

## President's Message

Dear Colleagues:

The Council of Writing Program Administrators continues to provide new services for members and to support programs already recognized for their utility to those who supervise writing programs. The 1982-83 year is another one for which to pat ourselves on the back.

In August, WPA and Northeastern University ran the first in a series of summer workshops for WPAs on Martha's Vineyard. Participants from Alabama, California, Connecticut, Illinois, Indiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, Vermont, the Virgin Islands, and Virginia explored a wide range of issues from curriculum to staff to program management. Despite some uncooperative weather we found time nonetheless for frolic on the island beaches and for a backyard clambake. We worked hard, but we also had fun. I hope that you will think of joining us this summer. The enthusiasm generated by this meeting of WPA minds encourages us to try to gather the faithful more often!

The WPA journal is now one of the best in the profession. Under the joint interim editorship of Ben McClelland, Rhode Island College, and Bill Smith, Utah State, WPA publishes essays that address the special needs of program administrators. Our annual bibliography of writing texts—last year, just an idea suggested to me by Chuck Christensen, publisher of Bedford Books—is now an indispensable part of every WPA's library. In one issue appear names, publishers, types of books, and brief descriptions of every new composition text. Publishers submit all information themselves according to a format established by the WPA editors. Special thanks go to Barbara Weaver at Anderson College for her superb work in preparing the bibliography this year, and to Joe Trimmer at Ball State for his planning and for his systematic efforts last year.


With a third grant from Exxon we continue to offer our consultation-evaluation service to requesting institutions at minimal costs. The City University of New York has requested evaluations for all seventeen of its campuses this year, and that will bring to more than forty the number of institutions to which we have offered guidance about program management. If your institution would like to be part of this program, write to me for details.

I hope to see many of you at the various professional conferences this year. And if there's anything that you think WPA should be doing that is not doing currently, please let me or one of the other executive committee members know. We aim to make the organization serve your interests, but we need to hear from you in order to achieve that aim.

*Harvey S. Wiener*

## A report on the workshop on the administration of writing programs, summer, 1982

*Stephen Zelnick*



**MARTHA'S VINEYARD SUMMER WORKSHOPS**

**10 day workshop  
WRITING PROGRAM ADMINISTRATION  
August 3—13, 1983**

Join WPA's from throughout the U.S. for this second annual workshop on Martha's Vineyard. Sessions are designed to give *new* WPA's the opportunity to explore state-of-the-art models in program development, faculty training, and other key areas. *Veteran* WPA's will have the opportunity to measure their programs against those models, to fine tune, to compare strategies. Reasonable lodging packages are available.

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The Workshop on the Administration of Writing Programs, held August 7 to 15 at Martha's Vineyard, was sponsored by Northeastern University's Summer Seminars in association with WPA. Harvey Wiener (La Guardia Community College) and Tim Donovan (Northeastern University) shared responsibility for the conference program. Unlike most writing conferences, the workshop did not cover such familiar ground as the writing process or theories of language acquisition but focused on program design and evaluation, and administrative problems. Although most of the participants clearly work in the midst of these questions every day, it was fairly obvious from the conference that many of us have not found the time or the way to thematize our daily problems for critical scrutiny. The great value of the workshop was that it allowed participants to isolate key problems of writing program administration and to approach these problems as if they had real-if not simple-solutions.

I have no doubt that Wiener or Donovan, or for that matter, half the WPAs who attended, could easily have run an ace workshop on the writing process or on becoming sensitive to the emerging voices of new writers, but it was clear from the beginning that a workshop specifically for WPAs was a venture into uncharted territories. Although there was a program of activities, Wiener and Donovan had chosen what might be called the Menemsha approach, i.e., fishing for issues. Much of the unhappiness expressed in the workshop evaluations was that the organizers had refused to specify a few set issues; yet the same evaluations grumbled that we administrators each faced very different sorts of problems. Instead of an agenda of issues, Wiener and Donovan decided on a loosely organized process of discovery.

Participants were asked to prepare a brief description of their schools before the conference. The descriptions provided such administrative information as material on staffing, budget, program structure and rationale, text-selection process, lines of authority, placement procedures, support services, and staff training. Each of the twenty-two of us brought copies to distribute to all the participants on the first day. On day one, then, each of us had sixty pages of close-packed information attempting (in our best administrator's prose) to describe the complex of arrangements we call our writing programs. We had learned much in preparing the document about our schools, but we could easily have used two weeks preceding the conference to absorb this material in any useful way. These documents did find one immediate use during the workshop: when we were puzzled or impressed by a participant's remarks, we could review the program description to situate the comments. As it turned out, this was necessary because we were coming from very different institutions with different kinds of programs. The conference attracted WPAs from large universities (Hofstra,

Kent State, Western Michigan), mid-size institutions (Eastern Illinois University, University of South Alabama, James Madison University), smaller colleges (Rhode Island College, Indiana State University-Evansville, Stockton State College), very small colleges (Vermont Technical, Bradford), community colleges (Manhattan, De Anza) and one college in an unusual setting (College of the Virgin Islands). Although some bickering and misunderstanding did result from this diversity, discovering the common ground was fascinating.

