Through an NSF Robert Noyce Master Teacher Fellowship grant, faculty members at the University of Louisiana at Lafayette are working with a group of in-service mathematics teachers from three local school districts. The goal is the development of a cadre of master teachers who will become leaders in the middle schools in their districts. These future master teachers have completed over half of the coursework required for newly created Louisiana Elementary Mathematics Specialist Certification and are on track to become the first in the state to obtain this certification. This presentation focuses on the accomplishments and challenges of the first year of this five-year program. (Received September 16, 2014)