Writing for Learning: The Student/Content Connection

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For professors and their students outside the English department, student writing assignments are a pain. Writing assignments take an extraordinary amount of time to design properly. Then, they must be graded. Students' writing exposes the weaknesses in their learning. Requiring writing places the professor and the student in direct confrontation, with the emotions of each disturbed by the personal frustrations and insecurities of the other. Thus, assigning written work in the business area can be painful to the professor (Drenk, 1982).

The benefits of using the writing to enhance students' active learning in all disciplines—those as diverse as Business Administration and Physics—have only recently begun to be appreciated. Writing is, at the least, under-utilized on most college campuses. At present, those professors who do require students to write view writing as a product, as a means of evaluation without realizing its rich potential for contributing to the process of learning. Most professors emphasize the subject in writing assignments, almost excluding the writer, and narrowing the role of audience to the professor as grader of tests and term papers. Using the full possibilities of the communication triangle—subject, writer, and audience—will result in improved learning in any discipline, and will provide students with experiences necessary to encourage their intellectual development.
The Restricted Role of Writing in the Schools

In a study of the writing of more than five hundred British students, ages eleven to eighteen, James Britton and his colleagues analyzed approximately two thousand samples of student writing. From these samples, they identified audience categories for student writing, including writing for the self, writing for the teacher, and writing for broader audiences (Britton et al., 1975). In no age group was the writing less than 95 percent teacher-directed, and of this writing, in ever-increasing proportions with older students, it ranged up to 70 percent for teacher-as-examiner. This writing is characterized by assignments formulated as a testing function where the writing is a culminating or end point.

In a similar study, the Writing Across the Curriculum Project, Peter Medway and his associates observed that “writing tasks set by teachers of school subjects rarely carried the child forward, nor were they seen to have any other ‘purpose’ than reciting what was already known” (Applebee, 1977). A more recent study conducted in this country confirmed findings from the British setting; students actually spend only 3 percent of their time writing papers of a paragraph or more in length. The rest of their “writing” time is occupied with filling in blanks and writing phrases or isolated sentences (Applebee, 1981).

The uses of writing are equally restricted at the college level. For example, at the University of Washington, students in twenty-four disciplines were surveyed about the writing requirements in their courses (Gere, 1977). The study revealed that writing for any course seldom involved more than fifteen pages, including essay examinations, with upper division courses in all fields requiring longer and fewer papers. Research papers and essay questions on exams were identified as the tasks most often assigned to students. The University of Washington is doubtless typical of most college campuses:

In essay exams, research papers, lab write-ups, descriptive papers and critical papers, writing serves as a means of evaluation, it provides students with a forum for displaying their learning and teachers with a product to judge (Gere, 1977, p. 63).
Gere maintains that most college writing is, and will remain, primarily a means of testing knowledge after-the-fact, until faculty members discover the potential of writing as a means of reinforcing content as students are learning.

Students who have not been encouraged to write for various purposes will be less able to demonstrate intellectual mastery of the abstract concepts required for both reading and writing formal academic prose. Students whose writing has been restricted to creation of products used by teachers to evaluate the students’ learning will be unable, as Medway puts it, “to communicate what they have to say when they most want to say it” (Applebee, 1977, p. 83). Teachers who have not considered the role of writing in the learning process will miss opportunities to help their students internalize the subject matter of their disciplines and extend the range of the students’ thinking processes.

Writing as a Means of Thinking

In his studies of the development of children’s intellectual abilities, Jerome Bruner theorizes a spiral of mental growth in which “around adolescence—language becomes increasingly important as a medium of thought” (Bruner, 1966, p. 27). Bruner notes that increasing sophistication in children’s ability to deal with abstract concepts is based upon the “translation of experience into language.” But, he continues, “it is obviously not language per se that makes the difference; rather, it seems to be the use of language as an instrument of thinking that matters, its internalization, to use an apt but puzzling word” (Bruner, 1966, p. 14, italics mine). Donald Murray insists that “the writer’s job is not to say what he already knows but to explore his own experience for his own meaning….As he sees his language he keeps changing the words—he thinks” (Murray, 1970, p. 23; italics mine). One conclusion of the 1975 Rutgers Conference on Teaching and Writing was that “writing has, or should have, a special role in learning in all disciplines” (Zemelman, 1977, p. 52).

