

1035-H1-1030 **Sheryl Stump*** (ssump@bsu.edu), 305 S. Normandy Dr, Muncie, IN , and **Kay Roebuck** (kroebuck@bsu.edu), 4601 N. Gishler Dr, Muncie, IN. *Algebra for Elementary and Middle School Teachers: An Inquiry Approach*.

Algebra for Elementary and Middle School Teachers: An Inquiry Approach is designed for use in college classrooms. The content, addressing recommendations from various professional organizations (CBMS, 2001; MAA, 1991; NCTM, 1991), is organized into four units. The Problem Solving unit presents nonstandard problems with an emphasis on writing equations that use variables to describe mathematical relationships. The Patterns and Sequences unit provides investigations of repeating patterns, growing patterns, and sequences that focus on constant aspects of mathematical situations and patterns of change. The Functions and Modeling unit includes explorations of a variety of dependence relationships in mathematical and real-life situations and connections among multiple representations. The Generalization and Proof unit provides opportunities to examine the structure of mathematics with an emphasis on conjecture and proof. Explorations in the form of problems and investigations are the critical essence of this book. They provide opportunities for teachers to engage in mathematical concepts before discussing formal terminology and techniques. These activities follow a three-phased format—Explore, Discuss, and Reflect. The manuscript has been reviewed and is ready for publication. (Received September 19, 2007)