

Meeting: 1003, Atlanta, Georgia, MAA CP G1, MAA Session on Drawing on Our Students' Thinking to Improve the Mathematical Education of Teachers

1003-G1-382 **Kenneth J. Bernard*** (kbernard@vsu.edu), Department of Math & CS, P.O. Box 9068,
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When prospective secondary mathematics teachers take their required mathematics courses; other majors, such as pure mathematics, computer science, engineering or science, are generally in those courses. The only courses they may take without other majors may be the secondary mathematics methods courses or, perhaps, the capstone course. These courses specifically lead to discussions about common conceptions and/or misconceptions concerning topics in the high school curriculum. Discussions could include, among others, development of rationale for basic concepts, identification of error patterns and mathematical connections. Prospective teachers become very receptive to these areas. A related concern is how to engage other faculty to look for similar common conceptions and/or misconceptions in other mathematics courses required for these students. (Received September 13, 2004)