

II. Writing across the Curriculum at Michigan Tech

Toby Fulwiler

How can teachers of writing influence the writing behavior of students no longer taking writing classes, or of students who refuse to take English classes seriously? No matter how carefully we design our freshman composition program, or how thoughtfully we teach advanced writing classes, the fact remains that most students do not treat writing classes with the same seriousness that we do. First-year students worry more about adapting to college and choosing majors than about improving their writing. Students with advanced standing often work hard in their major subject courses, but pay only momentary attention to the various support courses they are required to take. And many students at every level attach a stigma to all "English classes." They remember, often with great selectivity, spelling and grammar drills or foxy symbolic literary interpretations and, as a result, view all instruction in English with great suspicion.

One solution to this problem asks students to work on their writing skills in all disciplines and at all grade levels throughout the university curriculum. "Writing across the curriculum," to use James Britton's phrase, gives every teacher some responsibility for instruction in writing. Language instruction becomes the business of all teachers who use language. As a consequence, students cannot view English teachers alone as hung-up on good writing. Nor does it matter at what stage of development students begin to take writing more seriously or what major they select. At every turn of the university curriculum someone is paying serious attention to writing. In this way, students begin to recognize that writing is an interdisciplinary learning skill of great importance to everyone in the institution.

If this argument for "writing across the curriculum" is valid, as Dan Fader and James Britton have argued before me, the nature of the problem WPAs face changes from how to develop a better writing program within an English department to how to develop a writing program that is truly comprehensive and multidisciplinary. Since we posed this problem to our department at Michigan Technological University in 1977, we have developed one such program appropriate to the needs of a medium-sized institution with an enrollment of 7,500 students. We receive frequent inquiries about how this program actually works. What do we do to encourage colleagues in disciplines other than English to pay more attention to student writing? I answer this question here with a detailed description of our program.

Program components

Writing across the curriculum at Michigan Tech is based on principles that are second nature to most college writing teachers: 1. people learn to write by writing frequently; 2. writers need critical feedback to improve their writing; 3. writers need to understand the audience they write for; 4. writers should not be punished

for experimenting or taking risks; 5. writers need to distinguish between writing as heuristic and writing as communication. I might also add a final point: we do not believe there is "one best way" to teach writing—at least not at the present time. Based on these principles, we have created a writing program with the following integrated components:

A. *A required one-year course in freshman composition.* This course is the core of the writing instruction program. Students in most of the 50 sections study the composing process, learn to keep journals, practice peer-group critiquing, do library research projects, and work on critical reading skills. Section size averages 27; advanced placement and remedial sections are offered.

B. *Upper-division specialized writing courses.* These courses are offered both in the humanities department and in other disciplines. Examples include business writing, technical writing, creative writing, advanced expository writing, and literature and composition.

C. *Limited enrollment in humanities courses.* All classes offered by the humanities department are limited to 35 students to permit instructors to assign and evaluate student writing. Students in classes such as philosophy, music, art, and literature commonly keep journals, write several short papers, and respond in small groups to each other's writing. Writing is taught as both a communication process and a learning tool.

D. *Faculty writing workshops.* These workshops, conducted twice a year, expose Michigan Tech faculty from all disciplines to ways of using writing in their classrooms. During 1977 and 1978, three two-day, off-campus workshops were held for approximately 45 faculty members. In 1979, the workshops were lengthened to four days, and faculty members received a stipend of \$200 for attending (funds were provided from a grant by the General Motors Foundation). To date (August, 1980) 75 additional faculty members have attended the four-day workshops.

E. *Faculty seminars on writing.* We conduct these brief seminars periodically for departments in disciplines other than English. So far, we have provided this service for the departments of biology, business, mechanical engineering, metallurgy, physics and social sciences.

F. *A language skills laboratory.* This facility provides tutoring in reading and writing for the entire university community on both a drop-in and referral basis. It serves a wide range of student problems, from the freshman in need of remediation to the graduate student looking for help with audience analysis. Humanities faculty, in cooperation with faculty members in other disciplines, are currently developing discipline-specific lab materials to provide more pointed, individualized instruction.

