

Barbara Bogue
Associate Professor of Engineering Science and Mechanics and
Women in Engineering, The Pennsylvania State University

M.Sc., University of Southampton (UK)



Barbara Bogue is the PI for the SWE AWE (Assessing Women and Men in Engineering) Project and co-director of the AWE Project. In that role she has developed nationally implemented assessment instruments for university outreach activities, classroom climate and pre-college programming and capacity building tools for people who develop and implement educational outreach (all available on AWEonline.org). Bogue provides equity reviews for curricula and other outreach activities for national organizations including Project Lead the Way, ASME and IEEE as an expert for the National Academy of Engineering EEES (Engineering Equity Extension Service).

An associate professor of Engineering Science and Mechanics and Women in Engineering and Women in Engineering at Penn State, Bogue directed the award-winning Penn State Women in Engineering Program from 1996 to 2004. The author of numerous publications, Bogue has developed and presented workshops on assessment, evaluation and faculty development for the Women in Engineering ProActive Network (WEPAN), the American Society of Engineering Educators, the Society of Women Engineers, The Big Ten CIC Faculty Development, National Girls Collaborative Project (webcast), among others. She has received major grants from foundations, corporations and the National Science Foundation related to women in engineering and engineering education and has received several national awards, including the Betty Vetter Award for Research and the White House Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM).

Selected Publications

Bogue, B., Marra, R.M. (2007) "Addressing Gender in Complex Problem Solving". In *Learning to Solve Complex Scientific Problems*. D. Jonassen, ed. Lawrence Erlbaum Associates, Publishers.

Bogue, B., Marra, R.M. (January, 2007) "Did it *really* work? Assessing the Impact of Outreach Programs." SWE Magazine.

Marra, R., Bogue, B., Rodgers, K., Shen, D. (2007). Self-efficacy of women engineering students – Three years of data at U.S. institutions. In proceedings of American Society for Engineering Education, 22 – 24 June, Honolulu, Hawaii.

Marra, R., Bogue, B., Shen, D., Rodgers, K. (2007). Those who leave – Assessing why students leave engineering. In proceedings of American Society for Engineering Education, 22 – 24 June, Honolulu, Hawaii.

Bogue, B. (2005) "Assessment Driven Change: How Systemic Evaluation Can Lead to More Productive Outreach". Paper presented at the annual meeting of the American Society for Engineering Education Annual Conference and Exposition Copyright, 12 -15 June, Portland, OR.

Synergistic Activities

Bogue, B., Shanahan, E., Marra, R. "GSE/COM: Increasing Assessment Capacity in Engineering Outreach (SWE AWE)." (NSF GSE-COM 0120642).

Bogue, B., Marra, R. "Developing Exportable Assessment Instruments and Models for Women In

Engineering Programs.” Project based on NSF-GSE 0734072 grant to develop national assessment models. (2001-Current).

Bogue, B., Karimushan, S., Marra, R. ADAPT (AWE Database for Activity and Participant Tracking).

Bogue, B. Penn State Women in Engineering Program founding director (for re-institution of program) developed integrated program to recruit and attract girls and women into engineering. (1996-2004)
Received US Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring.