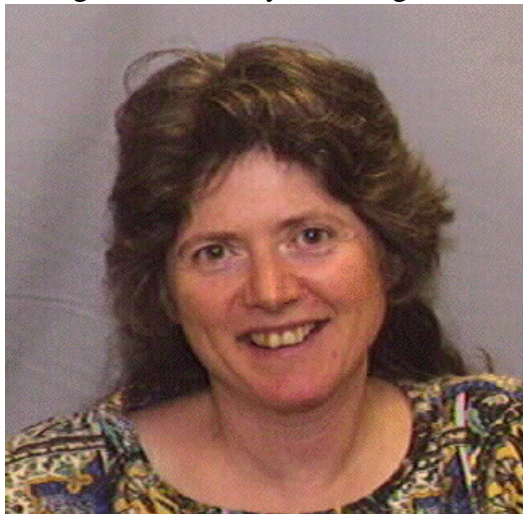


In 1991 the Mathematical Association of America instituted Awards for Distinguished College or University Teaching of Mathematics in order to honor college or university teachers who have been widely recognized as extraordinarily successful, and whose teaching effectiveness has been shown to have had influence beyond their own institutions.

Citation

Dr. Bonnie Gold

The New Jersey Section of the Mathematical Association of America is pleased to present its 2006 sectional award for Distinguished College or University Teaching of Mathematics to Dr. Bonnie Gold.



Dr. Gold is a dedicated classroom teacher who is known less for her polish as a lecturer than for her concern that *every* student in her class who is willing to work should be able to succeed, and her determination to push her students to learn as much mathematics, and understand it as deeply, as possible. The lines of students outside her door waiting to talk with her so impressed one of her chemistry colleagues at Wabash College that he came over to take a picture.

Beyond the tremendous influence she has on her own students, Dr. Gold has made remarkable contributions in other areas, such as course development, mentoring young faculty, expanding mathematics faculty's awareness of alternative teaching methods, and trying to make assessments in undergraduate mathematics both humane and effective.

Dr Gold has a long record of course development efforts. This is typical of her approach: when she sees that someone is getting less than optimal instruction in mathematics, she looks for a way to remedy the situation. When Monmouth's mathematics majors needed an experiential education course to meet the university's newly developed requirement, she worked with Dr. Thomas Smith to develop a course in mathematical modeling to give them a taste of using mathematics to solve real-world problems. Dr. Gold does the course development in consultation with the "partner" discipline when the course has been for non-majors. For instance, Dr. Gold developed MA 103, Foundations of Elementary Mathematics, to ensure that our future elementary school teachers would develop a more sophisticated understanding of the mathematics they were going to teach, and gain some confidence in their mathematical ability as well. This course was adopted as the required one for elementary education majors, and has just been expanded to two courses. She has also been working on developing courses for middle-school mathematics teachers who don't have mathematics certification. Over all she has developed seven new courses and has revised several existing courses since 1998. To enable students to be more active learners, she developed, as chair, several computer classrooms where students can easily move from paper-and-pencil activities to computer visualizations to small-group discussion to listening to lecture without leaving their seats.

Dr. Gold received her A.B. from University of Rochester in 1968, her M.A. from Princeton in 1970, and her Ph.D. from Cornell in 1976. She was an Instructor at Douglass College of Rutgers University from 1977-1978, and taught at Wabash College from 1978 to 1998. She came to Monmouth University in 1998 as

department chair, and has remained there since then, stepping down as chair in 2004.

While at Wabash College, Dr. Gold began her involvement with the Mathematical Association of America. Her service on the Committee on the Teaching of Undergraduate Mathematics, in particular, her work writing part of the section on instructional techniques in the *Source Book for College Mathematics Teaching*, led her to an interest in finding and sharing new ways to enable students to understand mathematics. She became editor of the Innovative Teaching Exchange, first in *UME Trends*, and, when that ended, on MAA Online. With others in the GLCA-ACM Colleges, she worked on laboratory projects for calculus. Then, after spending considerable time, while department chair at Wabash, floundering around developing its assessment program, she decided that other mathematics departments under pressure to develop such programs would benefit from the MAA publishing a resource book. So, with Dr. Sandra Keith and Dr. William Marion, she edited *Assessment Practices in Undergraduate Mathematics*. As has always happened when she has gotten involved in a project, this led to benefits for her own teaching: she learned about classroom assessment techniques, ways to both help students learn better, and to find out what students have learned and what they haven't before they fail the test. She has continued her involvement in assessment as part of the SAUM (Supporting Assessment in Undergraduate Mathematics) project, helping conduct three multi-year workshops, visiting MAA sections to give briefer assessment workshops at section meetings, offering (with Dr. William Marion) mini-courses on assessment, and helping edit a new set of case studies, just published by the MAA.

