

Writing to Learn

Critical Thinking Activities

For Any Classroom

Writing Across the Curriculum
Center for the Study and Teaching of Writing
The Ohio State University

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*This booklet is an adaptation of a handout created by Andrea Lunsford, Pam Antos, and Scott Miller around 1992.

What is Writing to Learn?

We all can think of times when we struggled with writer's block while working on a major project--when a perspective we hadn't considered challenged our data or argument, or when an idea that we thought was clear sounded less convincing when we put it into words. If we stuck with it, we often found that we could write our way out of the problem, and our thinking became clearer. Sometimes, even, our struggles with writing ended up radically changing the way we think. The challenge our writing posed helped us to clarify difficult concepts, to see apparently stale ideas in new ways. This kind of writing is powerful--if sometimes a bit messy--as we work to shape our thinking.

"Writing to Learn" is what Writing Across the Curriculum advocates call writing's capacity not only to communicate thoughts and ideas, but also to help structure our thinking. By giving students opportunities to work out their ideas in writing, they have a chance to struggle through difficult concepts and practice crucial critical thinking skills. Writing to learn activities are usually short, low stakes (often ungraded) assignments or activities in class. The most basic activity is asking students to write for five minutes on a discussion question to begin class. These kinds of activities can be a boon to those of us who have been frustrated by awkward silences during class discussion. If we ask them to write first, we know they have something to say; they've had a chance to develop their ideas without having to speak off the cuff. Furthermore, we don't have to spend time grading their responses, since their writing immediately applies to class activities or to upcoming assignments.

The key to using Writing to Learn activities successfully is to tie the activities into the central topical and methodological issues

of your course. This way time spent writing is not wasted. It's not something "extra" that you have to shoehorn into an already busy schedule; rather, it can help hone the skills and critical thinking students need for future writing in the discipline.

How can I use this book?

Writing to learn activities can be used in three ways:

- **As a way of helping students practice crucial habits of thought you'd like them to master.** This booklet offers several adaptable ideas for helping your students to practice the critical thinking skills that are specific to your course or discipline
- **As a way of "scaffolding" larger assignments.** Many of the ideas in this booklet are useful in helping you divide up major projects or assignments into smaller, more manageable parts. Structuring large assignments this way allows students to approach the process of research and writing more effectively, and gives you a chance to guide students through their work, providing them with resources and advice along the way.
- **As a way of assessing student learning.** Writing to learn activities can give you a chance to get rich, immediate feedback on students' learning. With this in mind, you should always do something with the writing students produce for you by making sure it receives some sort of (formal/informal, graded/ungraded) response from either you or their peers.

How do I incorporate these activities into my classes without overwhelming myself with more grading and commenting on student work?

These activities can be framed so that you do not have to spend much time giving extensive feedback to students. If you want to give a grade, you can have them count toward participation credit, or in a simple two- or three- point scale like pass/fail or ✓, ✓+, and ✓-. They could also be part of a group activity where the students work with each other as peers to give each other feedback. Rubrics laying out your specific expectations for an assignment and how they relate to your course's overall learning goals can save time and provide valuable feedback.

If these activities don't count for a grade, how do I motivate students to see them as something more than busy work?

Students will generally be motivated to find an activity valuable if it has a clearly articulated purpose that connects to their own and your goals for the course. If, for example, a writing activity clearly leads to a discussion later in a class period, or connects to an upcoming assignment, students are more likely to find it valuable. Additionally, if they can see how an activity connects to their personal interests, or allows them to reflect on their learning, they will be more likely to 'buy in' to the activity (for more on this, see Ambrose et al., *How Learning Works*, in 'Other Recommended Resources' below).

A lot of these activities seem like they would work fine in smaller classes, but I teach lecture courses with upwards of 50, 100 or even 300 students. How would these work in those contexts?

There is absolutely a difference between using these activities in a small seminar of 15-25 students and using them in much larger courses. Nevertheless, you can adapt many of these

activities to make them effective in larger courses, especially if you use them as low-stakes activities: not necessarily grading them; using them as jumping off points for in-class group work; giving limited or no direct feedback. You might, for example, randomly pick a few responses to discuss in class, or, after skimming through a few, reference a couple of representative pieces in class: e.g. "Looking over a few of your online posts last night, I noticed that several of you noted that...", or "Janet, you made an excellent point in our response..." If students see you are engaged with their work, even in a less direct way, they will be more likely to find the writing activities valuable.

