The ability of science undergraduate students to capably communicate course content and their understanding of scientific phenomena through writing has long been considered a problem. Effective methods for improving student writing skills are often fragmented and undertaken on a course-by-course basis rather than as a coordinated approach. I will describe the implementation of a departmental effort to enhance and evaluate chemistry student writing in several introductory and upper-year laboratory courses. This has involved introducing extensive writing-focused aspects to course assignments and reports through the faculty-wide Writing Instruction & Training (WIT) program and more recently the departmental Chemistry Teaching Fellowship Program (CTFP). The initiative has impacted over 1500 students during an eight-year period. Feedback has been exceptionally positive from undergraduates as well as graduate students.