Keith Weber Receives The Annie and John Selden Prize for Research in Undergraduate Mathematics Education from Mathematical Association of America

In January 2005, the Annie and John Selden Prize for Research in Undergraduate Mathematics Education was established by the MAA Board of Governors to honor a researcher who has established a significant record of published research in undergraduate mathematics education and who has been in the field at most ten years.

It is a pleasure for the Mathematical Association of America to recognize Keith Weber with this award.

Dr. Weber is Associate Professor of Mathematics Education at Rutgers University. He received his Ph.D. in 2001 from Carnegie Mellon University. His first published paper in collegiate mathematics education was in 2001: “Student difficulties in constructing proofs: The need for strategic knowledge,” published in Educational Studies in Mathematics, a highly regarded international journal.

Dr. Weber has 25 publications in refereed journals and 5 articles “in press,” most of which are in the leading journals in mathematics education. A recent article (2008) in the Journal for Research in Mathematics Education, ranked by many as the most prestigious journal in the field, is particularly impressive. This article, “How mathematicians determine if an argument is a valid proof,” offers a novel perspective on the work of mathematicians and important implications for teachers of undergraduate mathematics.

Dr. Weber is the recipient of a National Science Foundation CAREER award and has another National Science Foundation grant shared with colleagues at Rutgers. He received the 2006 Early Career Publication Award, awarded by the Special Interest Group in Mathematics Education of the American Educational Research Association. In 2009, he received the Rutgers Board of Trustees Research Fellowship for Scholarly Excellence. Dr. Weber has made impressive contributions to the Research in Undergraduate Mathematics Education Special Interest Group of the Mathematical Association of America; he has served as an Executive Board Member and Program Chair for this SIGMAA.

His selection for this award was based on his strong research program and his work in implementing this program. His work is theoretically based product oriented, and pedagogically sound. He has a deep understanding of mathematical content that is evident in all his writing. He demonstrates how research in mathematics education can be cumulative: based on previous works and aimed at bridging existing gaps.
Mathematics Education in 2009. Dr. Weber’s current research is on students’ reading and comprehension of proofs.