Assessment of Student Outcomes and Continuous Improvement for ChE 2306 Exposition of Technical Information

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In the Department of Chemical Engineering, the course assessment process includes preparation of an instructor self-evaluation after the course is taught. The self-evaluation includes the following:

- grade distribution
- expected student learning outcomes
- assessment methods, metrics, and results
- whether the outcome is met
- how and whether items of particular interest for our ABET accreditation, such as health and safety, ethics and professionalism, and particular software programs were used
- changes made to the course in that year
- suggested changes for the future

Our undergraduate committee reviews the self evaluations to ensure that we are meeting requirements for ABET accreditation. Every three years we conduct a faculty retreat where we review the undergraduate curriculum, again to ensure that our student learning outcomes are met.

The following modifications have been recently made to the course in an effort to improve it:

- Students’ oral presentations were evaluated, written individual feedback was provided, and a productive response to the feedback was used as a grading criteria for subsequent presentations (e.g., did a student improve eye contact or slow speech rate as previously instructed). This change was implemented in spring 2012 in an effort to reward students for improving their communication skills.
- Individual mock interviews of 20 min were added to the course. These were conducted by staff person Elizabeth Capps in the Engineering Opportunities Center of the Whitacre College of Engineering and were in lieu of performing short 3-5 min interviews in laboratory sessions, as done in previous years. As part of the process, students uploaded their transcript and resume on the TTU JobGrid server. This change was implemented in spring 2012 in order to make the mock interview a more realistic and substantive learning experience.