Faculty workshops

Perhaps the most significant and unusual part of Michigan Tech's program is our interdisciplinary writing workshops. These workshops were developed to heighten faculty consciousness of writing and the usefulness of writing in teaching content-area classes. At these workshops we introduce professors inductively to

"the composing process" through exercises, discussions, and writing practice. We have found that such experiential learning, while it takes more time, makes a far stronger impact than if we simply told our colleagues what they ought to do to add more writing to their classes. Workshop participants try something out, examine collectively what they have tried, and only then consider implications for individual classrooms. Workshop leaders participate fully in every workshop exercise. Insights gained in these exercises result in powerful, personal commitment by participants to incorporate writing in their own classes once they return from the workshop. Following is a brief description of a four-day, writing-across-the-curriculum workshop.

I. Workshop objectives.

The workshop exposes faculty in all disciplines to new techniques for teaching communication skills. Improving student writing is the primary goal of the workshop. Strengthening student reading and speaking skills are important secondary goals. Faculty members who attend the workshop spend four days off campus studying, discussing, and participating in exercises designed to heighten their awareness of language use. During the workshop we attempt to accomplish the following specific objectives:

- a. To explore writing as a learning activity, different from reading, talking, and listening
- b. To discuss the principles of good writing appropriate to a university community in general and to each discipline in particular
- c. To learn strategies for incorporating writing regularly in classes in every discipline
- d. To create an atmosphere of common understanding among faculty about communications instruction in the university community
- e. To generate new ideas for improving the writing, reading, and speaking skills of university students

II. Workshop schedule.

First Day. Participants explore the complex nature of the writing process and discover, through discussion, that few simple solutions exist: the needs of a student who is poorly motivated to write well are quite different from the needs of a well-motivated student who doesn't understand how to use semicolons.

Session 1 (9:00–10:30 a.m.). "The writing crisis." Participants explore their own perceptions about student writing problems, discuss possible causes, and offer tentative solutions.

Session 2 (10:45–12:00 Noon). "The composing process." Participants engage in a condensed exercise to duplicate several steps in the composing process: invention, freewriting, revision, reader response, and peer critiquing. Teachers re-experience firsthand the role of students who are asked to write on command and whose writing is evaluated by another person.

Session 3 (1:00–2:30 p.m.). "The functions of writing." This is the only lecture session at the workshop. We explain the functions of writing as delineated by James Britton in *The Development of Writing Abilities 11–18* (NCTE, 1977). In particular we stress the importance of expressive writing,

where oneself is the audience, making the point that such writing, in journals, notebooks, or first drafts, is close to thinking, and therefore permits the writer to speculate, invent, and clarify, concretely, on paper. Expressive writing, according to Britton, is commonly ignored by teachers who do not understand its relationship to more public (transactional) writing. We point out that writing expressively is important both as an aid to thinking and learning and as the matrix from which finished public writing emerges. Teaching teachers in all disciplines to use writing as a "thinking tool" is one of the most important lessons of the workshop.

Session 4 (2:45-4:00 p.m.). "Writing workshop I." Participants begin serious work on a piece of writing—personal experience or academic—which they will continue to revise and rewrite for the duration of the workshop. Permanent writing response groups of five or six participants are formed. (This exercise is borrowed directly from the Summer Institutes of the National Writing Project.)

Second Day. Participants are asked to explore in depth some aspects of the composing process, building on ideas introduced the previous day.

Session 1. "Invention and discovery." Participants explore techniques for initiating a piece of writing. Writing is discussed as a problem-solving activity. The notion of heuristics is explained, and teachers create practice assignments requiring invention strategies pertinent to their particular disciplines.

Session 2. "Journal writing." All members of the workshop are required to keep journals for the duration of the workshop. On the first day, participants write in journals, but do not discuss their possible use. This workshop session formally introduces the journal as a powerful educational tool with applications in all disciplines. It is one way all teachers can assign expressive writing.

Session 3. "Writing for an audience." Participants investigate the role of a reader in the composing process. Exercises give teachers practice in varying their writing voice depending upon whom they are writing for. The importance of peer readers is discussed.

Session 4. "Writing workshop II." Teachers meet in small groups and read their writing to each other. Each group member receives a copy of the others' writing. Groups establish their own guidelines for discussion.

Third Day. Participants turn their attention from their own composing process to the problem of evaluating student papers. Materials for these exercises have been prepared in advance from papers submitted by workshop members.

Session 1. "Responding to student writing." Participants explore in small groups the strengths and weaknesses of sample student papers and are asked to generate a consensus about responses that would help the student writer improve his or her paper.

