

## College of Engineering

# Tipping Point Progress – A Progression of Learning-Centered Experiences

March 2009

### 1. Examples of assessment feedback modify activities for continuous improvement

- Our last ABET evaluation was successful based on the changes in course curriculum resulting from department analysis of current technology and appropriate modifications to courses.
- A major part of our success was due to the Industry Action Councils in each department. The quarterly meetings in all seven departments focused faculty on change as a process to improve curriculum. Specific lists of changes made were copied and shared with the visitors.
- A broad level of assessment was conducted by the College Industry Action Council which is composed of manager level industry executives. They helped identify horizon issues in engineering that the College had not yet recognized. Their coaching in these helped the Department Chairs establish directions.

### 2. Measures taken to encourage students to take charge of their learning

- The college-wide first-year experience courses EGR 100 and 100L connect faculty with students upon their arrival to Engineering. The textbook and several manuals we supply to the students enable them to quickly identify the materials they need to be successful in Engineering.
- The faculty selected for the first year course have all undergone two full days of training based on the text we use. The faculty practice ways to engage student teams in the learning and frequently touch base to be sure their students are succeeding in critical areas.
- The Laboratory course usually follows the introductory class and gives students a chance to develop a project (e.g. the micro rose float). They are able to do things “their” way as a team which builds expirée de corps. Trial and error provides a powerful learning environment!
- Many of the upper level design courses in engineering encourage student teams to solve problems by designing circuits or systems that solve a societal problem.

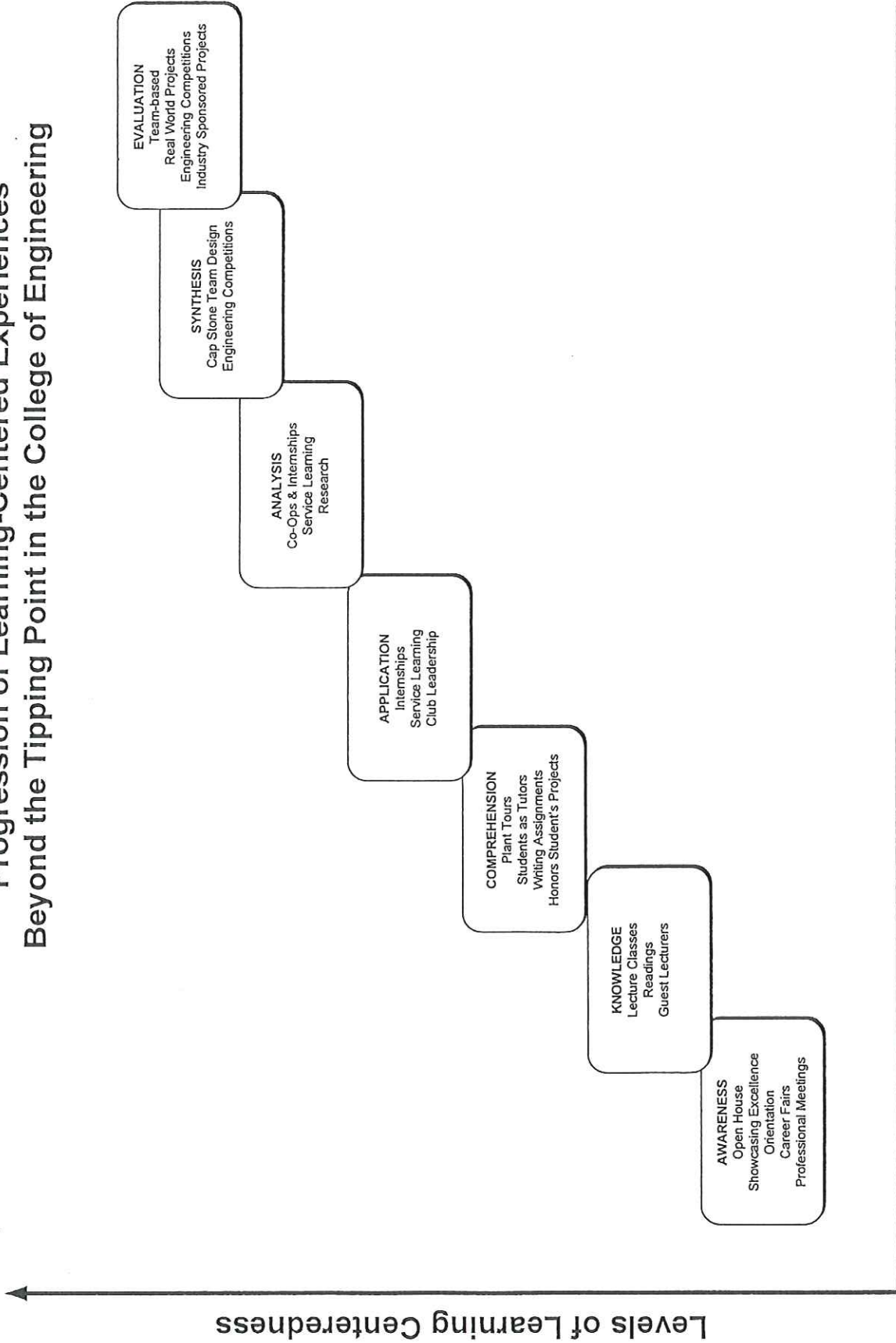
### 3. Effective methods used to measure customer satisfaction

- The College has taken advantage of surveys such as Survey Monkey to get student feedback on their experiences. The Dean and Associate Dean hold open forums and pizza dinners to assess student satisfaction several times a year. We also do this via the 40 or so student clubs in the College. Individual discussions over the course of an evening with the club leaders provide a wealth of information on things that are working well and those that need improvement.

### 4. Effective methods used to measure student learning (vs. what is taught)

- We do not have a very accurate way to assess how we students are prepared to begin their studies. We have found tremendous variations in SAT and other courses and of course High

## Progression of Learning-Centered Experiences Beyond the Tipping Point in the College of Engineering



School Grades vary all over the map. So believe a good measure is student performance in all of the various competitions we have in the College. It is not an individual barometer like the math tests they take but it does seem to provide an over view of how we are succeeding from class to class.

## Bloom's Taxonomy of Educational Objectives