Unfortunately, this realization has been accompanied by a good deal of proselytizing of non-English faculty by their colleagues in composition. The repeated message is that students should write more
in all their classes so that they will "write better." Contrast this view with the position taken by participants in the Rutgers Conference. They urged that the role of college writing must be changed. It must be made an activity of asking and discovering rather than one used almost exclusively for demonstrating what students already know. In Zemelman's words, "teachers need assignments and ways of 'correcting' papers that do not discourage students from risking exploration. And they need to make certain that in testing and evaluating, they do not mistake risk-taking and difficulty for failure" (Zemelman, 1977 pp. 53-54).

William Irmscher's two definitions of writing may offer a valuable fulcrum for balancing the pressures to assign more writing so that "students will write better" against a needed appreciation for writing as an integral process of learning in all disciplines. He says:

Two definitions...writing as a skill and writing as a form of behavior—make a practical difference in the kind of teaching that occurs. If we think of writing primarily as a skill, we tend to concentrate upon errors, because mastery of a skill implies eliminating weaknesses. If we think of writing as a form of behavior, we tend to direct attention to psychology of the total act from beginning to end, including the errors (Irmscher, 1977, p. 34).

Similarly, Janet Emig points out that:

Writing is special because it is an active form of learning compared to the more passive listening and reading that occupy much of a student's time. It can thus help students to act, rather than to accept uncritically whatever is given to them. Active learning, however, requires writing assignments which ask students to create, explore, analyze, rather than just repeat information they have read (Emig, cited in Zemelman, 1977, p. 52; italics mine).

But, granting the truth of Emig's observations, faculty may well propose another valid question: "If students write, when will I have time to correct all those papers? Again, faculty reflect the traditions that have produced them. Only within the past fifteen years have composition theorists proposed assigning quantities of student writing, whether or not the writing was "corrected" by anyone (see for example, Moffet, 1968). The remainder of this paper is devoted to practical aspects of using writing in the classroom, suggesting only a
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few of the many strategies currently in use by faculty concerned for the full intellectual development of their students.

Writing as an Active Form of Learning

In many classes, professors ask open-ended questions intended to provoke thoughtful discussions. In almost every case, the race is to the swiftest in these situations: a hand shoots up, followed by another hand, and, customarily, no more than thirty percent of the students in a class of twenty-five or thirty will participate in the discussion. What are the rest of the students doing? Thinking? Professors always hope so, and are occasionally rewarded by perceptive comments in the written work of a student who rarely speaks in class. But what about the fifty percent or more of the students who neither discuss often or write telling responses in papers or on essay exams? Many of those students doubtless believe that they are intellectually engaged in the discussion, that they are formulating relevant thoughts in response to the questions posed. However, many of those same students will frequently say about an essay exam: "I knew the answer, but I just couldn't say (write) it." Often the professor responds (or thinks): "If you knew it, you could write it." This response fails to take into account most students' lack of experience in expressing their ideas in writing (Applebee, 1981).

Studies of student writing at Eastern Oregon State College and elsewhere demonstrate clearly that students benefit from opportunities to collect their thoughts in writing, at various points during the term and under a variety of "practice" conditions. Representative student comments, reproduced in Table 1, suggest both the kinds of writing students find helpful and the ways in which students find they learn from these assignments.
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Table 1

“What Kinds of Writing Have Been Helpful in What Ways” EOSC Students Answer:

Lab reports: because I usually have no idea what I am doing during the lab, but after putting together a report I understand it much better.

Writing precis: This exercise forces you to carefully choose your words and check sentence structure because you are forced to use a limited number of words, yet have to include a certain amount of information.