What support is there for me as I implement these in my classes?

The Writing Across the Curriculum program at the Center for the Study and Teaching of Writing can help you implement these activities in your classes. We can sit down with you as you are designing your syllabus, a series of assignments, or simply just planning a class session, to help you make the most of your students writing and time in class. We have taught writing extensively ourselves, and we have talked with many instructors like you from all throughout the university about what has and has not worked in their teaching.

At the end of this booklet, we've provided a list of resources from which we drew many of these ideas. You'll see each of these resources referenced according to superscripted numbers. But these are just a sample of the kinds of activities and assignments you can use. We've listed a number of additional resources at the end of this booklet, including a wiki we have developed that pulls together many more approaches to using writing in your teaching. Furthermore, we've provided our contact information on the back of this booklet, in case you are interested in speaking one on one about how WAC can help address needs specific to your course.

WRITING TO LEARN ACTIVITIES

Anticipants⁷

Give students the beginning or the end of a report, paragraph, story, case study, or problem, and then give them fifteen minutes to write what follows or leads up to the statement. This brief exercise, which can be used for in-class work, helps students do the kind of goal-directed predicting and planning common to skilled writers.

Class Minutes¹

Assign a class scribe for the day who will be responsible for summarizing class discussion and activities during the first five minutes of the next day's class. Or have two people serve as independent scribes; invite the class to discuss the differences in the minutes they produce. This activity can help students to think more carefully about what you are trying to achieve in a class session, and can give you a clearer sense of how they are responding to your teaching.

Empty Outlines⁵

Provide students with a partially completed outline of a lecture, a discussion, an article, or a book chapter. Have students work together to complete it at an appropriate time in class (at the beginning, if the outline pertains to a reading they did for class, or at the end of it pertains to the day's lecture or discussion). Consider using a variety of formats: linear outlines, concept maps, and even matrices that can be partially filled out. Providing students with some structure for what they're learning helps them better organize knowledge--a skill at which experts are adept!

Another way of organizing an outline for students to fill out is with the categories "content, form, and function." Ask students to provide brief notes answering the "what," "how," and "why"

questions about a particular piece of writing. This can help them recognize how different authors respond to very specific rhetorical contexts.

Concept Metaphors¹

Ask students to think through a concept by creating a metaphor, building a model, or creating a definition for it. For example, in a dentistry class, students may create a metaphor for "teeth" (teeth are crystal castles), build a conceptual model for the structures of caries, and write a definition of "decay." Students may use the metaphor to build a theory about their experience. Working through building a metaphor can help students make connections between what they already know and new concepts they're grappling with--as well as test the limits of their knowledge when they see how far a metaphor can go: where it works and where it doesn't work.

Study Questions¹

Ask students to write their own study questions, "exam" questions, or word problems on the material being covered and to work together to answer them. Before they compose these questions, provide some examples of effective and ineffective questions for your course material. This kind of activity can allow students to come to understand how problems in your field are framed and the kind of thinking that goes into solving them, rather than simply trying to get the right answer to a problem.

Interruptions¹

Ask students to stop and write when you feel they may need a moment to focus attention, assimilate information, or articulate a question. Use these short writings to refocus class discussion.

Notebook or Journal Writing¹

Journals allow instructors to regularly assign a variety of short, informal writing activities that students can collect over a term and reflect on. The activities can include open “free-writing” activities where students can write about whatever interests or confuses them about the course, or reflect on the process of their research and composing. Assignments can also be more directed, asking students to respond to specific questions about course concepts and readings.

Journals are highly adaptable and versatile: you can have students write in them regularly or sporadically, in class and out of class. You can collect the notebooks periodically to respond to them. As with all the Writing-to-Learn activities, don't feel that you must “grade” these notebooks, but do respond naturally to what students say and suggest ways they can be even more insightful. Alternatively, don't make comments at all—just collect them and note briefly how complete the entries are. Journals allow you and your students to regularly explore central concepts, practice skills, and reflect on learning goals. Rather than being one off activities, tasks in a journal can become a comprehensive collection of what students have learned over a quarter.

