

Abstract

While the specific focus of an ABET on site evaluation of student outcomes may vary year to year, design outcome assessment (ABET c) tends to always be under scrutiny. Searching for evidence of addressing realistic constraints, as well as meeting any discipline specific program requirements, can be a time-consuming process for the evaluator, particularly if the capstone sequence spans two or more semesters. Capstone courses are frequently used for final assessments of many additional student outcomes, requiring a significant amount of time may also be spent identifying the evidence used in those outcome assessments. Following adoption of a philosophy that making the evaluation task easier for the program evaluator will lead to a better evaluation, a documentation process used to select and evaluate capstone senior design projects has been developed and employed. The documentation uses a project request for proposal form which includes identification of the realistic constraints that should apply to the design. Detailed rubrics used for the evaluation of oral and written reports include criteria that can be directly mapped to the assessment of other, non-design student outcomes. At this institution, the grading process involves faculty evaluations of both the written and oral reports by faculty members that were not the project advisors; further strengthening the assessment while simultaneously mitigating differences in expectations among different project advisors. While the direct effect on the ABET evaluation cannot be directly determined, the existence of the documentation was proven useful in focusing an ABET evaluator's attention to the assessment and evaluation evidence necessary to conduct the program evaluation in a timely manner. Specific aspects of the relevant documents, the design project evaluation process, and an ABET evaluation scenario will be presented.