



Students building SeaPerch ROVs as part of the Pribilof Marine Science Camp during summer 2008. (photo courtesy of Michele Ridgeway)

Hands-on Underwater Engineering Curriculum - Professional Development

Training includes instruction from professional engineers, networking with teachers from around your region and all the supplies necessary to get your students building!

Sea Perch provides students with the opportunity to learn about robotics, engineering, science, and mathematics while building the underwater ROV as part of a science and engineering curriculum. Throughout the project, students will learn engineering concepts, problem solving, teamwork, and technical applications, as well as having the opportunity to participate in an end-of-the-term design competition.

In addition, the curriculum includes discussion of potential careers in technical

and engineering fields, as well as related fields of study. The program will be used to inform and educate students through a hands-on activity in the classroom, with the objective of generating interest and enthusiasm for continued science, technology and engineering studies. The long-term goal will be to create the next generation of naval architects, marine and ocean engineers, and scientists.

The Sea Perch program introduces pre-college students to the wonders of underwater robotics. Sea Perch is part of the Office of Naval Research's initiative, "Recruiting the Next Generation of Naval Architects," and is administered by the Society of Naval Architects and Marine Engineers. The program teaches students how to build an underwater robot (called a Sea Perch), how to build a propulsion system, how to develop a controller, and how to investigate weight and buoyancy.

The Sea Perch program trains teachers, mentors and potential trainers how to build the remotely operated vehicles (ROVs), which are made with PVC pipe and other small parts, all housed in a plastic Rubbermaid bin. With a marine engineering theme, this project teaches basic skills in ship and submarine design and encourages students to explore naval architecture and marine and ocean engineering concepts independently.

2009 Workshops

ANCHORAGE

February 2nd-3rd, 8am-3pm

JUNEAU

Thursday, Feb 5th, 8am-3pm

Friday, Feb 6th, 3pm-6pm

Saturday, Feb 7th, 9am-12pm



To register or request more information, please contact Rebecca Parks at rparks@jedc.org or 907-523-2334

Financial support for travel is available.