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Harel Barzilai* (harel@barzilai.org), Department of Mathematics & Computer Science, Salisbury State University, 1101 Camden Avenue, Salisbury, MD 21801. *Fostering Active Engagement and Learning in College Algebra courses through Writing, Collaborative Learning, and Modeling.*

National instructional reforms emphasize active learning, engagement, and participation by students. The challenges these ideals present become more acute in College Algebra due to students with insufficient basic skills, poor study habits, fear/dislike of math, and misconceptions about mathematics. We argue, however, that ideas from the national reform movements can serve as ways to address precisely these deficiencies. Writing assignments, collaborative learning (groupwork and classroom discussions) and real-world modeling are presented as ways of fostering student introspection, student-faculty dialogue, more positive attitudes, and an understanding of mathematics as consisting of more than rote formulas. Emphasis is placed on the use of active communication by students as a path towards deepened understanding as they struggle to express their ideas in a comprehensible and organized fashion. Curricular materials shared include assignments incorporating communication skills with modeling, games, and real-world applications such as breast cancer screenings and helping endangered species. Excerpts from student evaluations are included in concluding remarks on the challenges and rewards of attempting to properly implement this model of College Algebra. (Received September 11, 2000)