This sense of common ground began to emerge on the first day when we met in groups of four to list the three main components of a comprehensive writing program. None of us listed program philosophy (Wiener, directing the session, seemed puzzled, even appalled). What emerged instead was a list of concerns that reflect the daily intricacies by which WPAs tend to be ensnared. Foremost on this list was "asserting the place of writing on the campus." This, in most cases, turned out to mean "battling the English departments for support and recognition" and, only in a secondary meaning, to represent a concern for reaching out towards a writing-across-the-curriculum arrangement. The battle with English departments for tenure/promotion/awards/support and for status recognition was not universal but very common. Where it did exist, it was the issue that elicited the most vehement responses, enough to allow one to conclude that, except for those few schools which had a nontraditional departmental structure (Stockton State, for example), this overcharged issue absorbed an immense amount of energy.

One variation of this general concern was expressed as, what I call, the Rumpelstiltskin Effect, i.e., the feeling among many WPAs that we are asked to spin gold out of straw. Specifically, this is the observation that the composition courses, which are the courses that require the most highly developed pedagogy and the fullest awareness of the overall curriculum, are most often taught by the least experienced teachers and those who often have little awareness of the full curriculum and of the institution generally. This concern arose again in a brief debate about adjuncts. Should the position of adjuncts be upgraded-better pay, promise of continued employment, campus benefits and amenities-or should we argue to abolish part-time employment, which in some cases threatens to disband faculties almost entirely in a time of economic exigency?

While there was a deep division on this question, as on the general problem of relations with traditional English department structures, a line of thinking towards solving these and a host of other problems did develop in the workshop. Indeed here as elsewhere-in such problems as integrating writing programs, sequencing the development of writing and reading skills, reinforcing those skills in later years, training faculty to teach, winning respect and support for basic skill programs, developing a comprehensive program and rationale-the solution was always the same: writing across the curriculum.

In some ways, talking about writing across the curriculum as the solution for all our problems is a bit like belonging to a persecuted Protestant sect in seventeenth-century Europe and repeating the word "America." This prayer answers all problems, but the specific plan necessary to set the idea in motion has to be considered in close detail, and in details specific to each campus. Most helpful were the anecdotal accounts of the moves being made towards a writing-across-the-curriculum agreement on different campuses. The University of South Alabama, for example, has been moving in slow stages towards a full sharing of responsibilities for writing instruction. This

process allowed sufficient time to enlist administrative support, secure grants, and arrange for external evaluation. It included a series of faculty training sessions, visits by experts, internal negotiations, data collection, and curriculum revisions. It was important for us WPAs to be reminded that any significant program change requires a marathoner's endurance and the wit and patience of an elder statesman in international affairs.

Other areas of concern were covered with much less success. Pursuing the wide-open style of the conference, Wiener asked selected teams of participants to address topics that he reasonably supposed were within our competence. The topics were placement testing, support services, grants, writing across the curriculum, and program evaluation. However, because these presentations were off-the-cuff, and on topics of very different scope, this part of the conference was weak. When scope and competence were in balance-as with Dennis Gendron's presentation on grants-the result was first-rate. But when scope and competence were off-placement testing, support services-the presentations were tedious. In short, anyone planning future WPA conferences has to anticipate a fairly high level of sophistication among the participants and allow for careful preparation of presentations and materials in advance.

Along with this concern for better planning, I must mention the use of readings. Although a few of the participants entered each discussion by repeating the BAWP credo--"process not product"--most of us were beyond such simple pieties and ready for a harder and more critical look at program philosophy and the practical politics of program administration. Weiner and Donovan chose fourteen brief articles that did address these higher level concerns-most of them were WPA articles of the past three years. Workshop participants would, however, have been far better informed if they had the time to study the articles before arriving and had discussions been more focused on them. Most participants agreed that it was impossible to absorb the readings in the midst of the conference and that the workshop leaders did very little to incorporate them. Here, too, the higher level of sophistication among the participants requires more advance work and a tighter agenda of issues.

By far the most frustrating moments in the workshop were the small-group, problem-solving sessions. Distributing case-situation problems to groups and asking for reports to the whole audience seemed sensible. The groups discovered, however, that individual participants were at different levels of experience and, more seriously, represented schools of such different size, level, and curricular pattern that precise problems became absolutely incoherent where we tried to tackle them. There is something to be learned from the differences in outlook and administrative strategy among such different schools. Nevertheless, if the agenda of issues takes no notice of those differences, a WPA conference risks significant failure.

