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# GRADUATE LEARNING OUTCOMES

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Thoughts and observations

**MARK J T SMITH**

Sr. Vice Provost for Academic Affairs and  
Dean of the Graduate School  
The University of Texas at Austin

## Some History: ABET Outcomes 1997

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems

In 1997 ABET adopted Eng Criteria 2000 (EC 2000) following a decade of development.

In 1980, ECPD was renamed the Accreditation Board for Engineering and Technology (ABET) to more accurately describe our emphasis on accreditation.

In 1936, ECPD evaluated its first engineering degree programs. Ten years later, the council began evaluating engineering technology degree

## ABET Outcomes Continued

- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) recognition of the need for and ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

~2009 Higher Learning Commission required learning outcomes assessment at the graduate program level.

Faculty were not invested.

**Lessons:**

- Be adaptive
- Listen to faculty involved in the assessment
- Be patient

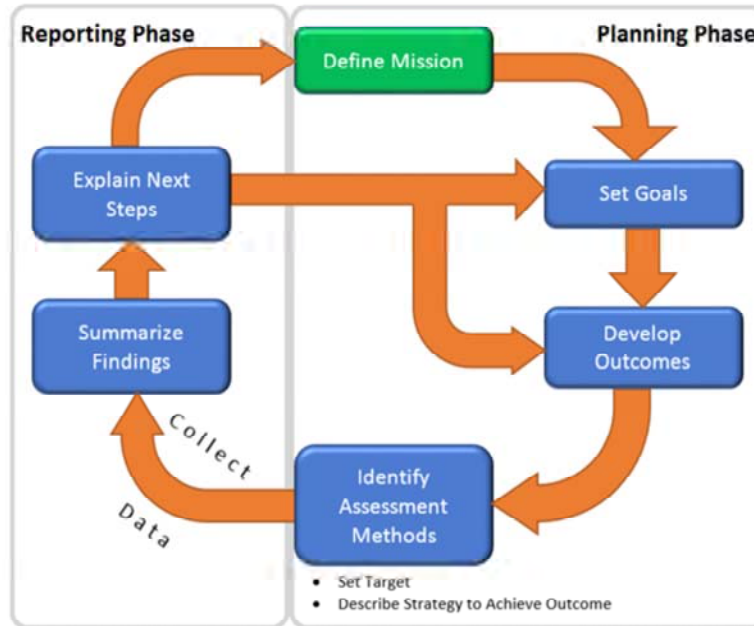


## Goals and Outcomes at UT Austin

Goals inform the development of program outcome.

Learning outcomes are defined as knowledge, skills, values, and attributes students will be able to demonstrate as a result of their studies.

# Outcomes Assessment Process at UT Austin



## Process

Programs do the following annually:

- Provide mission statement, goals and outcomes for current year
- Identify assessment method and plan to achieve goals
- Assess at least one outcome annually, using at least one direct measure
- Report on findings from previous year and how those findings are being used for improvement
- Identify at least one strong improvement action for next year

## Current Graduate Program Assessment Figures

- 171 graduate programs currently participate in UT Austin assessment process
- Those programs currently assess 594 learning outcomes (3.5 outcomes per program)



## Most Common Assessment Methods

# of programs using this method	Method
102	Written assignment / paper / essay
78	Direct observation
62	Exam, quiz, or test
48	Thesis / dissertation defense, or its equivalent
42	Project
18	Survey
20	Homework, lab report
16	Peer review
13	Internships or field experience
8	Portfolio