



<http://www.foundationcoalition.org>

# Newsletter

## *From Jeff Froyd, Project Director*

During the past two years, faculty members at the University of Alabama have constructed course modules designed to address skills associated with the student outcomes listed in EC 2000 Criterion 3. Work on these modules is substantially complete, and information on these modules is available at <http://foundationcoalition.org/home/keycomponents/ec2000.html>. Now the project is expanding to get a better handle on how schools across the nation are addressing these skills. The project will examine assessment processes and instructions as well as course materials that schools are using to address these skills. Specifically, the project is examining the following skills: ethics, global and societal impact, experimental, problem solving, teams, lifelong learning, design, professional tools, communication, and contemporary issues. The five people working on the project are Russ Pimmel (Project Manager, University of Alabama), Emily Fowler (University of Massachusetts Dartmouth), Rita Caso (Texas A&M University), Pete Morley (University of Alabama), and Susan Haag (Arizona State University). Information generated by this project should be useful to engineering programs across the country. If you are interested in more information about the project, please contact one of the people working on it.

## Upcoming Events

- Nov 22** **Teaching EC 2000 Skills Workshop: Integrating Student Outcomes a–k into Engineering Courses**, South Dakota School of Mines and Technology. Contact [Connie VanBockern](mailto:Connie.VanBockern@sdsm.edu) (605.394.2631).
- Dec 12** **Two Workshops** at the South Dakota School of Mines and Technology: Developing Measurable Objectives and Outcomes for Programs and Courses and Constructing Rubrics for Open-ended Activities, presented by [Ann Kenimer](mailto:Ann.Kenimer@sdsm.edu).
- Jan 20–May 10** **On-line Professional Development for Faculty: Ways of Knowing, Ways of Practice** The University of Wisconsin, with the FC, will offer facilitated dialogue (weekly conversations) on learning for faculty members at many universities. See [http://fc1.tamu.edu/events/news/learning\\_online.html](http://fc1.tamu.edu/events/news/learning_online.html) for information.
- 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. See [http://www.foundationcoalition.org/events/conferences/share\\_the\\_future\\_iv.html](http://www.foundationcoalition.org/events/conferences/share_the_future_iv.html).



## **M. Rita Caso**

Associate Director, Texas A&M System LSAMP and  
Texas A&M University Engineering Educational Assessment Resources

describes her Foundation Coalition experience:

I was first “recruited” by Karan Watson and César Malavé to join the Texas A&M University (TAMU) campus Foundation Coalition (FC) program management team late in 1997. As the Associate Project Director and Evaluation Manager of another multi-institutional National Science Foundation educational program, the Texas A&M System Alliance for Minority Participation, I had been asked, periodically since 1995, to provide assessment consultation and supporting data for TAMU engineering academic programs. The 1997–98 invitation to join the FC team anticipated the FC’s Phase II transition to dramatically scaled-up institutionalization on the TAMU campus. It also anticipated the need for assessment and evaluation (A&E) resources and assistance with campus efforts to begin preparing engineering faculty for changes in ABET accreditation review criteria. The educational principles of constructivist-based active and cooperative learning, articulated in the FC program’s mission, were familiar and attractive to me. I was also comfortable with the program’s efforts to focus upon the behavioral evidence of student learning (outcomes) in relation to learning processes (levels of cognition, meta-cognition, learning styles), and to learning facilitation (instructional activities).

These were notions and practices that had challenged and stimulated me at the K-12 level, as a teacher, educational program designer, administrator, and educational program evaluator in New York a number of years earlier (1973–86). The FC provided the opportunity to reexamine and reapply concepts and practices that I had previously used in relation to learning, instruction, and evaluation in communication (foreign and English) and performing arts. The FC’s considerable undertakings in the area of systemic, institutional, and organizational-culture change also resonated with my experiences, working with innovative, multiagency, human services (management, A&E, and research) between 1987 and 1994. Opportunities to relearn, test, and expand my knowledge have resulted from FC-sponsored attempts to help engineering educators with those aspects of A&E with which they are least familiar: that is, with clarifying, projecting, articulating, measuring, and interpreting the links between educational goals and expected student learning.

My activities with the FC and with programs that have borrowed FC models have been broad. They continue to include (1) collaborating with faculty on the development of outcomes-assessment and process-evaluation plans for project proposals; (2) consulting on the proposal of appropriate, strategic, instructional events; (3) collaboratively identifying, adapting, or developing measurement tools and methods for outcomes and implementation assessment in courses and across programs; (4) administering assessment tools and methods on behalf of faculty; (5) creating, maintaining, and managing comprehensive longitudinal databases of institutional data and data collected with locally administered instruments; (6) analyzing assessment results and performing appropriate comparative and longitudinal studies of results; (7) regularly and repeatedly generating comprehensive, internal reports on retention, progression to upper-division, rate of graduation, rate of core engineering requirement completion, GPA at various levels of progression, etc., in the College of Engineering: in particular, engineering majors, by cohorts (first-time freshmen; transfers and upper-division in major cohorts), compared by gender and ethnicity; (8) collaboratively producing papers and studies for presentation and publication; (9) creating instructional materials for A&E faculty development workshops and facilitating workshops; (10) assisting with thesis advisement; (11) providing on-the-job-training for engineering graduate assistants in the theoretical foundations of learning and instruction and in current educational practices of engineering education, as well as in the methodologies of measurement and assessment in the behavioral sciences.