to increase their ocean literacy. Here we outline broad, high-priority objectives that the COSEE network could implement to achieve that vision.

The national coverage of the COSEE centers makes them ideally suited to establish partnerships with community colleges throughout the nation and thus increase ocean literacy in a wide variety of populations. COSEE could support ocean science community college faculty in several ways: professional development programs that provide opportunities for both full-time and adjunct faculty and involve experiences, current ocean science information, and contacts and resources to increase ocean science literacy of both faculty and students. Faculty are interested in learning about resources that are currently available for instruction, working with ocean science research, and gaining access to timely information on current ocean science topics.

The regional nature of the COSEE centers allows for the development of opportunities that connect ocean scientists with community college faculty who are often place-based and have large teaching loads and few resources for professional development. The development of authentic research opportunities for use in the curriculum that are based on either local ocean issues or web-based data sets, especially important in the case of non-coastal community colleges, is one such suggestion for the COSEE community.

COSEE's resources are well suited to develop effective mechanisms for informing community college students of the pathways and diversity of ocean science career opportunities. This potentially could be in the form of a comprehensive web portal on career pathways and resources available to prepare for these careers. Few community college students have exposure to research opportunities. COSEE could develop mechanisms for community college students to access information about internships and research opportunities with academia, agencies and ocean workforce entities. COSEE could provide opportunities for community college students, and support pathways for community college students to enter the ocean science work force.

2YC Faculty who contributed to writing this document: Amanda Julson (Blinn College, Texas) and Laura Guertin (Penn State Brandywine)

*The workshop was held June 24-27, 2010. The list of participants is given on the workshop website: <u>http://serc.carleton.edu/geo2yc/workshop2010/index.html</u>

Submitted by Heather Macdonald (College of William & Mary) (rhmacd@wm.edu), workshop convener