Preparing to write this review I read through the evaluations of the workshop turned in by the twenty-two participants at the end of the conference. As a WPA myself, I have been to my share of workshops and directed some, too; but I have never seen such evaluations as these. Either this workshop was a flop, or WPAs are very different from other folks. Although there were weaknesses in the workshop, I think one of the things I learned in my ten days at Martha's Vineyard is that WPAs are a special breed, a mixture of restless intelligence, impatience, a will to command, and a readiness to think things could be better organized and more productive than by nature things ever are.

Without a doubt, the main value of the conference was the opportunity for twenty-

two isolated, harried, overworked and under-supported, thoughtful, serious, and ambitious WPAs to discover that our problems and notable frustrations were not the product of our particular institutions or our personalities. The tensions between writing programs and English departments, the movement to consolidate support from faculty in other disciplines and from central administration, the general lack of coherent outlook among writing program staff, the difficulty of achieving a comprehensive philosophy (both internally, and looking outwards towards the whole curriculum), the need for research and program-development grants, and many more concerns quite simply come with the territory. And, in the phrase that became the guide to wisdom in the conference, *nothing is easy!*

Along with gaining a securer identity as WPAs, participants came away with two other rewards: the beginnings of a network of contacts among the friends made in the week together and an enhanced awareness of WPA as an organization that provides helpful information for all of us. If I need an external program evaluation, I now know where to go; if I need a speaker on a special topic, I have some idea whom to ask; if I need specific advice on an administrative tangle, I have some knowledgeable sources for the kinds of information that may never get to print. In summary, I have been to better-run workshops and felt the sweet rush of comradeship they inspire; but I have not been to a conference that was more useful to me than this one. I am hoping for Martha's Vineyard for the next one, but I'd be willing to go to Altoona.

## Machines for the garden

*James V. Catano*

I was amused at the apocalyptic vision painted by the headline: "Computer Jargon Imperils English." While that particular bit of media was clearly ironic, most of us would admit that the technological boom is having some impact on our teaching, especially within writing programs. Although not yet a substitute for the word "writing," the concept of "word processing" has made rapid inroads into the practice of getting words down on paper. Today there are many who, face-to-face with word processing stations, long for the days of such mechanical breakthroughs as typewriters.

Whatever your response to the jargon spawned by these devices, it seems clear that their influence will continue to grow. In a recently published, sixty-page bibliography, Paula Reed Nancarrow, Donald Ross, and Lillian Bridwell list over 300 studies of computer technology as applied to the writing process.<sup>1</sup> The titles listed range from "A writer's tool: computing as a mode of inventing,"<sup>2</sup> to "Computer-Assisted Poetry: The Writing Machine is for Everybody"<sup>3</sup> and their sheer numbers indicate how important it is to come to grips with the available technology. For a writing program administrator, this means more than becoming familiar with what is available and how it can be used. Directors of writing programs will have to actively encourage their departments and schools to acquire the necessary equipment if they are to ensure that the best possible systems are created.

Obviously, gaining support is made difficult by the initial costs that will have to be borne. Yet the largest battle to be fought will not be financial; it will be the battle to dispel the air of mystique-or the stench of the cabal la-that many faculty members find encircling computer technology. Addressing the whole question of computers in teaching, Gayle Byerly lists five conditions for successfully uniting computer technology and academics.<sup>5</sup> Four of the five conditions are concerned with engaging faculty and administrative support; only one deals specifically with the question of software. My purpose here, then, is not to provide a great deal of information about computers and the myriad tasks they can perform. Rather, I want to provide a brief plan for convincing a perhaps reluctant department that computer technology can be very valuable to teaching in the humanistic disciplines, specifically within departments of English and writing programs. By approaching the question in these broad terms, you can gain the support of many of your colleagues.

### *I.*

An unfortunate stereotype still surrounding computer-based study is founded on what was originally, and unfortunately, named CAI, computer-assisted instruction. Many programs, modeled on the step-by-step progression used in teaching courses such as mathematics, still carry the taint of programmatic, unimaginative teaching. They look

like "electrified" workbooks. Today, a growing number of programs are being designed to teach grammar and other materials more dynamically.<sup>6</sup> But while CAI is undergoing rapid developments, the design and functioning of many programs only supports the prejudice that teaching writing and teaching literature are two unequal activities. This judgment is devastating enough to most writing programs. Recklessly requesting computer equipment merely for your program's use will simply exacerbate the problem, allowing many to see both the writing program and the computer as elements in a basic "skills" program rather than an integral part of their department. In order to gain support for word processing, and to do so without alienating the rest of the department, the best tactic is to plan ways to apply word processing both to writing and to literature.