Papers with comments written on them when returned to students are helpful. It is also helpful when rough drafts, ideas, etc. are handed in and evaluated before the actual assignment is due to be written and submitted.

Those writing assignments that have been most beneficial to me are those impromptu ones assigned and completed within the same class period. They force you to develop the theme using only the information you might have gleaned from the course. This in turn requires that you use all your skill to present the theme in an understandable, readable manner.

I believe that in-class writing over new material is very beneficial to students as it enables them to put the material in their own words. It is a great help in remembering and understanding new concepts.

Group papers are helpful in learning to incorporate new ideas.

Revising papers, reading others’ papers, discussing problems in class, finding out what readers hear and what they think you’re missing or what’s good.

Analysis and position papers help me to state my views and/or
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summaries in a clear way. Otherwise I’m a poor explainer. When I have to write it down, I understand it better, also.

Any type of short in-class response helps me to better understand the subject matter. Also, term papers help in giving insight into a specific area of study.

In the Ethics class, we had to explain concepts, which helped me to understand them more. We also had to take a stand on certain ethical questions which helped me to look within myself and forced me to analyze my feelings.

Explanation of concepts helps to organize thoughts, express ideas and re-reading them lets me know if I really understand what has been asked of me or if I know what I’m talking about.

Writing essays for comments by students as well as profs.

It has helped for me to write statistical information for science classes to get a better grasp of concepts.

Short essays on a specific topic to be done in class are a good writing experience.

Writing papers and then having them gone over and discussed without receiving a grade. So I could first learn what was expected.

Using Ungraded Writing to Improve Students’ Learning

Students clearly recognize that writing—even ungraded writing—is a valuable aid to their learning processes. In-class writing can be used to (a) improve class discussions, (b) show students where their thinking lacks clarity, (c) prepare students to listen and observe critically, and (d) alert professors to content that should be reviewed or explained further. A variety of strategies are useful in achieving
these ends. Some examples follow; for further suggestions see Ful­
wiler and Young, 1982.

As an Aid to Class Discussions

When you ask a question for class discussion or write it on the
board, give students a few minutes to write their answers before you
begin the discussion. You should write your response, too. After the
students have finished writing, you can:
1) ask various students “What did you write?” which should produce
much more structured responses from more students than asking
the class as a whole “what do you think?”;
2) direct students to exchange papers within groups of four or five,
explaining to each other their reasons for answering as they did;
3) collect students’ papers in order to get a quick check on the class’s
overall understanding of the particular concept being discussed.
(You might read some of the papers aloud as you skim through
them, commenting on your reaction to the students’ answers).
4) use the collected papers as a means of taking roll for the class; this
should improve attendance in discussion sessions.

As Feedback to Students on the Clarity of their
Thinking

Having written their answers to a discussion question, students
will not be able to convince themselves that they would have answered
exactly as the brightest student in the class did. Their own answers
will be on the page before them. If their thinking is confused or
inadequate, they will have a chance to review the material before they
are graded on a test.

If you see that the class is confused about a point you are making,
stop and ask students to write out an explanation of the concept for
themselves, or a statement of why they find the material confusing.
Call on some students to read what they have written. A good follow­
up for this activity is to ask students to write “I used to think that $x$
could be explained as $y$, but now I understand that it is $z$.”

Another means of showing the student what she knows is to use
essay questions as homework or in preparation for a testing situation.
As one professor observed, "Essay exam questions are too good to be wasted on tests" (Young, 1976). Students, given a series of essay questions as homework, can bring their written responses to class for discussion in small groups. After these discussions, the students can rewrite their answers to incorporate what they have learned from sharing knowledge with their peers. The revised "essay test" answers can then be collected and a few samples illustrative of adequate and inadequate responses duplicated for class discussion. Used as preparation for an exam situation, this exercise enables students to internalize the content, extend their thinking, and develop skills needed to perform well when their work is to be evaluated more formally.

