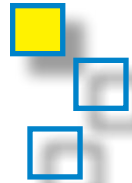


# White Board



Become An Effective Teacher & Save Your Valuable Teaching Time and Energy

Center for Effective Undergraduate Teaching (864) 388-8426

## Writing-to-Learn Activities and Assignments

WHY HAVE YOUR students do in-class or homework-related writing exercises, even those that you don't grade? The reasons are well grounded in research. For starters, writing about the material helps students learn it better and retain it longer - whatever the subject and whether the exercise involves note-taking, outlining, summarizing, recording focused thought, composing short answers, or writing full-fledged essays (Kirkpatrick and Pittendrigh, 1984; Newell, 1984; Young and Fulwiler, 1986; Ambron, 1987; Lander and Ablebee, 1987; Hinkle and Hinkle, 1990; Young, 1997; Wright et al, 2001). The power of writing is making students think actively about the materials.

Secondly, because practice makes perfect, any writing can improve your students' writing skills. They can reap this benefit in any discipline, as long as you explain the appropriate writing format and provide models, practice assignments, and plenty of feedback (Medigan and Brosamer, 1990). Some forms of writing also call for a well defined audience other than the instructor, and these develop students' sensitivity to the interests, values, cognitive levels, and vocabularies of different sectors of society.

A third reason to have your students write is for classroom assessment - that is, to find out quickly, while you're focusing on a particular topic, exactly what your class is and isn't learning. This way you can diagnose and clarify points of confusion before you give the next exam and move on to other topics (Cross and Angelo, 1988; Angelo and Cross, 1993). In fact, the student feedback and questions that writing exercises provide can plan a good part of your classes for you. Reading short, informal writing assignments that do not require grading takes no more time than any other type of class preparation.

Finally, many writing exercises give students the chance to learn about themselves

- their feelings, values, cognitive processes, and their learning strengths and weaknesses. Younger students in particular need and appreciate such opportunities for self-exploration (Ambron, 1987).

### FREE WRITES

Students write about a predetermined topic for a brief, specified number of minutes (one to three) as fast as they can think and put words on paper. The objective is to activate prior knowledge or to generate ideas by free association, disregarding grammar, spelling, punctuation, and the like.

Free writes serve as effective warm-up exercises for any class. Usually students walk in "cold," having forgotten the last class, the week's reading, and the lab manual instructions. Frequent free writes also put students on notice that they had better keep up with the course. Here are some possible free write topics:

- "Write down all the important points you remember from last Wednesday's discussion."
- "From what you recall from the lab manual, write down what is to be done in lab today, any procedures that confuse you, and what the experiment is expected to create or show."
- You write three key words on the board from the last class or reading and ask students to explain their importance.
- You write a "seed sentence" on the board - that is, a major hypothesis, conclusion, or provocative statement related to class or readings - and ask students to write their reactions.
- You can also use exam review questions for a free write exercise to prepare your students for a tightly timed essay test.

Free writes can also be assigned as homework. In the "concept assignment," students read a section or two of a book,

then begin free writing about what they just read and what they don't understand. They read the next section(s) and free write again. At the end of the assigned chapter or unit, they write three sentences, one on each of three key concepts they have identified in the readings. Students usually write three or more pages of notes and reflection (Kalman and Kalman, 1996, as applied to physics). The main benefit of concept assignments is getting the students not only to do but to really think about the readings.

While it is usually best not to grade free writings, at least not formally, you might collect them and check off those that demonstrate evidence of the student's having listened to the lecture or discussion, done the assigned readings, or studied the lab manual. You can count free writes as part of class participation or as "ungraded but required" assignments.

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4th of July Holiday - July 4

### WHITE BOARD

2011-12 Publication Dates  
First Monday of the Month

September 5	March 5
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## WRITING

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### THE ONE-MINUTE PAPER

With books and notebooks closed, students summarize the “most important” or “most useful” point(s) they learned from the day’s lecture, reading assignment, laboratory, or discussion. Time permitting, they also write down questions that remain in their minds. While called a “one-minute paper,” the exercise usually requires two to three minutes.

Just as free writing can function as a warm-up, a one-minute paper can serve as a “cool-down.” It helps students absorb, digest, and internalize new material, moving it from short-term and mid-term memory into long-term. It also makes them think about the material, especially what they didn’t understand, which is precisely what you need to know before wrapping up a topic.

As one-minute papers are not graded, they are usually anonymous. You might collect and read each one to find out how well the students grasped the new material. Their summaries and questions will tell you what to review and clarify in your next class.

### ONE-SENTENCE SUMMARIES

As an in-class activity or a short homework assignment, students answer these questions on a specific topic in one (long) grammatical sentence: Who Does/Did What to Whom, How, When, Where, and Why? (WDWWHWW) The topic may be a historical event, the plot of a story or novel, or by substituting another What for Who/Whom, a chemical reaction, a mechanical process, or a biological phenomenon.

This technique makes students distill, simplify, reorganize, synthesize, and “chunk” complex material into smaller, essential units that are easier to manipulate and remember. It is advisable that you do the exercise first before assigning it and allow students twice as much time as it takes you. You can collect and comment on the summaries yourself or have your students exchange them and write comments on each other’s.

