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**Tatiana Shubin\*** ([shubin@math.sjsu.edu](mailto:shubin@math.sjsu.edu)), Department of Mathematics, San Jose State University, San Jose, CA 95192-0103. *Math Courses Designed to Foster Mathematical Thinking and to Prepare K-12 Teachers for Classroom Exigencies.*

There is no question that mathematical content of teachers' preparation matters. Study after study has conclusively shown that broader and deeper mathematical background of K-12 teachers translates into better education for their students. Yet the mathematical courses that help future teachers to acquire the level of proficiency they need should be specialized. They must emphasize the universality of mathematical language, the interconnectedness of mathematics, and the underlying structure of elementary mathematics taught in school. They should also provide teachers with a healthy attitude towards problem solving and whet their appetite for deep and challenging problems. In this talk, mathematical courses that could achieve these goals will be proposed and discussed. (Received June 10, 2005)