1023-Q1-1130 **Kirk Weller*** (`wellerk@umflint.edu`), Department of Mathematics, University of Michigan Flint, Flint, MI 48502, and **Joanne Snow** (`jsnow@saintmarys.edu`), Department of Mathematics, Saint Mary's College, Notre Dame, IN 46556. *Using a Laboratory Approach in the Teaching of Real Analysis.*

In response to our students' difficulties in learning the basic elements of real analysis, we developed a series of labs. The labs engage students in learning to formulate definitions, make connections between different concepts, or complete a sequence of guided tasks. Each lab has three components: making observations and generating ideas from experience with examples; thinking critically about the examples; and answering questions for reflection. The labs use Maple, involve use of cooperative learning groups, and require submission of written reports. Observed benefits of the labs include improved mathematical writing, deeper understanding of fundamental concepts, increased enjoyment of the class, and more active class discussion. The labs have changed our teaching practice, as we place more emphasis on applying theorems in the context of examples. In this session, we demonstrate how one of the labs can be used in class and discuss its potential benefits. (Received September 26, 2006)