Reading Logs¹

Asking students to write about the course readings can help them understand the reading assignments better and demonstrate to them that critical reading is an active process. Use the following “Survey, Question, Read, Recite, Review, Write” method for improving reading habits, and, after explaining the method to your students, ask them to practice it in their reading journals. As they survey the reading assignment, they should note large headings, the first sentence of each paragraph, and the first and last paragraphs of the assigned text.

At this point, they should record in their notebooks answers to the following questions:

- What is the main subject or topic of this text?
- What do I expect the major points to be in discussing this topic?
- What questions do I have that I hope will be answered by this text?

Students then read “with a purpose,” i.e., to answer their questions and to see whether hypotheses are confirmed or denied—which is what good readers do. After they have read the text and attempted to answer the questions, they should review the material, noting whether the major points and key questions they identified turned out to be accurate. Finally, they should write in their notebooks answers to the questions they posed.

Double-Entry Journals⁵

This activity combines the previous two. Ask students to take notes on course readings or course content in one column. Then, have them reflect on what they found most interesting, intriguing, confusing, or applicable in the other column. Or, give them a specific topic for reflection to be written about in this second column. This can be done in or out of class. This activity helps students connect what they are reading with what they care about, and it gives you a sense of how students are understanding the applicability of what they are reading.

Writing Logs⁴

Ask students to keep and submit at regular intervals a writing process log in which they address the following questions. Students have an opportunity to think more carefully about their thinking and composing process, and you can be more engaged in guiding them through that process:

- How did you arrive at your topic?
- When did you first begin to think about the assignment?
- How long did it take to complete the assignment (including time spent learning and revising)?
- What kind of planning or investigating did you do?
- Where did you write the first draft? Subsequent drafts? (Briefly describe the settings)
- Who is the audience for this piece of writing?
- What is your relationship to the audience?
- What do you see as the major strengths of your essay?
- What do you see as the weaknesses of the essay?
- What would you like to change about your process of writing or about this piece of writing?

Observation Reports⁹

Ask students to do a bit of field research, taking careful field notes on whatever they choose to observe: a physical object, person or animal, process, event, or phenomenon. Students can then compare these notes and question one another about what may be missing. Novices to a discipline can sometimes be confused about what details of a phenomenon they should be focusing on, and, furthermore, how they should be interpreting what they observe.

Problem Generating¹

Have students generate problems--that is, central, contestable questions or issues in the field--from the reading or class discussions. Generating problems is often harder than solving them, and so this activity forces students to articulate key issues or questions. One way to do this might be to have math or physics students take a formula or theorem and create a scenario or word problem which would require using the formula. In a history class, students might write journal entries that consist simply of lists of questions from a reading that they would pose to the author of the piece or offer up for class discussion.

Documented Problem Solutions⁵

Ask students to justify in writing each of the steps they take to solve a problem. Having students explain why they proceeded as they did helps them focus on understanding the underlying principles that can apply to other problems, rather than on getting the "right answer." This activity is particularly helpful for quantitative reasoning skills.

Reading Process Reflection¹

Have students articulate places where they got stuck while reading and how they solved their dilemmas, whether their solutions emerged from other readings or while working on home-work assignments. This strategy can also be effective in pinpointing the source of writer's block; when students feel stuck, leaving the primary task and writing a journal entry about where they think the problems come from can stimulate fresh thinking.

Letters⁶

Have students correspond with each other about questions or concerns they have with course readings. For example, a student having trouble understanding the intricacies of photosynthesis might find that his or her correspondent understands the concepts and is able to explain them. This activity works especially well in large lecture courses, where students often don't have the chance to ask all of their questions during class. It also promotes student collegiality and fosters a sense of shared inquiry. If possible, you should collect these letters and read them, responding if you wish but not grading them based on correctness. Knowing you will read the letters prompts students to take them more seriously; reading them also gives you a better sense of which concepts that students are having difficulty understanding. Alternatively, you could have students use an online discussion forum to write and respond to these letters.

