

QEP Topic Conversations: School of Engineering (04.07.09)

- A recurring theme in this conversation with the engineering faculty was the need to improve our students' communication skills, and to encourage and nurture a real world, practical approach to learning. Moreover, attention to developing communication skills is an ABET requirement.
- General observation that the overall quality of our students has declined; this is seen most notably with respect to math and science skills as well as writing skills. In support of this observation, one participant noted that various board members have acknowledged the need for better writing skills in our students. However, faculty members need time to help students develop these skills, and there are already too many demands being placed on their time. How best to encourage a love for and commitment to lifelong learning and critical thinking skills?
- With technology changing as fast as it does – i.e., there is a four-year life expectancy on “new” technology – students really need to learn how to learn.
- Perhaps these critical reading, writing, and thinking skills could be taught within the context of internships, workshops, field trips, etc. This becomes especially important given the fact that the margin for error in engineering courses is so small.
- With students often taking 18 hours in a semester, there is little to no opportunity for them to take courses like music appreciation, which would help them to become more well-rounded.
- The need for faculty development was then noted; limited resources have made this increasingly difficult. For example, training courses are cost-prohibitive, but this would help faculty members to serve their students in better and more effective ways.
- One participant observed that the main drop in the overall quality of our students can be seen in terms of “mentality”; they want to succeed without having to work hard. Thus the value of internships, wherein students could actually see the expectations of potential employers. However, these internships are often not available until a student's junior year.
- Another observation was that non-engineering-specific courses – e.g., calculus – often discourage students from continuing as engineering majors, and this before engineering faculty are given the opportunity even to see them. Thus the need to convince students of the value of all courses and disciplines, and how they all cohere.
- There was a general sense among the engineers that our students misunderstand the “system,” and need to have a better attitude when they graduate. Contrary to what we often hear, our students are NOT our customers. Students misunderstand why they are here and, as a result, the overall quality of their work has declined as has our students' energy level. Students seem increasingly preoccupied with outside factors and distractions; this can be seen in more students falling asleep in class and in their needing to have things repeated over and over again.

- In sum, the consensus among the engineering faculty is that our students are not being adequately prepared prior to enrolling at CBU, and have unrealistic expectations, both of themselves and of CBU. Students seem not to have a clear sense of why they are here and/or why have selected engineering as a major. The suggestion was also made that student recruiting be paired with department chairs, which obviously begins with Admissions.

(Participants: E. Welch, N. Jackson, A. Pourhashemi, L. Lin, J. Ventura, P. Shiue)