



Calhoun: The NPS Institutional Archive
DSpace Repository

NPS Scholarship

Publications

2011-11-14

Expanding Your Horizons Conference Opens Doors for Young Women in STEM Fields

Naval Postgraduate School Public Affairs Office

Naval Postgraduate School

<https://hdl.handle.net/10945/32356>

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>


[About NPS](#)
[Academics](#)
[Administration](#)
[Library](#)
[Research](#)
[Technology](#)
[Services](#)

Expanding Your Horizons Conference Opens Doors for Young Women in STEM Fields

[NPS](#) > [About NPS](#) > [News](#)

Article By: *Amanda D. Stein*

More than 130 young ladies from around the Monterey Peninsula attended the Expanding Your Horizons (EYH) Conference and Career Fair on Nov. 5, part of ongoing outreach efforts by the Naval Postgraduate School (NPS) to engage young people in Science, Technology, Engineering and Mathematics (STEM) fields, and encourage them to explore STEM careers, where women are largely underrepresented.

NPS Chief of Staff, Air Force Col. Zöe Hale presented opening remarks to the girls, talking about her own career in the Air Force, and how she came to be in her current role at NPS. Hale was one of many career women on-hand at the event to encourage the participants, from grades 5-10, to start thinking about potential future careers.

"I was very pleased to have been part of the EYH Conference, helping to encourage and support these young ladies ... After all, they might one day be studying or working in labs right here at NPS," said Hale. "I think it's important that these girls are exposed to all kinds of careers and possibilities. If you can spark an interest in the STEM fields early on, and give them access to resources and support from positive role models, we can inspire them to imagine what great things they could accomplish in their own careers."

Participants were given a choice of 10 workshops that explored various topics – many related to this year's focus on marine science – and gave them a chance to engage with female workshop leaders about their chosen career fields and what their jobs entail.

One of the workshops included "The Hidden Code in Strawberries," which taught the girls how to extract DNA from various fruits, using common household products like salt and dish soap. There was a collective gasp when the end result was a string of DNA that they were able to pick up with a toothpick. Elsewhere in Glasgow, groups were parachuting stuffed animals off of balconies to learn about physics and aerodynamics.

Various worksheets and journals encouraged the girls to think about the educational requirements for several of the STEM fields, and how their interests would serve them in a given career.

"EYH provides chances for young women to meet female role models and learn firsthand about how they chose careers, civilian or military, in one of the many different STEM fields they represent and are now actively engaged in," explained Dr. Dave Nickles, NPS Director of Research Communications and Outreach, and the conference organizer. "It is one thing to read about women scientists and engineers in their text books, but quite another to engage with the real person. EYH provided these girls a chance to become aware of and then motivated to pursue courses of study that can lead to paths they may never have previously considered."

The career fair portion of the day allowed local STEM organizations and colleges to display booths – 13 in total – featuring information about potential careers in their field, as well as handouts for the girls to take home to learn more about the organizations. One booth, organized by the San Jose State University Career Counseling Center, allowed the girls to create colorful tags displaying what they hope to be when they grow up. Their career choices were diverse, from law enforcement, teaching and singing, to engineering, biology and medicine.

NPS' Graduate School of Business and Public Policy (GSBPP) also had a booth on display, featuring encouraging posters about the value of mathematics. GSBPP Dean Bill Gates was stationed at the booth, along with several female members of the department, to answer questions and encourage the girls to see mathematics as a valuable tool for a diverse range of careers.

"I think it's important for the girls to know that math is an important tool for almost anything—whether it's business or science," said Gates. "I think people tend to think of math as being more oriented toward the sciences, but certainly for everything the business school does, math is a big piece of it. So we just wanted to be part of encouraging that sort of math background."

Several of the participating booths were operated by members of the Monterey Peninsula Chamber of Commerce (MPCC), including Joanne Webster, chair of Partners in Education of the MPCC and the Human Resources Director for the Community Hospital of the Monterey Peninsula, who noted the value of these kinds of community events for young people.

"As an exhibitor at the event, I saw lots of smiles and enthusiasm," Webster noted. "The students who visited our table were engaging and inquisitive. The level of participation and interest shows a real need for these types of career development events in our area."

The teachers who accompanied the young ladies were also given an opportunity to learn something from the event, with the SeaPerch workshop held in Halligan Hall. In total, 15 teachers took part in the workshop, which trained teachers in how to build an underwater Remotely Operated Vehicle – a lesson they can ultimately implement with their students in the classroom using a curriculum heavily focused on science and engineering. The program is sponsored by the Office of Naval Research, and exposes kids to the potential careers in naval architecture and engineering.



Workshop leaders at this weekend's Expanding Your Horizons Conference engage young women in hands-on experiments outside of Glasgow Hall, Nov. 5. The conference paired more than 100 local girls from grades 5-10 with female workshop leaders and mentors to explore concepts of science, technology, engineering and mathematics.

"We were very pleased to be able to incorporate the SeaPerch workshop into the EYH conference this year. SeaPerch gives the teachers another tool to implement research driven lessons in their classroom while keeping students engaged in these subjects," explained Nickles. "It was wonderful to host the students at NPS and we need to continue to look for opportunities to

encourage girls, in particular, to think more about careers in STEM.

[Contacts](#) | [Employment](#) | [Copyright/Accessibility](#) | [Privacy Policy](#) | [FOIA](#) | [Intranet Access](#)

This is an official U.S. Navy website.

All information contained herein has been approved for release by the NPS Public Affairs Officer.
Page Last Updated: Apr 16, 2013 10:07:55 AM | [Contact the Webmaster](#)