Response or "Position" Papers¹

Have students write a short (1-5 pp.) response paper to an assigned reading, a film, or an issue that comes up in discussion. These response papers are most effective if the class itself is the audience. The main objective of the assignment is not to "perform"--i.e., to prove a thesis statement about the reading--but rather to formulate a response to a work and share it with the class. Not surprisingly, you will find that students who write such responses are more prepared for discussion and more engaged with the material. The way you use the papers in class can be informal or formal, e.g., you might have students trade papers and write responses back to each other. These kinds of writing assignments can help students understand both how to articulate the ideas they are engaging with for the first time, as well as learn how scholars in your field enter into a dialogue with other scholars.

Scenarios¹

Create a scenario that requires students to take on a particular role in a situation. This gives students a specific audience, which forces them to consider carefully the rhetorical situation and make relevant choices. It also reduces the tendency for students to write only to a teacher. Here are some examples to spark your thinking:

History: You are in the United States in 1944. You have a brother on the front lines in France. Write him a five-page letter to tell him what's going on in the U.S. Remember that your brother will want to hear about both local and national politics, as well as more domestic social and familial issues.

Modern Art: You are an art critic for the *Columbus Dispatch*. Visit the Columbus Museum of Art's newest special exhibit and write a review. You may wish to examine past issues of the *Dispatch* to see the most commonly used formats and critical conventions.

Invented Dialogues⁵

Select controversial issues or personalities that you cover in your course. Have students write a dialogue between two voices representing different perspectives, where each character attempts to persuade the other. Consider having your students work in pairs, each taking responsibility for the words of one "character." You might even ask students to act out their dialogues in class!

This activity helps students clarify arguments, identify appropriate evidence, and respond to counterarguments--essential scholarly skills!

Interview-Based Research⁹

Having students perform interviews and report on them is one way to make assignments a bit less workaday: students can't just make one pass through the library and say they've completed their research. Talking to people is an invigorating, frustrating, and rewarding experience that can breathe life into what might otherwise seem like a dreary assignment. Like the assignments above, interviews can be integrated with other assignments.

Interviews can of course be used to develop information for the content of a traditional assignment. But there are other uses for interviews as well. One possibility is to have students interview professionals in their fields, in order to gain a wider, professional viewpoint on their future careers: a business student can interview an accountant or a technical writer; a chemistry student could interview a chemist working in an analytical development laboratory for a local pharmaceutical company.

Annotated Bibliographies⁹

Annotated bibliographies are lists of published (or manuscript) works and focused summaries thereof. Composing them helps teach several skills: how to sort through research and select appropriate citations; how to summarize and paraphrase, especially for particular, focused purposes; and how to present summarized material. Keep in mind, however, that not all students will have done annotations before and may need explicit instruction in how to do the tasks mentioned above.

Annotated bibliographies provide students an intensive opportunity to become acquainted with the literature in a particular field or on a certain topic. They can help students work toward a larger project that requires understanding of

secondary sources, or they can function as individual assignments. As with the critiques, it can be valuable to share copies of them with the entire class, especially if the course is mostly composed of majors who will be taking more courses in the area.

Writing Definitions⁹

Students often claim to lack knowledge of or attitudes towards the topics they study. One way to illustrate that they bring knowledge and attitudes to their studies is to ask them to write on a concept before it is discussed in class. The point is to get them to see connections (that's why you don't want them to write directly on the topic), to circle around, always broadening their perspectives based on what they already know and/or think. For example, if you are reading a feminist article by a female author who is lamenting that her work, because of its feminine subject matter, is discounted by the long established patriarchal publishing world, you might ask students to write about the word authenticity. What is authentic? After asking several students to read their definitions, you then bring the discussion around to the search for a writer's authentic voice (the unique angle of vision that informs a work) and the societal standards that have confined and perhaps even silenced those voices. If the discussion is on love, you might ask them to write about vulnerability.

Collaborative Revision¹

Ask students to work together revising a document that has already been written. This is a useful activity for working on focus, organization, support, and use of jargon. You might have them rewrite something for a different purpose or audience. You have the option of having them sit down together from the start or work individually on the document beforehand and then pool their suggested changes.

