

Boston University Outcomes Assessment Inventory of Practice

Please assist us in building an inventory of useful approaches to assessment to share with other members of the Boston University community by describing a tool or approach that has worked for your School, College, or Program.

School/ College ENG

Program BS in Mechanical Engineering

Title of Practice Mapping Course-level outcomes to program outcomes

Purpose: (What prompted you to design this approach? What information were you seeking? How did the program intend to use results?)

This practice was developed to help degree programs quantify how course-level learning outcomes contribute to overall program-level outcomes. This mapping helps identify how and where program-level outcomes are achieved, and guides program-level assessment activities.

Implementation: (Briefly, what were the steps for putting the project into practice and what tools or resources did you use? What was the timeline?)

All courses at the undergraduate level are required to state in the course syllabus the course-level learning outcomes, and indicate the degree to which (1-5) the course outcome contributes to the overall program outcomes (an example is attached). These mappings are aggregated over the required elements of the curriculum (an example of a program level map is attached), and periodically reviewed by the program curriculum committee charged with degree program oversight to assure that program outcomes over the entire curriculum are adequately addressed.

The mapping also provides a guide for assessment planning to help target where best to obtain measures to support the attainment of program outcomes, or to indicate weaknesses and areas for improvement. Program committees also periodically ask instructors to provide evidence to support the contributions their courses make to program outcomes.

On the ENG end of semester teaching evaluations and course assessment instrument, students indicate the emphasis the course placed on each program outcome. Instructors also complete an Instructor Course Assessment form (attached) that includes a post-hoc assessment of the emphasis that was placed on each of the program outcomes. Program committees compare the student assessments, post-hoc faculty assessments and the syllabus targets for consistency. Inconsistent responses indicate areas that merit further discussion and possible course revisions.

Summary of Results:

Engineering has used the tools described as part of our overall program assessment plans for several successful ABET accreditation cycles. The course to program outcome maps guide program assessment plans, and indicate where to go to collect direct measures of student work. The comparison of course emphasis of program outcomes obtained from student course assessments, post-hoc faculty assessments and the syllabus targets for consistency has been a helpful early warning tool to identify areas and courses that need further attention.

Comments: