

CommunityMatters™

A Monthly Newsletter for the ABET Community

March 2008

InsideABET

PAVE Brings Revised Training and Forms, New Recruitment Materials

The Partnership to Advance Volunteer Excellence (PAVE) continues to move forward, as several more improvements in volunteer recruitment, selection, training, and performance appraisal processes have already been implemented this year. Recent developments include the following:

- ▶ The program evaluator competency model, against which these pivotal volunteers are selected and evaluated, has been revised to reflect the knowledge, skills, and attitudes that an individual needs to successfully embody as ABET expands beyond domestic accreditation.
- ▶ As ABET's member societies provide feedback about the online program evaluator application form, this tool is being improved to meet their needs. In addition, the recruitment and selection guide and other documents that help the societies during these preliminary stages are being updated to reflect these changes to the application process.
- ▶ A volunteer recruitment flyer that specifically targets professionals from industry and government is being developed.
- ▶ The pre-work that program evaluator candidates must complete has been updated to include the criteria and forms for the 2008-2009 accreditation cycle. Also, the face-to-face training materials have gone through extensive revisions based on feedback from last year's sessions.
- ▶ A plan to analyze and report the results of volunteer performance evaluations to the ABET commissions, the societies, and the individual volunteer has been proposed.

The latest information about PAVE is always available at www.abet.org/pave.shtml.

VolunteerSpotlight

Barbara Martin

In addition to representatives from the 28 member societies, the ABET Board of Directors includes five Public Members. These individuals are not affiliated with applied science, computing, engineering, or technology through either training or practice but have volunteered to act as a sounding board and provide impartial input for ABET's governing activities.

Barbara Martin, a retired Chief of the Organizational Development Bureau at Montana Department of Transportation, first became a Public Member in the fall of 2003. As a full member of the Board with voting privileges, Barbara has contributed to its deliberations and decisions over the past five years. But her duties certainly haven't been limited to participating in the Board's semi-annual meetings.

Her first assignment as a Public Member was to represent ABET on the Diversity Committee for the American Association of Engineering Societies. In this role, Barbara participated in discussions about initiatives

to promote diversity in engineering fields. In addition, she has served on an *ad hoc* task group that evaluated the Board's operations and communication practices between the Board and the ABET staff.

Recently, Barbara has been focused on the Board's fiscal responsibilities. She served on the Financial Model Task Force that helped to develop ABET's current activities-based

financial model, which the Board adopted in 2006. In addition, she was appointed to the Board's Finance Committee in 2004 and became its chair in 2006. This committee has worked with the ABET staff to implement the new financial model and recommended amendments to ABET's fiscal policies.

Barbara said that her experiences as a Public Member have been highly enriching. "It's refreshing to work with people who are dedicated to ensuring that students are well-prepared for their professions," she explained, "and it's amazing what can get done when those decision makers are focused on solving problems with their mission in mind."



LookAhead

- March 3 — "Completing the Institutional Appendix" Webinar
- March 11 — "What the Accreditation Criteria Don't Tell You" Webinar
- March 15 — Faculty Workshop on Assessing Program Outcomes, Nashville, TN
- March 15-16 — Program Evaluator Training, Portland, OR
- March 20 — "Developing Rubrics" Webinar
- March 22 — Hotel registration deadline for April 12 Faculty Workshop on Assessing Program Outcomes, Baltimore, MD
- March 29 — ABET Board of Directors Meeting, Baltimore, MD

InsideABET

Latest Best Assessment Processes X Program Details Available Online

Additional details about the program for the tenth Best Assessment Processes Symposium have been posted at www.abet.org/bap.shtml.

The symposium will take place in Atlanta, Georgia, on Friday, April 25, and Saturday, April 26. Among the activities planned are a series of 50-minute concurrent sessions, 80-minute mini-workshops, and a choice of six three-hour workshops that provide opportunities for applied science, computing, engineering, and technology educators to learn about assessment methods and how they can be used to validate and improve student learning outcomes. Individual session descriptions, biographies for some of the speakers and the discipline-specific roundtable participants, and other information are available online.

ABET Welcomes New Members to Its Industry Advisory Council

ABET's Industry Advisory Council (IAC), which was founded in 1991, is composed of approximately 15 industry and government leaders from the disciplines that ABET accredits who volunteer to offer the ABET leadership access to industrial viewpoints on issues of accreditation, technical education, and matters affecting the relevant professions. This body also provides reactions to proposed ABET programs and policies as they relate to industry and government while bringing those programs directly to the attention of leaders in industry. In addition, the IAC is charged to develop methods that stimulate the involvement of industrial firms in the work of ABET

through increased participation as Board members, members of the four accreditation commissions, program evaluators, committee members, and conferees.