The first step in this process is to discover what facilities are available at your institution. While the possibilities are legion, for our purposes we can assume three basic situations. You may be at an institution that provides a great deal of support for word processing and related areas. Or, you may be at a school where there are good computing facilities, but they are used primarily by people in the sciences or by those who do statistical work. Or, you may find that your school has almost no facilities available for faculty use. I am going to assume the second situation in this essay, since the first has few problems that can't be solved internally, and the third presents difficulties that are too complex to be dealt with here. In this last case, let me suggest that the problems are not unsolvable, rather, they involve a commitment of time and effort that most program administrators cannot undertake.

Before continuing, I should mention that I do not believe that "personal" micro-computers are the way to go. Although there are many useful applications of such equipment, they present too many problems at the early stage we are discussing here. My reasoning is based on a number of factors. First, I believe that the major brunt of financing, both initial and continuing, should be met by a school's computer center and not departments. Given that assumption, your school may choose to adapt their existing equipment to your needs rather than purchase mini-or micro-processors. Second, I prefer to have the flexibility and storage capacity of a large, mainframe computer at my disposal. The possibilities for future expansion into other areas are much greater with such a machine. Third, I believe that making use of a smaller processor will lead to a much larger commitment of time than is healthy. It is important to be able to delegate all those annoying little system problems to a computer center that is paid to deal with them, and no one needs the strain of becoming a full-time consultant, as happens when a department arranges to purchase its own equipment.

I am assuming that most program administrators will find themselves in the middle category. Discovering that fact will have acquainted you with a prime source of information: the staff at your computer center. The staff members are just as important as the equipment. Without their cooperation, it is impossible to obtain the best materials or to fully utilize what is available. As you talk with the staff, your inquiries will probably elicit two types of response. One response will be a strong desire to help. That desire will be qualified, unfortunately, by a rather vague sense of what humanities types do or want to do. That means you have the responsibility for deciding just what you need the computer to do for you—a large task.

Unfortunately, the other response is neither helpful nor pleasant. Some staff members may be annoyed at an invasion of their grounds. They might begin to talk about the greater demands put on the system by word processing, to anticipate annoying

questions from illogical, "math-poor" users, and to express other well-established half-truths. In all of these cases, the simplest procedure is to talk to people higher up on the staff. Most of them jettisoned their prejudices as they advanced.

## II.

What, then, are the uses you envision? What materials will you need in order to convince your department of its needs? In English departments, the most readily available and useful capacity of the computer is for word processing or text editing. Many schools will have a program of some sort available or can buy one easily enough. Although drill programs for the workshop are equally common, a word processing system is the most adaptable feature available, and hence the foundation for the support you wish to gain.

The most urgent need is for on-line storage—both permanent and temporary—of the materials on which you are working. As with all computer questions, the simple question immediately becomes muddled by related problems. The question of "what is storage?" is immediately qualified by the question of "how it can be affected?" For instance, some text-editors require that you use your own storage space to maintain a hyphenation file. Other programs must use your storage space to take a working file and turn it into a print file. The nature and extent of the problems involved in such questions only become truly apparent as documents are produced. If you know about such things, ask specific questions now. If you don't, ask now many pages can be stored on an account—and try to get an answer in terms of typed pages. Knowing how many "Kbits" of storage are available won't help much. If you can't store more than twenty-five pages of material on any one account, you're going to have trouble. Ask closely about this fact. Often, some other departments—such as math or engineering—may have the best accounts. If that is true, a larger problem may have been uncovered. Such territorial imperatives are often resolved only by deans, but it is best to try to solve them within the center itself.

The question about storage leads to the next question: what type of accounts are available and to whom? In general, expect to find three separate types—faculty, graduate, and undergraduate—and expect that the major difference among them will be the amount of permanent storage allotted to each. The problems that these differences can cause will be discussed later. For now, it should be noted that there is a general as well as a specific purpose behind many of these questions: to discover just how annoying the system will be to use. Ask about the availability of terminals and see if there are any figures available on response- and down-time. If response time is poor during certain periods, as it usually is, then you will want to schedule demonstrations and teaching to avoid those times. If the computer is down fairly often—it usually isn't—then there may be large problems with reliability.

The next questions begin to move into areas of more specific importance to a department of English. Ask about the quality of the printer. If the need for Letter-quality printing has been small, then the center is not likely to have filled the need. Better printers will have to be purchased. To justify its purchase, you will have to demonstrate a growing interest in such equipment. Until then, it is important not to underestimate the positive qualities of a good word processing program, even when it's hooked up to a poor printer.

In regard to the program itself, there are some preliminary questions worth asking, although no system displays its full benefits and quirks without thorough use. What

documentation about the program is available? There may belittle, although a good center will provide manuals of its own to supplement those of the company selling the program. Poor documentation and poor servicing remain the great flaws of the computer industry. How large a document can the system reasonably handle? What about footnoting capacities, page formats-what the printed page can be made to look like-hyphenation capabilities, and other specific needs? In addition to the ready revision that is possible with a word processor, a footnoting capacity can be one of the biggest initial selling points for members of the department. It may seem silly to others, but any academic knows how much time can be saved by using a system that automatically counts, numbers, and types footnotes.

