

Ergopedia's *Essential Physics* Chosen by Office of Naval Research for \$600,000 STEM Grant to the East Bay Educational Collaborative.



US Senator Jack Reed announcing the award at the East Bay Educational Collaborative in Warren, RI.

US Senator Jack Reed formally announced the award of a \$600,000, three-year grant to strengthen the STEM pipeline in Rhode Island and local area schools. Speaking at the East Bay Educational Collaborative in Warren, RI, Senator Reed was enthusiastic about the potential for the new program to engage many more students in STEM learning in high school and middle school grades. The senator stressed the need to *do* science and engineering instead of just reading about it.

The grant from the Office of Naval Research will provide *Essential Physics* hands-on equipment, curriculum, and training for 36 classrooms and more than 60 teachers over the next three years. *Essential Physics*, published by Ergopedia, is a state-of-the-art STEM physics program that incorporates engineering and technology into the teaching of high school physics.

An audience of 50 teachers and administrators from local school districts applauded Senator Reed's commitment to STEM education. They then watched as the new physics program was demonstrated by coauthors Dr. Tom Hsu and Dr. Manos Chaniotakis, both formerly of MIT. To show how engineering and physics support each other, Dr. Hsu drew a graph of motion on the e-Book page. With a push of a button, a small robot faithfully drove back and forth across the floor doing exactly the motions shown on the graph. "This is how students need to learn" said Dr. Hsu, "we teach them science so they can use it to solve the worlds problems. This program lets them learn by solving real problems - like making the robot go around this post. This is much more effective and engaging than just a paper and pencil."

The East Bay Educational Collaborative (www.ebecri.org) has been supporting hands-on science and math education for communities across Rhode island, Massachusetts, and Connecticut for twenty five years. The new ONR grant continues a strong commitment to STEM education that has included very successful curriculum implementations such as the Physics First program sponsored by the National Governor's Association (2007-08) and *A Natural Approach to Chemistry* (2009-10). These two high school programs were also coauthored by Hsu and Chaniotakis.



Senator Reed with Essential Physics coauthor Dr. Tom Hsu demonstrating the new hands-on physics equipment schools will receive as part of the ONR grant.



Essential Physics coauthor Dr. Manos Chaniotakis teaching a physics workshop at the East Bay Educational Collaborative in Warren, RI.

Contact information:

Ergopedia: Dr. Tom Hsu (tom@ergopedia.com) **website:** www.ergopedia.com

East Bay Educational Collaborative Ron Kahn (ronald.kahn@ebecri.org) **website:** www.ebecri.org