Teachers and Technology:

ROVing the Oceans

2nd Annual MATE Center

Summer Institute

July 23 - 28, 2000

The Marine Advanced Technology Education (MATE) Center, located at Monterey Peninsula College in Monterey, California, is a national consortium of educational institutions and organizations dedicated to improving marine technology education. The MATE Center will be hosting a summer institute sponsored by the **National Science Foundation**. The participants will be Community College, Four-year college, and High School faculty in marine science and technology. The institute constitutes five days of professional development during which faculty will gain a deeper understanding of emerging technologies in marine fields and use that information to develop new and exciting instructional materials for their own use. The focus of this years Institute will be **Remotely Operated Vehicles (ROVs)**: uses, design, fabrication, and classroom applications.

During the five-day institute, participants will be introduced to industry-driven guidelines for skills and knowledge that the MATE Center has developed for five marine occupational clusters: Marine Technicians, Marine Surveyors, Aquaculture Technicians, Oil Spill Response Technicians and Remotely Operated Vehicle Technicians. In addition, participants will visit two marine facilities in the Monterey Bay region where marine technicians will present specific problems that they encounter on the job. Institute participants will then use these real-world marine problems to develop instructional materials that address the industry guidelines for skills and knowledge and can be inserted into existing curriculum at the participants' institutions.

The goals of the summer institute are for faculty to work with other faculty and with technical experts from industry and research organizations to:

- Experience and understand the type of work that marine technicians do now and in the future.

- Experience and understand the types of emerging technologies used and their general application in the marine environment.

- Create interdisciplinary technology-rich instructional materials that address real-world marine problems.

The MATE Center Summer Institute in
Professional and Curriculum Development
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Participants will achieve the following objectives:

- Build a small-scale, fully functional remotely-operated vehicle (ROV) that teachers can take back and replicate in their classrooms.
- Produce instructional materials based on building the ROV that address real-world marine problems, improve student preparedness for ocean-related occupations, and address the high school, community college, and university versions of this process.
- Visit and interact with marine technicians at two marine research and technology facilities in the Monterey Bay region of California.
- Acquire marine-related resource materials for curriculum.
- Identify marine-related, problem based scenarios and activities that will enhance current curriculum.
- Identify course assessment strategies that are aligned with course objectives and industry guidelines.
- Identify ways to incorporate industry guidelines for marine technicians (including SCANS) into existing curriculum.
- Present action plans for 1) inserting curriculum module(s) into current course(s) and 2) disseminating information on marine technology to colleagues.

If you are interested in the MATE "Teachers and Technology: ROVing the Oceans" Institute, please contact Saundra Butcher for an application. Or you can fill out the application on the MATE website. **Applications will be due May 19, 2000.**

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