Returning to the question of accounts and storage, it is important to find out if graduate and undergraduate accounts have permanent storage. The reason is simple. The easiest place to begin building a core of users may not be among the faculty. While more and more faculty members are recognizing the benefits of writing with the aid of a word processor, you should expect to find a fair amount of intransigence. If that is the case, it helps to cultivate the graduate students. Their interests and needs usually overcome any initial qualms. In fact, most graduate students, facing the cost and annoyance of hiring a typist for their dissertations, are well aware of the advantages of using a word processor. It is very important, however, to be certain that funding of accounts, permanent storage, and adequate printing are available. You do not want to encourage your graduate students to make use of an inferior system. Convinced of its adequacy, you can go ahead and begin building what will be a solid core of dedicated users.

The best way to convince anyone of the benefits of the system is simply to begin using it yourself. As interest builds, along with your knowledge, a group of users will form. Somewhere within this time period (its length is highly relative), two goals should be accomplished. First, classes in using the processor should be offered specifically for your department (quite probably by you). Second, your faculty should purchase their own terminal and have it installed in a room set aside for that purpose. A terminal is not a mimeograph machine. While no one wants to apotheosize computer technology, it is important to cultivate a sense that word processors are not just machines but teaching devices. Setting the equipment up in its own room is a small but important step. The next move is to demonstrate some of the larger possibilities.

### III.

There are already numerous applications of computer technology to classroom teaching. Some are very mundane. Some are very sophisticated projects that are capable of dynamically uniting the computer, the classroom, and the teaching of writing and literature. How quickly these more sophisticated projects can be undertaken depends upon how solid a foundation is built in the first place.

The initial classroom applications will be simple, perhaps simplistic, but they break ground. To begin, there are two groups in any faculty that will probably have more than a passing interest in using a terminal. The first group consists merely of the faculty member who teaches the bibliography course. The second group encompasses the entire creative writing program. This group can find uses very readily, and their applications will lend weight to arguments about the importance of computing for the writing program. Because these latter projects finally reach our real goal-Linking

writing and word processing-I want to discuss them later at length. First, it's worth noting how a good bibliography course can make use of a text-editor.

Given the importance of computers as tools for basic library research, familiarization with them is integral to anyone learning to engage in scholarship. Such necessities make it easy to enlist the teacher of the bibliography course and it is not to envision a design for the class. The production of an annotated bibliography matches the objectives of most courses of this nature. If a specific topic or subject is chosen at the outset, either by individuals or by the class as a whole, then the system can quickly be put to serious use. The ability of word processors to add material anywhere, to delete, and to rearrange, is a clear advantage in bibliographic work. Later, the semester will end with the completion of a publishable bibliography-an incentive in any class.

Unfortunately, the presence of this course does not provide a very strong argument for using the computer in a writing program, or even in other courses in the department. A course in stylistics would be a much stronger argument. It would allow for the combination of linguistic, stylistic, and composition theory by making use of the computer for pattern scans, statistical counts, readability evaluations, motif searches, or any of the myriad possibilities already being demonstrated by scholars. Still, these projects are time-consuming and limited to a small population. They may also still appear too mechanical for many tastes. A wider base of support among the faculty can be gained in less time by working with the creative writers in the department.

There are three very good reasons why these colleagues will provide strong support. First, enough of them will have seen such articles as those in *Time*<sup>9</sup> or the *Writer's Digest*<sup>11</sup> to have become interested and willing to make the effort to team. This willingness usually outstrips that of the rest of the faculty. At the same time, use by writers provides a second, bonus argument. If the people who produce literature are willing to make use of the technology, then it is difficult to see why it should not be used by those who study that literature. Under such circumstances, the argument that technology has no place in the humanistic disciplines begins to disintegrate rapidly.

The third reason for meeting with the writers is the most important for the writing program. Having creative writers make use of the system finally provides the needed argument in its full form: word processors are useful to writers, to writing, and thus, to the writing program. For example, there are few better ways to demonstrate the idea of writing as an activity than by observing and talking to an individual who works on a processor. A writer working before a lighted screen rather than a sheet of paper has already escaped from the realm in which the written word is fixed on the page. It will never be possible to eliminate that slight separation between trying to form ideas and trying to write them down. But the fixed quality of print is absent when you work on a word processor, and with it go to its attendant inhibitions and restrictions-shaving that separation down to almost nothing.

