The N.J. Partnership for Excellence in Middle School Mathematics (NJ PEMSM) is in its 4th year of a 5-year grant from the MSP Program of the NSF. Short-term goals of the project include (1) helping mid-career middle school math teachers to deepen their understanding of the mathematics of grades 6-8 and of some crucial aspects of mathematical pedagogy, (2) improving the capacity of special education teachers to support math teachers, (3) engaging senior mathematicians in work with in-service teachers, (4) enhancing the mathematical education of prospective teachers, and (5) research on teacher learning. Longer term goals of the project include engaging school children more effectively in studying and learning mathematics, and enhancing the capacity of N.J. residents to use mathematical thinking on the job and in civic life. The NJ partnership consists of 15 public school districts, and the Department of Mathematics, the Graduate School of Education, and several other units at Rutgers University. This presentation will discuss the structure of NJ PEMSM, progress toward its goals, and plans to sustain its offerings once the grant is over. (Received September 20, 2012)