As a Way to Prepare Students to Listen and Observe Critically

Before providing a key definition, ask students to write one for themselves, and call on several students to read theirs aloud. After the class has formulated a definition through a group effort, they will be much more alert to the precise wording of the discipline's formal definition.

Before beginning a new section in a lecture, ask students to write down what they already know about the topic. For example, in a sociology course, students might be asked to jot down as many causes for domestic violence as they can. The student who has listed five or six causes will be interested to learn which of those are listed by the professor, and she will be particularly conscious of those she has not heard before, or has not remembered to put on her list.

As a Source of Feedback on Content Needing Further Attention

At the end of a lecture or demonstration, give students five minutes to summarize the main points of the presentation or to write a statement about the most confusing aspect of the material. By collecting and skimming these papers periodically, you can pinpoint areas of misunderstanding.

About the third week of the term, ask students to write you a letter addressing the following questions: "What two things do you like best
about the course? What two things do you like least about the course, and what suggestions do you have for correcting them?” By emphasizing that you want both questions answered, you are likely to get thoughtful, well balanced responses. You can tell students that their letters need not be signed and have one of the class members collect them for you.

All of these writing activities should produce positive results, even though few of the papers are handed in, and none of them is graded.

A Note of Using Journals

Journals also offer students an opportunity to sort through their involvement with course material without unnecessarily burdening the professor with papers to correct. Gere’s study showed that only English and Women’s Studies courses assigned journal writing at the University of Washington (Gere, 1977). The journal has genuine value for any course work designed to broaden or change the students’ attitudes about their lives and their society. As one student puts it:

I think that’s where the value of the journal comes in. In order to write an entry, it is required that I think about the anthrop class and what was going on in it, and that, in turn, made me consciously relate what was being taught and what I thought about what was being taught. And thus I became more aware of how the class was affecting me and my thinking. It added new dimensions in my perception of the class. Instead of the course acting on me, I was reacting to the course (Krupa & Tremmel, 1983).

As Ann Berthoff reminds us, we must consider that knowing is not something external to our students’ lives—something, inevitably, is occurring to the students “inside,” too. Personal knowledge and previous experience is constantly transferred in the light of newly acquired information. “What is missing is our understanding of language as an instrument of knowing—our means of knowing our experience, knowing our feelings, knowing our knowledge” (Berthoff, 1976, p. 288). Britton agrees: “An essential part of the writing process is explaining the matter to oneself....There are plenty of things we think we are sure we know but we cannot articulate: ‘tacit knowl-
edge,' Polanyi calls it" (Britton, 1975, p. 28). When students work through course material for themselves they go beyond the basic process of reading and memorizing information; they are relating the material in their courses to their present and future lives, a goal frequently stated in college catalogs but sometimes lost in the daily routine of higher education.

**Broadening the Audience**

Journal writing illustrates an important message of writing-across-the-curriculum programs: Vary the audience for student writing. In journals, the audience is the self, but numerous other audiences can be constructed. Use of realistic audiences increases student involvement in the writing process, resulting in better written products (Larsen, 1983).

Varying the audience for students' writing can be as simple as creating a hypothetical audience for an assignment, or making the other students in the class the first audience for students' papers. The second alternative has an immediate result. Students who have no qualms about boring the professor will work very hard not to embarrass themselves before their peers. They almost uniformly identify an audience of students as "tougher" to write for than the professor alone, especially since they are aware of their classmates' low tolerance for boredom. In fact, a widely accepted composition theory identifies students' classmates as their most effective audience. Ken Bruffee (1973, 1978) has demonstrated dramatic effects on student writing as a consequence of using peers as critics and collaborators in the writing process.

A hypothetical audience helps to focus an assignment for students. For example, Harriette Stover created an assignment for freshman pre-nursing students at Dallas County Community College. After spending some time observing in the wards of a hospital, students are asked to write three papers and a journal entry about an unusual occurrence with a patient, one they remember vividly. Although the subject matter is the same for each paper, the audiences vary:

Describe the incident concisely, as you would for an "incident report" to go in hospital files.
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Write a narrative of the same incident in a letter to a friend who is a paramedic.