Interested in improving not only her own teaching, but in helping others to grow as teachers as well, she has been involved in a variety of mentoring activities. When one of the new faculty members at Wabash was not accepted for the national Project NExT, she immediately began developing a section version, Project NExT-IN, for those who were not able to participate in the national project. After the first two series of NExT-IN workshops, she moved to New Jersey, and even before she attended her first section meeting here,

leaders of the New Jersey section approached her about developing a New Jersey section version of NExT. The participants in the second set of NJ-NExT workshops finished their official sessions at the fall, 2005 New Jersey section meeting.

Dr. Biyue (Betty) Liu of the Mathematics Department, Monmouth University, nominated Dr. Gold for this Distinguished Teaching Award.

Response from Professor Gold

I would certainly not be who I am, nor the recipient of such an award, had I not been the recipient of much good teaching and mentoring when I was younger. Two faculty members at the University of Rochester have influenced my work enormously: Stanley Tennenbaum (who passed away last year), from whom I learned to listen carefully and think seriously about what I heard and said, and that ideas matter and that concern for students matters; and Sanford Segal, who has been a friend and support since I was an undergraduate and who first recommended me for appointment to an MAA committee. Later, James Leitzel and Martha Siegel were mentors within the MAA who encouraged me and to whom I turned whenever I felt I might not understand the ramifications of what I was thinking of doing. There are, of course, many other colleagues, at Wabash, Monmouth, and in the MAA, from whom I have learned a lot.

The most important thing I learned about teaching is that it isn't about teaching: it's about student learning. I learned this the hard way: the first time I taught a course in Real Analysis, I had a wonderful time, rediscovering theorems I had forgotten in response to student questions, making connections, exploring the beauty of the subject (which I had not appreciated as a student). But the students in my class got little out of it: they had no idea how to develop the crystal-clear proofs I was presenting, and, having not worked and struggled with the concepts, they didn't appreciate the connections I was so enthusiastic about. This experience led me to investigate the Moore method and other active learning approaches, and the range of approaches I now use.

RECIPIENTS OF MAA-NJ DISTINGUISHED TEACHING AWARD

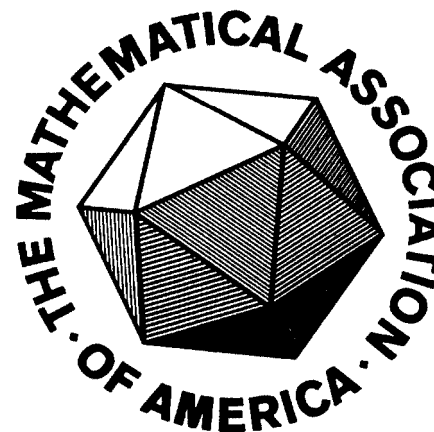
Sr. M. Stephanie Sloyan, Georgian Court College	1992
Eileen Polani, St. Peter's College	1993
Richard Bronson, Fairleigh Dickinson University	1994
Siegfred Haenisch, The College of New Jersey	1995
Andrew Demetropoulos, Montclair State University	1996
Roger Pinkham, Stevens Institute of Technology	1997
Virginia Lee, Brookdale Community College	1998
Amy Cohen, Rutgers University-New Brunswick	1999
Janet H. Caldwell, Rowan University	2000
Evan Maletsky, Montclair State University	2002
Stephen J. Greenfield, Rutgers University-New Brunswick	2003
Arthur Schwartz, Mercer County Community College	2004
Bonnie Gold, Monmouth University	2006

MEMBERS OF THE SELECTION COMMITTEE

Janet H. Caldwell, Rowan University
Amy Cohen (chair), Rutgers University
Roger Pinkham, Stevens Institute of Technology
Arthur Schwartz, Mercer county Community College
Kenneth Wolff, Montclair State University

MATHEMATICAL ASSOCIATION OF AMERICA

NEW JERSEY SECTION



**Award for Distinguished College or
University Teaching of Mathematics**

Spring Meeting

**Saturday, April 8, 2006
Georgian Court University
Lakewood, New Jersey**