Narrator: Aboard the R/V Thompson off the Washington coast, an orca sighting. A friendly sealion swims alongside to check out the Applied Physics Laboratory scientists and their guests on a four-day cruise led by APL-UW Principal Oceanographer Matthew Alford.

Matthew Alford: The main purpose of the cruise was actually to deploy our mooring — the Cha'ba surface mooring, which is a big part of the NANOOS observatory out there, and also to recover our glider, which has been out there for about six months now.

Narrator: Among the guests are UW physical oceanography graduate students and high school teachers.

Amy Sprenger: The classroom teachers are working on an ocean acidification curriculum — bringing ocean acidification into the classroom. Since this buoy is monitoring ocean acidification, it was a great chance to get the teachers linked up with the scientists in a realm where they can all talk more — to learn more about the research and more about how to bring acidification topics into the classroom.

Narrator: Teachers aboard the Thomson and students ashore talked via Skype about the science underway at sea.

Alford: We were out there using some pretty high-tech tools to look at some of these big undersea waves that we think may be responsible for bringing some of the nutrients onto the Washington shelf that feeds the ecosystem.

Sprenger: Having the scientists and non-scientists together on this cruise for four days and four nights was a really great opportunity to get scientists and non-scientists talking to each other, communicating and having each understand where the other individuals are coming from.

Alford: This whole cruise was really designed to get the community aware of some of the issues out on the Washington coast and to help teachers spread that message.

What I really started to get the past few years is how little value science is without communicating it to the public. We can all sit in our offices and write our papers but really the joy for me is being able to communicate those concepts to the public. On the other hand, if you don't do excellent science, you don't have anything to communicate.

This cruise was a perfect example of that really, because we were out there doing absolutely thrilling science and at the same time, the educators were right on board, the students were right there getting their hands wet and dirty with the instruments, and it really was a great opportunity on Earth Day to really spread some of these concepts out to the public.

This is APL — The Applied Physics Laboratory at the University of Washington in Seattle.