The Mathematical Association of America
New Jersey Section

Award for Distinguished College or University Teaching of Mathematics

Spring Meeting
Saturday, April 10, 1999
The College of New Jersey
Ewing, New Jersey

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. Amy Cohen

The New Jersey Section of the Mathematical Association of America is pleased to present its 1999 sectional award for Distinguished College or University Teaching of Mathematics to Dr. Amy Cohen of Rutgers University - New Brunswick.

Dr. Amy Cohen received her A.B. from Harvard University in 1964 and her Ph.D. from the University of California, Berkeley in 1970. Her mathematical research has focused on the theory of nonlinear partial differential equations with particular emphasis on the Korteweg-de Vries equation. She comes from a family of mathematicians: her father Leon W. Cohen was in the Department of Mathematics at the University of Maryland and her late husband Larry Corwin was another Rutgers mathematician.

In 1972, Dr. Cohen joined the faculty of Rutgers University's Department of Mathematics, where she has been a strong advocate for effective mathematics instruction. She is a committed,

enthusiastic, demanding classroom teacher and a careful advisor on the continuing evolution of the mathematics curriculum. She brought to Rutgers an adaptation of Uri Treisman's highly successful "active learning" techniques for calculus courses. Called Project EXCEL, she developed an intensive workshop-based calculus course beginning in 1989. Establishing this course was a substantial undertaking. As well as convincing her department to offer it, she obtained the extra funding required for the course, wrote many of the initial workshop problems, recruited faculty members and teaching assistants to teach the course and taught one of the two lecture sections of the course during the first year.

The success of Project EXCEL subsequently led her to transfer the pedagogy developed there to other courses, including advanced calculus and abstract algebra. Her efforts were recognized with a special award from Rutgers Faculty of Arts and Sciences for Innovation and Creativity in Undergraduate Education in 1991. The experiences in Project EXCEL received national exposure through presentations at meetings of Mathematicians and Educational Reform (MER) and Joint Mathematics Meetings. In 1995, her reports were published in the book *Changing Cultures: Education and Research Mathematicians* (edited by Naomi Fisher).

In addition to this record of educational innovation, Dr. Cohen's record of educational accomplishment has many other facets. As a member of the Department's Undergraduate Committee and former Vice-Chair for the Undergraduate Program in Mathematics (1986-88), her advice is sought on all matters related to the undergraduate program. She has been active in teacher education and helped plan the curriculum for candidates for certification as high school mathematics teachers. She also served as Dean of University College, a unit devoted to serving adult part-time students in baccalaureate programs (1988-94).

Dr. Cohen currently serves in the Advisory Committee of MER Network and is a faculty consultant for Project NEXT of the MAA.

Response from Professor Cohen

I am deeply grateful that the MAA and its Sections maintain this award program to recognize mathematics faculty for their interest and efforts in undergraduate teaching. I accept this award on behalf of all my hard-working mathematical colleagues in the colleges and universities of New Jersey. Conscientious teaching is generally within the power of each of us. But effective teaching can occur only with the cooperation of students. Whether they come in motivated and prepared, whether they have the time and self-discipline to study in groups and alone -- these are issues over which we have only partial control. Ben Franklin said that ``experience is a hard school, but some will learn in no other''. I am grateful for my students for what they have taught me in that hard school. I thank you for this honor. I will try to be worthy of it.