Implementation

We assign MyPsychLab’s writing assessments for each chapter in our textbook, specifically, the critical thinking questions provided at the end of each chapter. We keep the stakes low by calling it “writing practice,” and students earn full credit for essays by scoring 70 percent or better. Student essays are automatically graded, and students get their grades immediately accompanied by feedback on both content and mechanics. We are impressed by how well Writing Space’s auto-grading software works. The program uses Latent Semantic Analysis to identify the meaningful patterns underlying responses to each question. These responses were trained on 400+ human-scored student essays of varying quality. Writing Space’s auto-feedback simulates human grading quite well. A high-scoring essay is typically a well-constructed four- or five-paragraph essay in which the student responds to the question fully and straightforwardly using an active voice, with correct grammar, punctuation, vocabulary and syntax. What most impresses me is that the program is able to identify when students fail to understand concepts or when they provide correct information without actually answering the question being asked of them.

At the beginning of the semester I thought Writing Space might be a solution to the challenge of providing writing in a large-enrollment class, but I must admit I was nervous about the whole process. By the middle of the semester, however, I was quite impressed. And by the end of the semester I’d become very enthusiastic about the program.

“I think the essays have been very helpful understanding the main concepts. Also, I feel like the scores reflect the amount of work/time I put in the writings.”

—Student
"I really liked the automatic grading on the essays because you knew that you were getting graded fairly and everyone was getting graded the same way."

—Student

Benefits
We have seen the benefits of computer-grading vs. human grading. For example, a well-trained computer has no bias; everyone is graded against the same rubric and held to the same standards. Graduate students who graded the student essays in the past would sometimes miss things that the computer now catches. With Writing Space’s fast and consistent automatic grading and instructional feedback, students are given more opportunities to practice writing and, as a result, become better writers. In addition, Writing Space automatically checks the essays for plagiarism.

Assessments
- 31 percent Exams (three)
- 20 percent Comprehensive Final Exam
- 18 percent Weekly assignments and group work
- 17 percent Chapter quizzes (Moodle; using test bank questions)
- 13 percent Writing Space (16 writing assignments, 4 points each)
- 1 percent Supplemental activities (four)

Results and data
While writing has always been a required part of this course, we are now confident that students are getting the unbiased and consistent feedback they need in order to become better writers and critical thinkers. In addition to the significant benefits described above, we see promising indications that we are on the right track in terms of improving student learning; we hypothesize that this is a result of Writing Space since no other aspect of the course has changed. Average final exam scores were higher this semester compared to previous semesters without Writing Space (figure 1), and we expect this trend to continue as we learn and incorporate more “best practices” for using the program.

The student experience
Students report they find writing essays to be a more effective way of understanding and synthesizing the material than chapter quizzes alone. Also, they feel Writing Space’s automatic grading gives them fair and consistent feedback on their writing.

Conclusion
Writing Space has given us a solution to a problem we’ve been struggling with for years: “How can we provide meaningful writing instruction in a class with a huge enrollment and limited resources?” Finding this solution is important because writing is important to our students; it is how critical thinking develops. Writing Space has enabled us to assign and consistently grade weekly writing assignments. We implemented Writing Space for the first time last semester and saw a small but significant increase in exam scores. We will continue tracking student performance to see if the gains in exam scores are sustained in future semesters.

“These assignments make you think. They make you dig into the chapter, and most importantly, they help you to really understand psychology.”

—Student

Figure 1. Exam 2-3 and Final Exam Scores with vs. without Writing Space (Fall 2012-Fall 2013)