Write an account of the incident from the point of view of the patient describing it for his/her family members.

Now look back over your writings. How do they differ in organization, selection of details? Is one version more accurate than the others? Write a brief journal entry analyzing the differences (Stover, 1982).

Often a rather broad hypothetical audience is also effective: "When writing your paper, present the information clearly and concisely so the someone unfamiliar with x could easily understand your explanation." This person could be a family member or a student about to take your course. This uninformed audience effectively substitutes for the omniscient professor who needs nothing explained, and also provides a point of discussion for omissions or confusing passages: "How would someone who is unfamiliar with x know that y is significant? Would you need to clarify this cause-and-effect relationship for someone who is not a specialist in the field?"

More "realistic" hypothetical audiences can also be contrived for student writing. Business courses have relied for years upon the case study method, which directs students to write up analyses for presentation to clients. Virtually every other discipline has an appropriate audience, as well. For example:

1. music students writing short music history papers as though they are preparing program notes for a performance or for a record album,
2. political science majors writing position papers for their congressmen or government advisory groups,
3. education majors preparing position papers for school boards,
4. sociology students writing informative reports for public service agencies.
5. art history students providing a detailed rationale to a museum board for the purchase of a given art work,
6. computer science students writing a comparative report on
small office computers for an office manager who knows little about computers,

7. history students researching and writing historical vignettes for publication in the local historical society's centennial booklet (for further examples see Field & Weiss, 1979).

Another traditional audience for student writing is the professional journal. Although that audience may be appropriate for papers in some upper division courses, it is a disastrous expectation for entering freshmen—especially those enrolled in general education courses. Even on the upper division level, using academic journals as an audience for students' writing has one potential drawback. Depending upon the journals being studied, students' writing may become, in the words of one dismayed scientist: "verbose, pompous, full of fashionable circumlocutions as well as dangling constructions, and painfully polysyllabic" (Woodford, 1967).

At the very least, professors can relinquish their "audience" role of teacher-as-examiner, exchanging it for the role of "interested adult reader" (Britton, 1975). In so doing, they enter into a professional relationship with the student writer, based upon shared interest and expertise; in Perry's terms, they invite the student to participate in the community of scholars so essential to their development (Perry, 1970).

In Teaching the Universe of Discourse, James Moffett observes that the student is "on a two-way street": sometimes he needs to trace his over-generalizations down to their inadequate sources, and sometimes he needs to build new ideas from the ground up" (Moffett, 1968, pp. 29-30). He insists that students "need to know when they are adults how experience is abstracted, communicated and utilized, whether the data are the recurring phenomena of nature and society or the private truths of the hearts" (Moffett, p. 212). How will students develop these skills in their classes? How will they learn? By writing.

Implications for Instruction

In the past, college faculties may have taken credit for teaching students who were, in reality, largely self-taught—students with an innate sensitivity to language who internalized skills of analysis and clear expression through extensive reading. The dramatic change in
college student populations over the past two decades mandates a reappraisal of instructional techniques for students who must, literally, be taught. In order to progress beyond rote learning, these students require expanded opportunities for clarifying concepts, examining conclusions, and perceiving relationships. Continuing opportunities to engage their course materials through a variety of writing experiences, both graded and ungraded, may show these students how to build productive bridges between course content and themselves as learners.

References


Zemelman, Steven. The Rutgers assessment on teaching writing—a summary and assessment. CCC, 1977, 28, 52.

Notes

* This paper is a continuation of work begun at the Institute of Writing, University of Iowa, Iowa, 1979.

Parts of this paper are excerpted from The Busy Professor’s Guide to Writing Across the Curriculum, available from Lois Barry, Eastern Oregon State College ($2.75 plus postage).