Enlisting the aid of the creative writers will go a long way toward introducing word processing into a department's program and into its writing program as well. There is, however, another hurdle to clear. The argument may arise that the system is clearly useful for writers of all kinds, but its applications to the teaching of literature are limited. In the face of such an argument, the presence of the bibliography course will provide only a meagre example of the wider applications of the system. Nor is there time to produce other courses, as was noted in discussing the stylistics course. The elusive blend of literary study and computing is still absent. However, there are a num-

her of course projects discussed elsewhere in which literature is the primary focus. Two separate programs are worth mentioning: the Brown University experiment with a communal poetry text and the similar SEMINAR program used at Wellesley College.

The Wellesley course is described briefly in an article. "Developing Computer Literacy at A Liberal Arts College," that also discusses some of the topics dealt with here." Since I am more familiar with the Brown project, I will write about it. Described at length in "Poetry and Computers: Experimenting with the Communal Text," the project attempted to center an introductory poetry course around a computer-based corpus of poetry and critical materials.<sup>1 2</sup> While those materials formed the core of the readings, students were expected to expand the text by adding their own comments, responses, and ideas. In this way, the text could be both read and written at the same time. With such a combination of reading and writing, we hoped to teach the students both the rudiments of literary analysis, while at the same time providing them with a program for writing about literature. Since the text expanded as they commented on all portions of it, the students were given a unique working experience in compiling research and putting it to their own use. There was no other way to have collected and combined these materials as easily and as interestingly as on the system.

This course, and the one taught at Wellesley, are indications of what can be attempted. Their most successful innovation is the avoidance of passive learning; both courses require that students interact with each other, with the materials, and with the system. The oral interaction of the classroom is still present, yet there is also a high incidence of written response—a clear benefit to the students' writing habits. The use of the Computer-based text thus supplements classroom activity by allowing students to create a written dialogue between themselves, the material, and their fellow students.

Programs such as these, while not available to every institution, can help convince faculties that computers have a place in the English department. As I noted at the outset of this essay, many WPAs already know that they want some form of computer-based instruction. The question was how to demonstrate the importance of such instruction to the department as a whole. Assuming that a degree of success has been reached, it might be enjoyable to recall some of the reasons why computers are a useful tool for growing writing programs.

There are, of course, many packages available in traditional CAI education: grammar drills, spelling exercises, evaluation of errors and readability levels, and other focused projects. While much of this work may appear mechanical to many of us, our students may not have the same response. Nor should we overlook the large benefits in time to be gained from such programs. Their application to the workshop is readily apparent, and supplemental work of this kind is available in a variety of forms. The more exciting programs, however, are those that are designed for larger writing tasks.

In addition to the SEMINAR program and the Brown Communal Text project, a number of different applications have been designed. In "Fear and Trembling: The Humanist Approaches the Computer." Ellen Nold describes a program for writing poetry, one to aid in teaching logical problems, and a third for encouraging the exploration of invention strategies and pre-writing techniques. Stephen Marcus describes another poetry-writing project in "Compupoem: A Computer-Assisted Writing Act ivity."<sup>14</sup> Helen Schwartz's "Monsters and Mentors: Computer Applications for Humanistic Education" provides a thorough, and readable, discussion of a range

of applications, one of which closely resembles Marcus's project. She also describes a project in literary analysis that allows for a form of student interaction via a so-called "Electronic Bulletin Board."

It may be that one-on-one applications will prove to be the most useful, that the dynamic merging of computer and writing class will be too complex and too costly to succeed. However, the projects at Brown and Wellesley, along with Schwartz's program, would seem to indicate otherwise. Whatever the final outcome, it is clear that some use of current and future technology will be a part of many writing programs. Following some of the suggestions made here may help WPAs to influence the design of that technology.

## Notes

<sup>1</sup>Don Nunes, "Computer Jargon Imperils English and Intimidates Would-Be Users," "Washington Business," *The Washington Post*, June 21, 1982, 11.

<sup>2</sup>Paula Reed Nancarrow, et. al., "Word Processors and the Writing Process: An Annotated Bibliography" (Minneapolis: Univ. of Minnesota, May, 1982).

<sup>3</sup>Hugh Burns, "A writer's tool: computing as a mode of inventing," ED193693, (1980), 8-9.

<sup>4</sup>Richard W. Bailey, "Computer-Assisted Poetry: The Writing Machine is for Everybody," *Computers in the Humanities*, J.L. Mitchell, ed. (Edinburgh: Univ. of Edinburgh Press, 1974), 283-295.

<sup>5</sup>Gayle A. Byerly, "CAI in College English," *Computers and the Humanities*, 12 (1978), 281-285.

<sup>6</sup>William Wresch provides a good overview of the shift from traditional CAI to more flexible programs. See his "Computers in the English Class: Finally Beyond Grammar and Spelling Drills," *CE*, 44, 5 (Sept., 1982), 483-490.

