Improved data products and data access. The touch tank at HMSC Visitor’s Center.

Formal Education in the SMILE Program:

CIOSS is helping the Science and Math Investigative Learning Experiences program to develop its high school curriculum and activities in the thematic area of Oceanography and Remote Sensing.

The SMILE Program works to address issues of higher education readiness, access and diversity through academic enrichment and outreach in science and mathematics for pre-college students in grades 4–12. The work of SMILE is intended to significantly improve the educational outcomes of underrepresented and underserved students.

The High School SMILE Program culminates in an annual High School Challenge Event, where SMILE club members work as teams of students from around the state on a community-based scenario. The 2005 Challenge featured a realistic oil spill scenario. Students examined data to learn the extent, the direction of the spill, the direction of coastal currents, weather impacts, and the marine and coastal ecology of the area involved. Students collected data pertinent to the developing situation, examined options for oil recovery or remediation, developed a plan informed by the data, and implemented strategies to communicate that plan. They had to defend that plan to “community members, experts and other stakeholders,” as played by teachers, OSU students and faculty.

Informal Education at Hatfield Marine Science Center:

CIOSS is helping HMSC to build an interactive public display that will highlight the use of remote sensing to monitor the coastal ocean off Oregon and in other coastal locations.

Located on the coast, approximately 75 minutes from OSU, the Hatfield Marine Science Center houses marine science laboratories from OSU, NOAA, EDA, and the State Department of Fish and Wildlife. It also houses the OSU Hatfield Marine Science Visitor Center—a unique, dynamic environment for lifelong exploration and discovery. The Visitor Center encourages adults and children to explore marine science.

The Visitor Center also provides opportunities for conducting research on devices, methods, and concepts for informal science education that will advance the art of public education. It effectively provides a “laboratory” for informal education.

CIOSS is supporting the development of an interactive display on oceanography and remote sensing. This activity forms the research for the PhD thesis of OSU student Molly Phipps. An interactive, touchscreen display will allow visitors to fly through the ocean underneath the surface, as well as in situ data sets that allow the visitor to fly through the ocean underneath the surface.