The ABET community would like to welcome the following individuals to its IAC:

- ▶ **Kim Miller Dunn, CAP**
Emerson Process Management
- ▶ **Gina L. Hutchins**
United Parcel Service
- ▶ **Scott C. Petrak**
Bayer Corporate and Business Services, LLC
- ▶ **Ray Steen**
General Dynamics Armament and Technical Products

In addition, the following returning members will serve for the 2007-2008 term:

- ▶ **Michael Gwyn** (chair)
Benham Constructions, LLC
- ▶ **John K. Amdall**
Caterpillar, Inc.
- ▶ **Patrick Rivera Antony**
Terex Corporation
- ▶ **Ray Almgren**
National Instruments
- ▶ **Kenneth R. Baker**
Eli Lilly & Company (retired)
- ▶ **Dwight A. Beranek**
Michael Baker, Jr., Inc.
- ▶ **Paul "Buz" Kalafos, II**
Northrop Grumman Corporation
- ▶ **Susan M. Sinclair**
Hershey Foods Corporation

The next annual meeting of the Industry Advisory Council is scheduled for August 7-9 in Baltimore.

Nominations for 2008 President's Diversity Award Being Accepted

ABET is accepting nominations for the 2008 President's Award for Diversity. This honor is bestowed annually to recognize individuals, educational units, associations, or firms for extraordinary success in facilitating or achieving diversity and inclusivity in the technical segments of our society.

To be considered for this year's award, ABET headquarters must receive a detailed nomination by September 1, 2008. The nomination must describe the program or achievement to be recognized and detail such factors as the program or achievement's longevity, its impact on the target group and society in general, and its transportability to other persons or entities. There are no restrictions on who may submit the application, and self-nominations are encouraged.

Further details about the award are available at www.abet.org/diversity.shtml. ABET President L.S. "Skip" Fletcher will bestow the President's Award for Diversity upon the 2008 winner(s) during this year's annual Commission Summit, which will take place in Louisville, KY, on Wednesday, October 29, 2008.

In Memoriam

The ABET community is mourning the loss of long-time volunteer William E. Sayle, Ph.D., who passed away on Saturday, February 2. A past EAC commissioner and active member of IEEE, he was always dedicated to improving the quality of engineering education. Bill was a Professor Emeritus of the School of Electrical and Computer Engineering at Georgia Tech.



Bill Sayle

ABETOnline

- ▶ Register for next month's Best Assessment Processes Symposium at www.abet.org/bap.shtml.
- ▶ Try the revised PEV Training Pre-Work: www.abet.org/_TrainingCD/index.htm.
- ▶ Sign up for ABET's E-NEWS alerts at www.abet.org/sign_up.shtml.

CommunityMatters™

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Assessment101

Assessment Tips with Gloria Rogers, Ph.D.

Program Educational Objectives and Program Outcomes: Same But Different

Program educational objectives are the broad statements that describe the professional accomplishments that the program is preparing graduates to achieve. **Learning outcomes** are statements that describe what students are expected to know or be able to do when they complete the program. Objectives differ from outcomes in at least four ways: degree of specificity, role of constituents, types of measurements possible, and cycles of data collection.

Degree of specificity: Graduates of the program (objectives) go into a variety of situations: graduate school, industry, military, etc. Since there is no common environment in which program graduates demonstrate the objectives, defining the objectives narrowly is counterproductive to the assessment process. Objectives are, by their nature, broadly stated and should not be narrowly defined.

Outcomes, on the other hand, are the result of shared experiences of students. Except for some elective courses, all students experience the same curriculum. Unlike objectives, the development of outcomes into measurable performance criteria is critical to understanding whether the outcomes have been met. These performance criteria should be confirmable through evidence.

Role of constituents: Program constituents (or "stakeholders") are those who have a vested interest in the success of the program. The role of constituents in determining and evaluating objectives is essential to programs understanding their needs. Programs generally look to employers, alumni, faculty, and perhaps graduate schools when determining the competencies that graduates will need to be successful (objectives).

For learning outcomes, the faculty are the primary stakeholders is determining the outcomes that will enable students to achieve the objectives after graduation and how those outcomes will be integrated into the curriculum. That is not to say that advisory boards do not have a meaningful role in curriculum development, but ultimately it is the faculty who are responsible for the curriculum.

