This talk will describe a system for using weekly laboratory-type sessions in mathematics courses to stimulate student discussion and attention to writing (in short segments) of mathematics. Each session takes one class period and involves teams of three to five students in working on learning new material (usually) or on follow-up development of topics (occasionally) in structured exercises, with a required written statement of results and methods — very much like the laboratory model in physical sciences.

Some structure is imposed on the teams to maximize participation by all members; the work of the team is graded on participation by all members and on completion of the work and the write-up. the team’s written work is read and graded and returned to all team members at the next class — comments on presentation are included.

The talk will include a discussion of the preparation, use, and grading of the exercises, some examples, and some assessment of the effectiveness. (Received September 26, 2005)