Idea Exchange⁶

Have students write a short summary or copy a sentence/short passage from a text across the top of a sheet of paper, and divide the sheet below in half vertically. Student #1 responds to the passage in the left-hand column; students then exchange papers with the second student responding to Student #1's comments with her own in the right-hand column. They may want to exchange papers several times until they have exhausted their ideas on the subject.

Condensing an Essay

Have students write a two or three-page essay on a key course concept, process, or application. You might want to assign different groups different topics, possibly according to last names (e.g., A-E, F-J, K-O, etc.). The day they bring their essays to class, have them condense the three-page essay into a one-page essay, an act that underscores the importance of writing concisely and precisely. Then have the students in each group read each others' one-page essays and write a group paper that combines the best of everyone's ideas but does not exceed one page. You can collect these and quickly scan over them to gauge students' level of understanding.

In the next class, project these group papers onto a screen and let the class comment on their effectiveness, both in terms of the writing and the content. This activity gives students practice in revision, synthesis, and peer review and reinforces key course concepts.

Assignment Paraphrase¹⁰

Ask students to write a 3-4 sentence paraphrase of the assignment. Several students can read them aloud, and the class can discuss the degree to which it reflects the work they've been asked to perform. This helps ensure that students understand course writing assignments.

Assignment Cover Sheet¹⁰

On the day students turn in a paper, have them write for 5-10 minutes, reflecting on the paper. What problems and concerns did they have? What insights did they attain? Ask them to pose 1-2 specific questions for the grader to respond to, and have them attach this reflection to the essay they submit. Cover sheets can give you a good sense of the kinds of problems students had and make responding easier and more focused.

Counter-arguments¹

If an argument has been raised in class or the reading, or more than one theory has been advanced, stop for 5 minutes and allow students to write down all the counter-arguments or evidence, or present the case for accepting one theory over another. Identifying multiple sides of an argument helps students develop critical thinking skills by enabling them to identify strengths and weaknesses in arguments.

Response to the Response¹⁰

After handing back a graded assignment, ask students to respond for 5 minutes after reading the teacher's comments. Ask them to identify one strength and one area for improvement that is evident from the comments. This will encourage students to look at and consider the instructor's comments.

The Believing and Doubting Game⁸

First espoused by Peter Elbow, this writing activity simply calls for students to complete *two* brief, informal writing responses: first, in support of an idea, concept, methodology, thesis; second, in opposition to it. As students complete this writing activity based on a course reading or controversy in the field, they become more adept at understanding the complexity of issues and arguments.

Speed Dating a Thesis Statement

For this activity, have students bring in a draft of their proposed thesis typed on the top of an otherwise blank page. After a short introduction about what you expect from their thesis statements, post one or two questions on the board for other students to answer about their colleagues' statements. Begin swapping (the easiest way is to collect them all, hand them out in a different order, and then just facilitate their rotation; this way you get to check up on their comments and help direct them if necessary). Students should only keep each draft for about five minutes. This quick activity will help students collaboratively help each other with a central critical thinking and writing skill.

What Counts as a Fact?¹

Select two or more treatments of the same issue, problem, or research. For example, you might bring in an article on a new diet drug from USA Today, The Wall Street Journal, and the Journal of Dietetics. Ask students to write about what constitutes proof or facts in each article and explain why the articles draw on different kinds of evidence, as well as the amount of evidence that supports stated conclusions.

Alternatively, ask students to look at a range of publications within a discipline--trade journals, press releases, scientific reports, first-person narratives, and so on. Have them ask the same kinds of questions about evidence and the range of choices writers make as they develop and support arguments in your field. While students think that facts need to be taken at face value, expert scholars test any claim to tests and questions that are particular to a discipline. This activity can help students understand what underlies reliable claims in your course.

Passing Notes in Class⁶

This activity offers an informal writing opportunity for students to identify, interrogate, and complicate ideas they do and do not understand about the content of the course. At the beginning of class, ask every student to tear out a piece of notebook paper and write a note to another student in the class inquiring about some aspect of the course about which they are unclear. Run class as normal but allow students to pass these notes back and forth to each other as class continues. (Warn them that you will collect them at the end of the day so they must be on topic).

Near the end of the period, ask them what issues came up as they were writing and if anyone was able to respond to their questions satisfactorily. As a group, you may be able to resolve some of their concerns. Alternatively, read over the notes later during your prep time so that you can integrate their concerns into later course content.