Types of measurements possible: Alumni are the most significant source of information about the achievement of objectives. They can indicate whether they can demonstrate the objectives in the context of their current situation. This is a self-report and, as such, is an indirect measure of their accomplishments. For graduates, this is a low-stakes assessment; they are not being asked about what they "learned" but what they are able to "do." Well-developed alumni surveys can yield valuable information about the achievement of objectives.¹ There are also other strategies that can be used to get employer/graduate school input (focus groups, surveys, advisory boards, etc.) to triangulate² the data collected from alumni.

For learning outcomes, the target group for assessment is students. Faculty are able to assess student learning through the direct examination and/or observation of student performance. Direct measures of what a student knows or can do provide data that can be used to evaluate the curricular and co-curricular strategies that have been developed to achieve the outcomes.

Cycles of data collection: Data collection for objectives (graduates) may only take place every three years, depending on the cycles that have been developed by the program and the speed with which a discipline is changing. Outcomes (students), however, should be assessed on a continuous cycle. That does NOT mean that data must be collected on every outcome every year. However, programs must develop a systematic process for data collection that smoothes the process out over time. Focusing on a limited number of outcomes each year will enable a program to have two cycles of data collection, evaluation, and improvements for every six-year accreditation cycle. Data do not need to be collected on every student for every outcome, and not all faculty will have to be involved in the data collection process in any given year.

For more information on data collection, see "When is Enough Enough?" in the January 2007 issue of *CommunityMatters* (online at www.abet.org/newsletter.shtml).

¹ See "Surveys and Questionnaires: Do They Measure Up?" in the January 2008 issue of *CommunityMatters* (online at www.abet.org/newsletter.shtml).

² *Triangulation* is the use of multiple assessment methods for the purpose of comparison from multiple perspectives. This process strengthens the reliability of the findings.

YourCorner

Board of Directors

Time to start getting to work on those award applications! Nominations for the 2008 Linton E. Grinter Distinguished Service Award and ABET Fellow Awards are now being accepted. The award nomination forms are available on the ABET website at www.abet.org/awards.shtml. The deadline for submission is Saturday, May 31.

Commissioners

If you are a new commissioner or have been reappointed for the 2008-2009 accreditation cycle, be on the lookout for a letter welcoming you to your respective commission for the upcoming year. This important communication will provide you with details about your responsibilities, the upcoming meeting in July, specifications for the portrait that will run in the *2009 Commission Directory*, and much more.

Institutions

If your program was visited in the fall of 2007 and you have not received your draft statement yet, hang on! The statements are still being processed and should be on their way shortly.

Member Societies

Don't forget that appointments and renominations for the ABET Board of Directors are due to ABET headquarters on Friday, March 21, 2008.

Also, keep in mind that the ABET Board recently approved a new policy regarding conflict of interest forms. Whenever your society's accreditation committee meets, either in person or via conference call, all participants *must* complete the ABET Conflict of Interest and Confidentiality Compliance Form, and it must be returned to Stephanie Brown via mail or fax at (410) 843-7186.

Program Evaluators

Have you seen the PEV Training Pre-Work that new volunteer candidates will complete as part of their training? Visit www.abet.org/_TrainingCD/index.htm to see what your future colleagues are learning about ABET and/or to refresh your own basic knowledge about the accreditation process.

Member Societies

ABET is a federation of 28 professional and technical societies representing the fields of applied science, computing, engineering, and technology:

American Academy of Environmental Engineers	Health Physics Society
American Congress on Surveying and Mapping	IEEE, Inc.
American Industrial Hygiene Association	Institute of Industrial Engineers, Inc.
American Institute of Aeronautics and Astronautics, Inc.	ISA
American Institute of Chemical Engineers	Materials Research Society
American Nuclear Society	National Council of Examiners for Engineering and Surveying
American Society of Agricultural and Biological Engineers	National Institute of Ceramic Engineers
American Society of Civil Engineers	National Society of Professional Engineers
American Society for Engineering Education	SAE International
American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.	Society of Manufacturing Engineers
American Society of Safety Engineers	Society for Mining, Metallurgy, and Exploration, Inc.
ASME	Society of Naval Architects and Marine Engineers
Biomedical Engineering Society	Society of Petroleum Engineers
CSAB, Inc.	The Minerals, Metals, and Materials Society



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