



<http://www.foundationcoalition.org>

### ***From Jeff Froyd, Project Director***

Across the Foundation Coalition (FC), partner institutions have made substantial changes to their sophomore and first-year engineering curricula. Detailed information on the changes and their results can be accessed for sophomore curricula through <http://foundationcoalition.org/home/sophomore/index.html> and through <http://foundationcoalition.org/home/keycomponents/firstyearcurriculum.html> for first-year curricula. Although curricular changes are one set of stories emerging from the FC project, another important story is the study of the processes through which these changes were made. This study, which began in October 2001, has generated eight qualitative case studies of the process of curricular change. Data for each case study was acquired from interviews of approximately twenty-five individuals who were connected with the curricular-change process, as well as from reviewing relevant documents. The first major published result from the project will be a paper to be presented at the 2003 ASEE conference. The four team members—Carolyn Clark, Jeff Froyd, Prudence Merton, and Jim Richardson—are also writing a book to describe the results of the project. Twelve people from across the FC will be meeting on 23–25 July 2003 in Banff to review a preliminary draft of the book and to provide additional insights that can be incorporated into a revised version. If you are interested in additional details about the curricular-change project, please contact Carolyn Clark at [cclark@tamu.edu](mailto:cclark@tamu.edu).

## **Upcoming Events**

- Jan 20–May 10 On-line professional development for faculty: Ways of Knowing, Ways of Practice** The University of Wisconsin, with the FC, is offering facilitated weekly conversations on learning.
- Mar 16–18 Share the Future IV**, the cross-coalition conference, will be held in the Tempe Mission Palms Hotel and Conference Center, near Arizona State University. **For on-line conference registration**, go to [http://www.foundationcoalition.org/events/conferences/share\\_the\\_future/registration.html](http://www.foundationcoalition.org/events/conferences/share_the_future/registration.html).
- Apr 24–26 Best Assessment Processes V: A Working Symposium**, Rose-Hulman Institute of Technology, Terre Haute IN
- May 13–14 Freshman-year Innovations Miniconference**, Purdue University.
- Jun 22–25 American Society for Engineering Education Conference**, Nashville TN
- Jul 23–25 Meeting of FC curricular-change-processes book reviewers**, Banff, Alberta, Canada
- Nov 5–8 Frontiers in Education Conference**, Boulder CO

# Project to Collect EC 2000 Course Materials and Assessment Tools

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## Purpose

Criterion 3 Program Outcomes of EC 200x, the new accreditation criteria, includes several outcomes (e.g., communication, teaming, awareness of global and social impact) that may be characterized as **soft, open-ended, or nontraditional**. To address these outcomes, engineering faculty members are preparing assessment processes/tools and instructional resources. They often feel ill prepared to help their students address these outcomes and even less prepared to assess them, either as part of regular course-embedded classroom assessment or as part of programmatic outcome evaluation. Traditional sources of engineering assessment tools and models—test suggestions from engineering texts or examination problems borrowed and adapted from other faculty members—are not helpful in addressing the nontraditional outcomes.

Because some instructors have developed materials for their own uses, faculty members responsible for incorporating these competencies into the curricula are searching for instructional materials and assessment resources to assist their work. However, the materials are scattered across the Internet or tucked away in departmental files. To discover useful resources, the five project principals from four different universities, all partners in the NSF's Foundation Coalition (FC), undertook a systematic search to find, summarize, and publish links to materials that are being used by one or more institutions. The project will search the Web and printed materials. Firsthand surveys on information to locate instructional and assessment materials that are available to address EC 2000 a–k program-outcome competencies will be conducted. Search results will be posted on the FC Web site.

## Project Objectives

This study will attempt to

- Determine the extent to which instructional materials (as well as relevant assessment material) were publicly accessible on line and in libraries in each of the ABET a–k categories
- Identify instructional and assessment material that would be available for use by engineering educators
- Find articles and papers from which instructional or assessment materials could be readily extracted, and
- Develop a Web-searchable database of annotated references, categorizing and pointing engineering educators to appropriate and available instructional and assessment materials for “soft,” as well as traditional, a–k competencies.

## A Structured Survey to Inventory EC 2000 Instructional Materials

The study randomly selected one third of the institutions with ABET-accredited programs. To reduce the volume of material that each institution might be asked to provide, two outcomes are linked. A survey of deans and department heads will identify instructors who recently taught a course that addresses each outcome. The group will request information from these instructors about the materials that they used in teaching these courses. Responses will be collected on line, and the resulting database will be searchable from the Internet. Searches will respond to queries such as, “List all the courses in electrical engineering that have instructional material for lifelong learning.” Responses will identify all the courses (and instructors) that meet these criteria. The user can also request information about the type of material, the instructor’s perception of its effectiveness and usefulness, and the availability of the material.

## Information

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