



OPAS Initiative

Trip Report:

OSU CoE Admissions Tour

February 29, 2008

I took the Oregon State University (OSU) College of Engineering (CoE) Admissions Tour; scheduled daily for 2:00 – 3:00, these tours are led by Engineering Ambassadors who are current students and do a variety of outreach for the CoE. Typically, these tours consist of prospective students and their parents, who are given a “goodie bag” – a bright orange drawstring backpack with logo, annual report, brochure, MECOP flyers, and lip balm labeled “Prosperity Through Innovation”. No one told me if this particular lip balm is innovative in some way connected with OSU. A selection of additional brochures was available at the starting point of the tour.

This tour consisted of me and a recently hired EECS advisor, and was led by Hilary, a junior in Industrial Engineering with a very non-geeky presence. Hilary says the Engineering Ambassadors started as an Industrial Engineering program, and have been expanded to all of CoE. From Lakeridge High School in Lake Oswego, Hilary was inspired to come to OSU and major in Industrial Engineering because of an Engineering Ambassador who visited her school. She is doing a minor in Business and plans to get an MBA and work on the marketing side of engineering, but feels that her understanding of engineering processes will help her greatly. Because no prospective students were present, I quizzed Hilary about being one of very few girls, and how she felt about that. In general, she has always gotten along with guys as friends, and has generally, but not always, been comfortable in classroom situations in her engineering classes. She will be doing her first MECOP internship in the spring.

The tour itself did not encompass a lot of stops and disciplines; Hilary said she is working on adding Chemical Engineering and Industrial Engineering stops to the tour. We did see:

- **Society of Automotive Engineers lab** where a group of students, I believe a mix of grads and undergrads, were working on car teams for both a Formula-One-type and a mini-Baja vehicle. The four students were all white males, all willing to talk, although quickly designated the most articulate as a spokesperson who delayed going to class to talk to us. This work is connected to the curriculum, although the students say a great deal of it is done extracurricularly. Some student capstone projects connect to this work. OSU is doing well at these competitions; I was surprised to see this was not featured in the Annual Report. There is an awards display case outside the lab.
- **The Machine Shop and Workstations** – Mechanical engineering students were using drill presses and other equipment, so we just peeked in the door. The facility looked well-kept and busy. At the workstations, students were working in groups, and were not all white males.
- **Additional Work areas under Graf Hall** – look like an old tool shed, but contain cubicle-size areas where students work on and store projects. We saw a few students

- huddled intensely around a construct I did not identify. This is not a regular part of the tour and I could see potential safety issues with a large group – lots of stray parts and equipment, low ceiling, poor lighting, uneven floor. I bet the students love it.
- **Kelley Engineering Building** – after the complimentary cookie stop (thanks!) we heard a very little bit about the LEED gold rating and green features of the building, which is a very comfortable, welcoming, and architecturally spectacular space (at least in the lobby). We saw the reflector mural, and proceeded to the TekBots lab where during the 15 minutes we were present, three male and three female students engaged in activity. We talked to two students. We were shown three TekBot configurations: a bumpbot, an animatronic Beaver dancing to “Mr. Roboto”, and a TekPet.
 - These students communicated a great sense of ownership of the TekBots program and felt that students were very active in creating and extending the TekBots curriculum.
 - The male student started in physics, but saw EECS students doing cool things with TekBots and switched. He started in physics because of a great high school teacher.
 - The female student, a freshman, thought TekBots were “ugly” and did a summer project creating TekPets as more “girl-friendly”. She herself thinks she’s in CS because her two older brothers are, having gotten interested because of a home computer purchase. I believe one of her parents is a teacher, and there were no CS-type classes in her high school.
 - From this sample, “geeky” girls are a lot cuter and more stylishly dressed than in my day, so maybe it is time to quit even discussing that stereotype.
 - The Beaver is a work-in-progress by some students for their own amusement outside of class, discussed as an engineering project -- arm-waving and singing leave no juice for platform movement. I thought this was a valuable point.
 - The TekBot lab shows definite signs of creativity through chaos, which might be off-putting, especially to parents not familiar with engineering as a discipline or engineers as a group. Tour guides might want to be ready for that possibility and have ideas on how to counteract it.
 - **Industrial Engineering** was not part of this tour, but Hilary discussed it enthusiastically; I was not aware of how much Human Factors engineering falls under Industrial Engineering.
 - **Batcheller Hall**’s lobby has a very nice display of OSU students impacting the world for the greater good.

The CoE students appear to be a quietly welcoming, engaged, and collegial crew. I did not ask how “primed” for visitors people were in those areas we stopped in. All in all, it was a very enjoyable and informative tour. I would love to be able to follow up with some of these students, and the tour sparked several ideas for possible further investigation of student data and conversations.

*Respectfully submitted,
Jo Oshiro
February 7, 2008*