Definitions

While Accreditation Board for Engineering and Technology (ABET) recognizes and supports the prerogative of institutions to adopt and use the terminology of their choice, it is necessary for ABET volunteers and staff to have a consistent understanding of terminology. With that purpose in mind, the Commissions will use the following basic definitions:

**Program Educational Objectives** – Program educational objectives are broad statements that describe what graduates are expected to attain within a few years of graduation. Program educational objectives are based on the needs of the program’s constituencies.

**Student Outcomes** – Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students attain as they progress through the program.

**Assessment** – Assessment is one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process.

**Evaluation** – Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained. Evaluation results in decisions and actions regarding program improvement.

**Objectives** are intended results of instruction, curricula, programs, or activities. Example “problem solving”.

**Outcomes** are achieved results of what was learned.

Example “ability to select and apply knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies”.

**Developing Program Objectives and Outcomes**

1. Identify the mission of university, college, unit, and the program.
2. Identify objectives that meet the needs of constituents. Describe the process to develop and review program objectives periodically.
3. Identify program student outcomes. Describe process used for developing and revising outcomes. Display all courses or activities – learning objectives/outcomes in each course or co-curricular activity.
   Identify common themes or elements across the courses or activities. Relate them to the program objectives/outcomes
4. Identify methods to assess and evaluate attainment of objectives/outcomes.
   Describe the assessment process used to collect data, process frequency, level of achievement, evaluation & summary of results, and how results are documented and maintained. Use systematically the results of evaluation for continuous improvement.

**Checklist for Outcomes**

a. Are the outcomes are aligned with mission and objectives?

b. Are the outcomes clearly defined, observable, and measurable?

c. Is it possible to collect accurate and reliable data?

d. Are the outcomes can be assessed and evaluated by more than one process or method?

e. Are they written using action verbs to specify definite and observable behaviors?

f. Does it describe student rather than teacher behavior?