

Why require writing in your classes?

- The prevalence of “teaching-to-the-test” in high schools means that students have often not developed strong writing skills.
- Nearly all careers require solid writing skills.
- Students recognize the value of writing skills and *want* to be better writers.

- Writing assignments can be designed to promote student learning of course objectives.
- Writing requires active thinking and leads to more permanent and deeper understanding.
- In other words, writing can enhance active learning inside and outside of the classroom.

Writing *in* the classroom

- Short in-class (and even un-graded) writing exercises can promote active learning.
- Examples:
 - Ask all students to bring a written summary of the main idea of the reading to class. Ask 1 or 2 students to read their summaries.

- In the middle or at the end of class, give students 2-3 minutes to write a paragraph summarizing a key concept, idea, mathematical operation, or steps to solving a problem. Ask students to read their responses.
- Pause during lecture and ask students to re-write what you just said in their own words in their notes.

- Written summaries can be collected for attendance or participation. They need not be graded.
- In large lecture classes, have 1 or 2 students read their summaries aloud.
- Whether read aloud or collected, the summaries give you immediate feedback on how well students understand course material.

Writing on exams

- Exams that require writing use different thinking than multiple choice exams.
- Even identification or short answer questions can test deep learning more effectively than multiple choice questions.

- Short answer and essay questions must be designed with care to ensure they test the intended material.
- Exams should be graded anonymously to prevent the “halo effect.”
- Grading rubric should be clear before grading begins.

- If TAs grade exams, it is best to have TAs grade one part of the exam for all students (rather than just their students). Ideally, TAs would grade together in the same room at the same time.
- If TAs grade exams, a clear grading rubric is even more important.

- When handing back exams, show students “model” answers in class.
 - Students can see difference between their answer and one that received full credit.
 - This helps students understand expectations for future exams.
 - It reduces the number of students that “lobby” for better grades.

Assigning Papers

- Paper assignments need not be long (>10 pages) “term” papers.
- For undergraduates, term papers should be divided into manageable parts.
 - Research question; thesis; outline.

- Multiple short (3-4 page) papers can be more effective (especially in lower division or core classes).
 - These give students opportunities to improve writing (unlike one long paper).
 - Early assignments can be weighted less than later assignments.
 - Students also get “practice” writing.

- Paper assignments are better when they ask focused/precise questions.
 - This helps students formulate a thesis statement.
 - A well-written question will suggest a “natural” organization for student answers.
- “Why” or “How” questions are best.

- Avoid paper assignments with mere “topics.”
 - Students may have trouble developing clear arguments.
- Asking focused questions can avoid potential problems with [internet] plagiarism.

- Questions should be changed regularly to avoid plagiarism.
- Describe differences between “A,” “B,” “C,” “D,” and failing papers when making assignment.

- When designed with care, paper assignments can enhance student learning and understanding of course material.
- Paper assignments can be “puzzles” that lead to critical-thinking and deeper learning.
- Writing assignments can be used not to teach students how to write but to teach course content.

Grading Papers

- Papers should be graded anonymously to avoid the “halo effect.”
 - Students appreciate fairness.
 - Reduces requests for re-grades.

- Skim a handful of papers first to get sense of range of quality (and to make sure assignment was clear).
- Use a paper evaluation form to reduce comments on papers.
 - Hand out a copy of the form with the assignment.
 - Example:

- Write comment “sandwiches.”
 - Put critiques between positive notes (if possible).
 - Reduces student despair.
- Put short comments throughout paper, rather than just at end.

- Comments can be phrased as questions.
 - “Could you revise this ¶ to be clearer?”
 - “How does this relate to your thesis?”
 - “Could you elaborate this point?”
 - “How so?”
- Questions get students thinking about their writing.

- Do not copy edit papers.
 - Mark mistakes first time only.
 - Reduces student despair.
 - Saves time.
 - Tell students to look for repeated errors.
- Weight assignments early in the semester less than later assignments.

- To avoid grade inflation, grade first assignments more stringently.
 - Student writing will improve during semester, and you want to allow room to reward improvement.
 - Shoot for lower average on first assignments. Reward improvements with better grades.
 - Final class average can still be your ideal.

- Show students an ideal “A” paper when you hand back the paper.
 - Remove student’s identity.
 - Discuss why that paper is an “A” paper.
 - Reduces requests for re-grades.
 - Improves future student papers because students understand expectations and can imitate style of “A” papers.

Attitudinal obstacles to encouraging writing

- Don't see relevance of writing skills for science disciplines.
- Don't understand how writing can improve learning.
- Think someone else should teaching writing.

Institutional obstacles to writing at GA Tech

- No Institute Writing Center.
- Peer institutions have writing centers
 - CalTech: <http://writing.caltech.edu/>
 - MIT: <http://web.mit.edu/writing/>
 - VA Tech: <http://www.english.vt.edu/writing/center.htm>
 - Stanford: <http://swc.stanford.edu/>
 - Berkeley: <http://slc.berkeley.edu/writing/tutoring.html>
 - UofIL: <http://www.english.uiuc.edu/cws/wworkshop/>
 - UofTexas: <http://uwc.fac.utexas.edu/>
 - UNC: <http://www.unc.edu/depts/wcweb/>

- Lack of writing center discourages faculty from assigning writing.
 - No campus resource to send students for guidance.
 - Increases faculty advising; reduces incentives to use writing assignments.
- Large class sizes and time for teaching at a research university.
- Lack of graduate students with ability to help grade writing assignments in our disciplines.

References and resources

- GT Center for the Enhancement of Teaching and Learning
<http://www.cetl.gatech.edu/>
- UNC Center for Teaching and Learning <http://ctl.unc.edu/index.html>
- Teaching @ Berkeley <http://teaching.berkeley.edu/>
 - On writing: <http://teaching.berkeley.edu/encouraging.pdf>