What is SeaPerch?

SeaPerch is an innovative underwater robotics program that equips teachers and students with the resources they need to build an underwater Remotely Operated Vehicle (ROV) in an in-school or out-of-school setting. Students build the ROV from a kit comprised of low-cost, easily accessible parts, following a curriculum that teaches basic engineering and science concepts with a marine engineering theme. The SeaPerch Program provides students with the opportunity to learn about robotics, engineering, science, and mathematics (STEM) while building an underwater ROV as part of a science and engineering technology curriculum. Throughout the project, students will learn engineering concepts, problem solving, teamwork, and technical applications.

Building a SeaPerch ROV teaches basic skills in ship and submarine design and encourages students to explore naval architecture and marine and ocean engineering principles. It also teaches basic science and engineering concepts and tool safety and technical procedures. Students learn important engineering and design skills and are exposed to all the exciting careers that are possible in naval architecture and naval, ocean, and marine engineering.

SeaPerch it is not simply a one-day experience. Participation in the SeaPerch Program is a step along a journey that will hopefully include other STEM (Science, Technology, Engineering, and Mathematics) activities. Think of SeaPerch as one step along the Yellow Brick Road that might lead a student to consider further study or a career in STEM. A student building SeaPerch today just might be future scientist, engineer, Naval officer, educator or inventor… It starts here.

SeaPerch is a K-12 Educational Outreach program sponsored by the Office of Naval Research (ONR) and managed by the Association for Unmanned Vehicle Systems International Foundation (AUVSIF), designed to help identify the next generation of STEM professionals. We are proud to be one of the Navy’s signature Outreach programs, and since the program’s inception eight year ago, over 300,000 students and over 17,000 teachers and mentors have participated.

SeaPerch is designed to be an effective educational program and activity to teach and reinforce STEM concepts through hands-on activities and a STEM curriculum. The program’s goal is to generate Awareness, Interest, and eventual Pursuit of STEM careers, and to teach students that working in a STEM field can be fun and engaging.