### MOCK TESTS

An excellent assignment for getting students to review and really think about the material before a test is to have them make up a test over the material. This exercise

can be done in class or as homework, either individually or in groups. However, you assign it, students should hear and discuss each other’s test questions. The power of this exercise rests in getting students to identify what they believe to be the key concepts and relationships in a body of material. If they miss the mark, they will find out in class before the test.

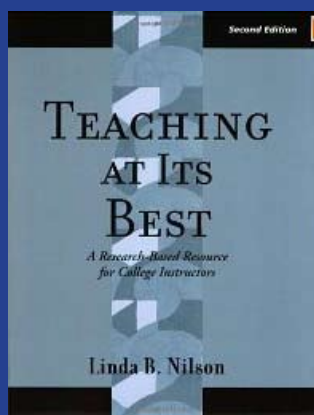
Before giving your students this assignment, you may want to teach them some questioning techniques, such as Bloom’s (1956) taxonomy of cognitive operations.

You may also find it helpful to specify the test format - so many multiple choice items, true-false, short answer questions, essays, etc. With a little practice, your students may write such good questions that you can actually use in your tests.

*Nilson, Linda B. Teaching at its Best: A Research Based Resource for College Instructors. 2nd ed. Bolton: Anker Publishing Company, Inc., 2003. Print.*

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## RECOMMENDED READING

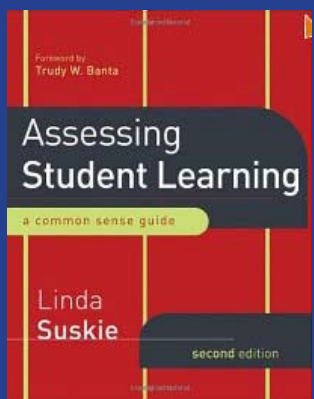


Author: Linda B. Nilson  
Publisher: Jossey-Bass; 2 edition  
(July 15, 2003)  
ISBN-10: 1882982649  
ISBN-13: 978-1882982646

### Teaching at Its Best: A Research-Based Resource for College Instructors

(JB - Anker Series)

This best-selling handbook is an essential toolbox—a compilation of hundreds of practical teaching techniques, formats, classroom activities, and exercises. It is now newly revised and expanded to cover more on the topics relevant to today’s classroom such as technology and the Internet, simulations and games, diversity, service learning, and faculty evaluation systems.



Author: Linda Suskie  
Paperback: 384 pages  
Publisher: Jossey-Bass; 2 edition  
(March 23, 2009)  
ISBN-10: 0470289643  
ISBN-13: 978-0470289648

### Assessing Student Learning: A Common Sense Guide (The Jossey-Bass Higher and Adult Education Series)

"This book is a self-contained manual to assist anyone with the implementation of outcomes-based assessment. I highly recommend it to all of my students because Linda Suskie illustrates each step in great detail and answers common assessment questions clearly. I own two copies of the first edition, because one is always in use by one or more of my colleagues." —*Marilee J. Bresciani, associate professor, Administration, Rehabilitation, and Postsecondary Education, and codirector, Center for Educational Leadership, Innovation, and Policy, San Diego State University*

## WRITING REFERENCES

*Continued from Page 2*

### WORKS CITED:

Ambron, Joanna. 1987. Writing to improve learning in biology. *Journal of College Science Teaching* 16 (February): 263-66

Angelo, Thomas A. and K. Patricia Cross. 1993. *Classroom Assessment Techniques: A Handbook for College Teachers*, 2d ed. San Francisco: Jossey-Bass.

Bloom, Benjamin. 1956. Taxonomy of Educational Objectives. New York: David McKay. \_\_\_\_\_ . 1984. The 2 sigma problem: The search for methods of group instruction as effective as one-on-one tutoring. *Educational Researcher* 13 (6): 4-16.

Cross, K. Patricia and Thomas A. Angelo. 1988. *Classroom Assessment Techniques: A Handbook for Faculty*. Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning.

Hinkle, S. and A. Hinkle. 1990. An experimental comparison of the effects of focused freewriting and other study strategies on lecture comprehension. *Teaching of Psychology* 17 (February): 31-35.

Kalman, Judith and Calvin S. Kalman. 1996. Writing to Learn. *American Journal of Physics* 64: 954-956.

Kirkpatrick, Larry D. and Adele S. Pittendrigh. 1984. A writing teacher in the physics classroom. *The Physics Teacher* 22 (March): 159-64

Langer, Judith A. and Arthur N. Applebee. 1987. *How Writing Shapes Thinking*. Urbana, IL: National Council of Teachers of English.

Madigan, Robert and James Brosamer. 1990. Improving the writing skills of students in introductory psychology. *Teaching of Psychology* 17 (February): 27-30.

Newell, George E. 1984. Learning from writing in two content areas: A case study/protocol analysis. *Research in the Teaching of English* 18 (October): 265-87

Young, Art. 1997. *Writing Across the Curriculum*, 2nd ed. Upper Saddle River, NH: Prentice Hall.

Young, Art and Todd Fulwiler. 1986. *Writing Across the Disciplines: Research into Practice*. Upper Montclair, NJ: Boynton/Cook Publishers.

Wright, W. Alan, Eileen M. Herteis, and Brad Abernethy. 2001. *Learning Through Writing: A Compendium of Assignments and Techniques*. Halifax, Nova Scotia, Canada: Office of Instructional Development, Dalhousie University.