

Recent ABET trends and results

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Short summary of experience at Binghamton University

- Electrical Engineering, Computer Engineering Programs
- 3 Objectives
 - EEL– Engagement, Expertise, Learning
- 12 outcomes for each
 - Total of approximately 50 performance criteria identified to cover these 12 outcomes
 - Example
 - CoE-5.1.1 EECE315 #3 Perform analysis of circuits containing diodes and transistors
 - » Course instructors then identify one or more test questions, lab exercises, homework questions, etc. to “measure” how well students are meeting this performance criteria

Continuous Assessment

- ACTS (ABET Compliance Tracking System)
- Web-based online password protected database that instructors use each semester to give tabular data about performance of students on exercises linked to performance criteria for each course
- Also expected to enter comments about student preparation for course, and suggestions to undergraduate studies committees (USC) for curricular changes
- Does not contain any confidential information about students
- Demo---
- ACTS summaries monitored each semester by USC, and presented to faculty as a whole

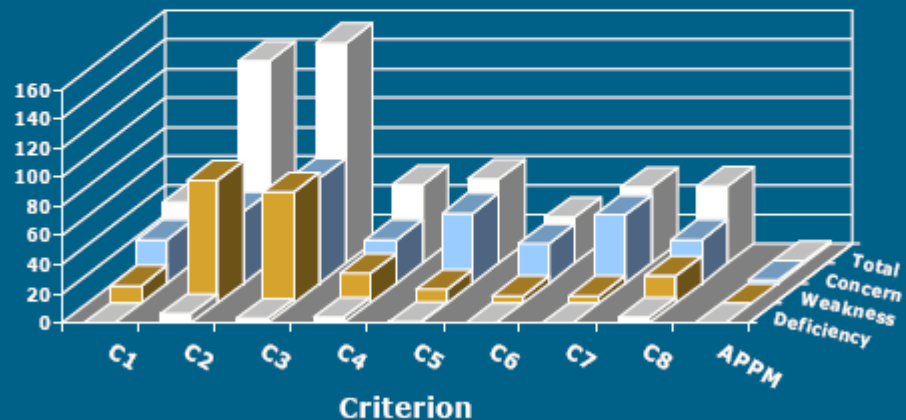
ABET visit

- EE and CoE program visited in fall of 2006
- Visitors very impressed overall especially with ACTS
- Informal comments:
 - “Don’t let ABET get in the way of making your programs better”
 - It would be “better” for program outcomes to map exactly to a-k
- Formal comments
 - Consider using employer surveys as part of the assessment of objectives

Comments from 2007 Bioengineering Visit at BU (New Program)

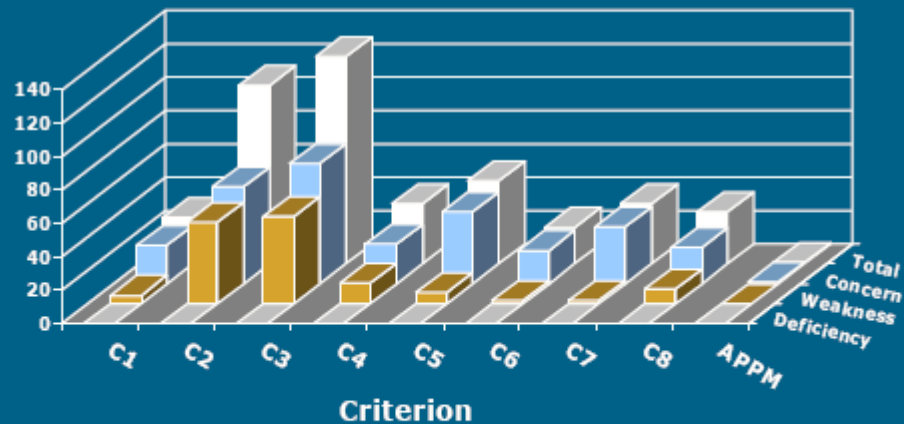
- ABET moving away from 3-5 year terminology in assessing objectives. Data on assessment of objectives dominated the overall evaluation of program. As long as objective worked out with constituency, and objectives being met, overall ABET outcome likely favorable
- Difficult to get full engineering credit for freshmen and sophomore courses
- Effective assessment of outcomes difficult. As long as effort, and clear process to improve assessment and improving curriculum to improves outcomes, evaluator was satisfied
- Major focus on design, especially as problem solving, and not so much on innovation
- Breath requirement was interpreted to with respect to overall engineering discipline

Percentage of Programs with Shortcoming Prior to Due Process (Partial Data for 2006-2007)



Data reflects evaluation of 260 programs involved in general reviews

Percentage of Programs with Shortcoming After Due Process (Partial Data for 2006-2007)



Data reflects evaluation of 260 programs involved in general reviews



Major Alerts for 2007-2008 and Beyond

- ◆ The period for reporting perceived errors in fact is now **7 days**.
- ◆ In 2008-2009, the new “Renumbered Criteria” will be applicable.
 - ◆ The “Renumbered Criteria” are rearranged and edited, but no new requirements are introduced.
 - ◆ Information on these and the appropriate Self-Study guidelines are available at www.abet.org.