1014-O1-95 Dale J. Winter* (amanitav@umich.edu), Department of Mathematics, University of Michigan, Ann Arbor, MI 48109, and Matthew E. DeLong (mtdelong@taylor.edu), Department of Mathematics, Taylor University, Upland, IN 46989. Effects of Elaborate Contextual Information in Group Homework.

Several researchers (e.g. de Lange, 1987; Freudenthal, 1983) have described the benefits of organizing mathematical activities around rich, realistic contexts. One function assigned to these contexts is to stimulate motivation by generating situational interest. Interest has been related positively to measures of recall, among other cognitive outcomes (Schiefele, 1991; Tobias, 1994). This study investigated the effects of rich, realistic contexts on students' recall of information (mathematical and non-mathematical) from homework problems. Two formats of compulsory homework problems were administered to students in a second semester calculus course. One format included little or no contextual information while the other incorporated elaborate contexts with large amounts of realistic and accurate background information. A sample (n = 316) of students from the course completed surveys at the end of the semester rating recall of mathematical and non-mathematical ("background") information from the homework. In this talk we will report on the differences observed in recall of both background information and mathematical content when the two formats of homework problems are compared. (Received July 21, 2005)