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**Mary Ellen O'Leary\*** (oleary@math.sc.edu), Department of Mathematics, University of South Carolina, Columbia, SC 29208. *The Mathematical Preparation of Teachers for the Middle Grades.*

In recent years, an increased emphasis on effective programs for students in the middle grades has led many states to implement specific teacher certification requirements for this level. In this paper, we will consider the response of teacher preparation programs. In particular, we will examine coursework being developed by Departments of Mathematics for the preparation of late elementary/middle grades teachers. This will include undergraduate courses aimed primarily at pre-service teachers as well as graduate courses designed to help in-service teachers meet the new standards. The importance of the NCTM Standards and the CUPM guidelines in designing coursework will be discussed.

The state of South Carolina has recently enacted middle school certification, with a requirement that beginning teachers demonstrate proficiency (primarily through Praxis exams) in two content areas - for example, in mathematics and science. The challenge to math departments across the state will be used as a particular example. Various funded initiatives will be described, including project MET at the University of South Carolina, which addresses the issue of recruiting and preparing mathematics research faculty to work with prospective teachers. (Received August 22, 2005)