<sup>7</sup>The same problem exists with using technical writing courses as an argument for general applicability. There would be little difficulty in finding uses in such a course, or finding support in other departments. But the majority of the faculty in a Department of English would not provide support on this basis alone. The exception would be in the case of a nearly autonomous writing program. In such a situation, however, the program would be independent enough not to encounter the above problems in the first place.

<sup>8</sup>If you decide to make such a commitment, you might begin by becoming a member of the Association for Computers and the Humanities. They publish a regular journal and newsletter, and sponsor panels at most of the the major conventions. It is also worth remembering that there are government agencies that sponsor programs in which equipment purchasing is subsidized. For example, the NEH has a program, "Curriculum Materials Grants," that might support such a request.

<sup>9</sup>J.D. Reed, "Plugged-In Prose," *Time*, (Aug. 10, 1981), 68-70.

<sup>10</sup>Robin Perry, "A Writer's Guide to Word Processors," *Writer's Digest* (April, 1981), 21-30.

<sup>11</sup>Nancy H. Kolodny and Gene Ott, "Developing Computer Literacy at a Liberal Arts College," *NCEE* (1981), 96-99.

<sup>12</sup>James V. Catano, "Poetry and Computers: Experimenting with the Communal Text," *Computers and the Humanities*, 13 (1979), 269-275.

<sup>13</sup>Ellen Nold, "Fear and Trembling: The Humanist Approaches the Computer," *CCCC*, 26 (October, 1975), 269-273.

<sup>14</sup>Stephen Marcus, "Compupoem: A Computer-Assisted Writing Activity," *English Journal* (February, 1982), 96-99.

<sup>15</sup>Helen J. Schwartz, "Monsters and Mentors: Applications for Humanistic Education," *College English*, 2, 44 (February, 1982), 141-152.

## A primer on computer literacy for writing program administrators and writing instructors

*Bruce Herzberg*

Nineteen-eighty-two was the Year of the Computer at the CCCC annual convention. There were seven sessions on computer-assisted instruction, including a demonstration of microcomputers and a session on teaching programming as part of a writing program. Bibliographies were distributed at some of these sessions. One bibliography contains fifty entries and a headnote indicating that it is a highly selective listing. Downstairs at the ERIC booth, you might have discovered that there are several categories for computer articles: "Computer Assisted Instruction," "Computer Assisted Testing," "Computer Managed Instruction," "Computer Oriented Programs," and "Computer Literacy." Computer Literacy. Now that hurts. How did this field get so far advanced? Where were you while all this was happening? What the hell is computer literacy? There's a new dispensation, and under it, most of us are illiterate!

If you have begun to consider using computers in your writing program, you will need to be at least minimally computer literate. You need to know what good it will do to add computer hardware to your other headaches, what to ask for, and how to get started.

It is rather difficult to take the first steps toward computer literacy by reading about it. It is far easier to sit down at a computer or terminal and learn to do something on it. Like learning to ride a bicycle, becoming computer literate is awkward at first, but later it is so natural that instead of telling someone else how to do it, you simply cry, "Climb on!" Very soon, I imagine, this analogy will be even stronger. When computers are as common as bicycles, they will be childhood conquests. Now, however, conquering the computer requires a large investment of money and time. The writing program administrator and the writing instructor need to know much before entering the computer age, so it is perfectly reasonable to expect a coherent description of what you do with a computer in a writing program and how you can get a computer to work with, if you decide you want one. [hope that this primer answers these and a few other pressing questions about using computers in a writing program.

In this primer, I will develop the premise that word processing is the most useful form of computer-assisted instruction in writing, and that other forms are of limited (sometimes *very* limited) usefulness in a writing program. Computer-assisted instruction (CAI) and computer-mediated instruction (CMI) consist almost exclusively of drilling and testing programs. Students in developmental courses and students who use the writing lab can answer questions on the computer screen and get an immediate check on correctness. But in many schools, word processing is becoming the chief

form of computer-assisted instruction. All writing students can use word processing because it is a writer's tool, not a substitute teacher.

I will try to describe here what it's like to use word processing; how to get some hands-on experience; how to get computers into your writing program; how to expand word processing as a form of writing instruction; and how to select forms of CAI other than word processing.

### **What it's like to use word processing**

Word processing should be the most common computer activity that you and your students will engage in. Word processing can be done on any of several kinds of computers:

- large computers with many terminals
- small, self-contained microcomputers
- word processing machines or systems, which are microcomputers that will do only word processing.

The word processor is actually a program that runs on a computer-not a physical component or an independent piece of machinery. Virtually every computer made in the world today is capable of running a word processing program. so it is not necessary to have equipment specifically designated as a word processor.

The word processing program turns your computer into a fancy typewriter. Whether you work with a microcomputer or with a terminal that is hooked up to a bigger computer, you sit at a typewriter keyboard and a television screen. A computer is a bit harder to turn an than a typewriter-after you flip the switch, you have to type some introductory instructions or insert a diskette. It is important to remember two facts about the coded instructions and procedures that you must learn to operate a computer: every computer has its own set of secret words; and all of the secret words are in the manual. Don't be impressed by someone who knows the codes-that's easy stuff.

