

Meeting: 1003, Atlanta, Georgia, MAA CP C1, MAA Session on Courses Below Calculus: A New Focus, I

1003-C1-978 **Pat Shure*** (pshure@umich.edu), Math Dept, 525 E. University, Ann Arbor, MI 48109. *Stressing the Underlying Structure When Teaching College Algebra.*

Students taking college algebra courses have often seen the topics before. Commonly they find it easier to ignore the underlying structure and focus instead on acquiring a surface knowledge of manipulations. Unfortunately, the fluency they seek often eludes them precisely because they fail to recognize both the underlying algebraic form and the purpose of different forms. The presentation will be centered on analyzing a set of problems to see how the solutions foster symbolic understanding and why this type of problem might prove valuable in teaching. We will examine what algebra these students really need to continue on to precalculus and calculus, and how an understanding of symbolic representation can improve learning. (Received October 01, 2004)