Background Knowledge Probe⁵

At the beginning of a course or a specific unit, ask students to write down everything they know about a specific topic that you'll be covering. For example, ask students to write down what they know about gravity, the Civil War, evolution, or feminism. Or, ask them a specific question such as "What were the reasons for forming the European Union?" This exercise helps prepare students to connect (and revise) prior knowledge relative to what they learn in your class. Their responses also provide feedback regarding the students' range of preparation.

Consider using this exercise as both a pre- and post-test. At the end of each class period ask students to add to or revise what they wrote down initially, allowing them to organize and reflect on their own learning. Use this information to check for understanding.

Opening¹

At the beginning of class, pose a question related to a topic you have planned for the class to discuss. For example, ask the class to write on the following question: "How would you evaluate the evidence used to support argument X?" or "How would you describe the tone of essay X?" The five-minute writing will serve as a warm-up and provoke students to do some thinking, even if they only discover that they don't quite know what "tone" means. You can develop the discussion from there.

Closing¹

At the end of class, ask a question that can provide a starting place for the next class. For example, "What did you learn today about theatrical elements in Act III of Hamlet?" or "What questions were left unanswered for you in our discussion of the kinds of tissue in the human body?" This activity gives students an opportunity to think back over what you discussed that day, and can give you a way of assessing what they learned.

Mind Mapping⁴

In the early stages of any writing assignment, or just after students have learned a new unit of content, ask them to create a visual map or other representation of the ideas involved in that unit, or of their knowledge of the content from that unit. Though all writing is in some way about being able to visualize and externalize ideas and their relationships to one another, the process of actually mapping concepts, rather than trying to connect them through fully written sentences, can be a very useful way of demonstrating the use of writing to connecting ideas, and of helping students to clarify their understanding or to realize their arguments. Students might also enjoy using a digital tool for mind mapping available for free online at <http://www.mindmeister.com/>

Resources

This booklet is an adaptation of a handout created by Andrea Lunsford, Pam Antos, and Scott Miller around 1992. The resources below, while not necessarily the original sources for the activities, offer accounts of these activities, as well as many others.

1. Bean, John C. *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. 2nd Edition San Francisco: Jossey-Bass Publishers, 2011.
2. Emig, Janet. "Writing as a Mode of Learning." *Landmark Essays on Writing Across the Curriculum*. Eds. Charles Bazerman and David Russell. Anaheim: Hermagoras Press, 1994. 89-96.
3. Flash, Pamela. "Teaching with Writing." University of Minnesota Center for Writing. <<http://writing.umn.edu/tww/assignments/informal.html>>.
4. Murray, Donald. *Write to Learn*. New York: Holt, Reinhart, and Winston, 1984.
5. Angelo, Thomas A. and K. Patricia Cross. *Classroom Assessment Techniques*, 2nd ed. San Francisco: Jossey-Bass, 1993.
6. Young, Art. *Teaching Writing Across the Curriculum*. 4th Edition. Upper Saddle River, NJ: Prentice-Hall, 2006. <http://wac.colostate.edu/books/young_teaching/>
7. Smith, Frank. *Reading*. New York, NY: Teachers College Press, 1978.
8. Elbow, Peter. *Writing without Teachers*. New York, NY: Oxford University Press, 1973.
9. Young, Richard. *Toward a Taxonomy of "Small" Genres and Writing Techniques for Writing Across the Curriculum*. Fort Collins, Colorado: The WAC Clearinghouse, 2011. <<http://wac.colostate.edu/books/young/>>
10. Walvoord, Barbara and Virginia Johnson Anderson. *Effective Grading: A Tool for Learning and Assessment in College*, 2nd Ed. San Francisco: Jossey-Bass, 2010.

Other Recommended Resources

Ambrose, Susan, Michael Bridges, Michele DiPietro, Marsha Lovett, and Marie Norman. *How Learning Works: 7 Research-Based Principles for Smart Teaching*. San Francisco: Jossey-Bass, 2010.

Ohio State University Writing Across the Curriculum Resource Wiki:

<http://go.osu.edu/osuwacresources>

WAC Clearinghouse:

<http://wac.colostate.edu/index.cfm>

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