Session 2. "Sentence combining." Workshop members are introduced to simple techniques for improving the syntactic maturity of student writers. Ideas are explored for using such exercises in nonwriting classes.

Session 3. "Peer editing." Critique sheets serve as guides for par-

ticipants to practice commenting on student papers. This exercise asks participants to take the role of students who must make helpful editorial suggestions to each other.

Session 4. "Writing workshop III." Participants read and discuss the latest revisions of each other's writing.

Fourth Day. Participants explore classroom practices that might work in their particular disciplines. In addition, the notion of *reading* and *speaking* across the curriculum is introduced.

Session 1. "Writing in specific disciplines." Participants divide into related disciplinary groups and discuss problems peculiar to social-science writing, scientific and technical writing, and humanities writing, respectively. At the conclusion of this session the workshop as a whole explores differences and similarities in the writing tasks in each area.

Session 2. "Reading in every classroom." A guest workshop leader with expertise in reading discusses methods for encouraging critical reading skills among students. Participants practice exercises, including the CLOZE test, designed to enhance their awareness of what skillful reading requires.

Session 3. "Speech in every classroom." A guest leader from the speech department explores the nature of the classroom "oral environment." Short exercises encourage participants to look more closely at acts of public speech as well as the causes of speech anxiety.

Session 4. "Writing workshop IV." This is the last meeting of the workshop's writing practice groups. Participants read their finished products to each other and explore the kind of revision still needed to make each piece a publishable essay.

Session 5. "Conclusion and recommendations." This final meeting of the whole workshop explores possible writing-across-the-curriculum activities for the near future. Each participant is asked to make at least one concrete suggestion for using writing effectively in class.

A Tentative Evaluation

As of this writing, the Michigan Tech program has operated for three years. During this time, approximately 120 faculty members, including someone from nearly every discipline on campus, have taken part. While we consider this a substantial number, it is still only about one-third of the institution's 370-member faculty. Some departments have gained more than others. Humanities and social sciences teachers have been most active, followed by faculty members from mechanical and electrical engineering and metallurgy. In these departments substantial changes in particular courses have begun to occur. It is now common for students in these disciplines to keep journals, work in reader-response groups, and submit papers in multiple drafts.

Perhaps as a result of these changes, this year I have noticed less groaning when I assign journals to upper-division students. Chances are good now that these juniors and seniors have kept journals in the past and are keeping them now for other classes. When I talk about "writing as a process" in a sophomore-level American literature class, many students already know what I mean. When I suggest that students in a senior-level communications theory class "free write" to explore an idea, several students will invariably help me explain the value of the technique to the rest of the class.

These results suggest that we have already made substantial gains at Michigan Tech in changing faculty and student attitudes toward writing. But the results are difficult to measure. Students are now more likely to understand that writing is a process because they hear that message in courses other than English. More students now understand the complex nature of the writer-reader relationship, even if they do not achieve a perfect balance in every assignment. I know one senior who is still careless about punctuation when she writes a formal paper, but who has developed keen insights into herself and her major (electrical engineering) by writing regularly in her journal. Another student, a junior, who once thought writing was a drag, now recognizes that he needs extra help on every paper he is required to write and seeks it out. I would argue that in both cases motivation about writing has changed and, because of that, these students will become mature, accomplished writers, however long it takes. Attitude changes such as these may in fact be the major achievement of our program. We are currently attempting to collect data that might measure this result.

At a school the size of Michigan Tech, it will take some time for even the majority of our faculty to participate in the writing workshops. Nevertheless, word-of-mouth advertising for the workshops has been consistently strong. The university administration together with the department heads are on record as supporting the workshops, and the two-hundred-dollar stipend for workshop participants helps. Still, participation remains optional and voluntary—as it must for participants to be open to the experience. At larger schools, participation might be encouraged by offering workshops in institutional subdivisions, such as a college of arts and sciences or engineering, rather than offering them to the whole university. At smaller schools than Michigan Tech, where faculty are more likely to be acquainted, the program could influence an entire faculty in a relatively short period of time. In any school, influence is likely to spread more rapidly if the program is well supported financially. To gain this support, institutions might follow Michigan Tech's model of reaching out to local business and industry for funding. These resources will give workshop programs the incentive base they require.