Once the word processing program is turned on, you simply type your text as you would on a typewriter and the text appears on the screen. When you fill the screen, the text "scrolls up," so you can continue to type along the screen's bottom line. The first difference between the typewriter and the word processor is that you don't hit the Return key at the end of each typed line-just keep typing. When you begin to run off the edge of the screen, the word you are typing jumps to the beginning of the next line. You can break off a line (at the end of a paragraph, for instance) by pressing Return. The "no-Return" feature is called "word wrap"-you and your students will find that it makes typing much easier.

The real power of the word processor is in editing the text that you have typed. The three chief editing procedures are deleting, inserting, and moving pans of the text. Each word processing program has its own set of commands for performing these operations, but the general idea is the same for every word processor. Use the arrow keys on the keyboard to move the cursor-the blinking square on the screen-over the letter you wish to delete or over the place where you wish to insert something or at the beginning of a passage that you want to move. Then type the appropriate command-To delete the letter under the cursor, you hold down the Control key while typing a letter key, such as "D." Most word processing programs use mnemonic codes like this. Control-D deletes a single letter. Control-W, in some word processing systems, deletes a whole word. Some word processors have commands for deleting sentences, paragraphs, and whole pages.

Similarly, to insert one or more letters, move the cursor, type the insert command (something like Control-I) and then type the material to be inserted. The text to the right of what you're typing just gets pushed down the screen. Because editing frequently requires replacing text (delete this and insert that), most word processors let you overtype. Give the command (say, Control-G) and what you type replaces text as the cursor passes over it.

Finally, to move text, you'll use "block" commands. Position the cursor at the beginning of the "block "of text to be moved (word, phrase, paragraph, anything) and type the "block" command (it's probably Control-B). Then move the cursor to the end of the block and type the block command again. The block commands will probably leave some sort of marker or symbol at the beginning and end of the block. Now move the cursor to the place in the text where you want the block to end up and type the "move" command (Control-M, no doubt). Almost instantly, the block will appear in the new position-

For many of our students, revising and editing are difficult because written or typed text physically resists change. When students succumb to this textual inertia, they do not learn what revising and editing are. But by making these essential writing procedures neat and easy, the word processor helps students overcome their resistance and experiment with their writing.

After you have worked with the basic functions of the word processor, you'll find that there are commands designed to make your work even easier. There are ways to move the cursor very quickly to key spots in your text-to the beginning and end, for example. You can search through your text for words and phrases-the cursor will jump to the word you specify and at your command, jump to the next appearance of the word, and so on. Moreover, you can replace the words you search for. When you discover that you've misspelled a word all through your text, you can fix it all at once. This feature has other uses as well. In preparing this article, for instance, I typed "wpr" instead of "word processor" and then let the computer replace the "wpr" for me.

Another useful feature of the word processor is that it allows you to save successive drafts of the same text. You might, for example, type in a text called Draft #1 and file it away. When you "file" or "save" a text on the word processor, the computer stores it electronically on a magnetized disk in exactly the same way that a tape recorder saves sounds by recording them on cassette tape. To work on Draft #1, you "play" it into the word processor. Doing this does not erase Draft #1 from the disk, just as playing a song doesn't erase it from the tape. This means that you can revise Draft # 1, change its name to Draft #2, and save it on the disk as a separate text. Later, you can go back to Draft #1 and revise it in a different way, or combine parts of several different drafts of the same essay-- no more uncrumpling pieces of paper to find the sentence that was, after all, just right. Here again, the word processor makes it physically easier to produce and compare successive drafts, to combine prewriting materials into drafts, and to connect the parts of the writing process as ideas and essays develop.

The final step in word processing is printing the text. Type the proper command (yes, Control-P, very likely), and the printer types out your text. You can insert some printer commands in your text if you wish. Such commands can change the size of the margins, print page numbers automatically, justify the right margin of your text, center lines of text, and so on.

The word processor is a powerful writer's tool. Even the most confirmed Luddite

will find it relatively easy to learn the commands and teach them to others. Using word processing in a writing course interferes very little in the normal teaching schedule. One class period for an introduction and demonstration should suffice. Thereafter, the students work during "lab" time. Whether you have your own lab or are sharing the school's computer lab, you should have tutors in the lab to help your writing students through the first sessions. Give students exercises that will get them to use the editing procedures. Encourage them to play with the word processor. Assign successive drafts to be done on the word processor, so they'll see the capabilities of the machine. Soon, both instructors and students will discover the positive effects of using word processing:

- **No handwriting.** Text always looks good, on the screen and printed out. Writers often find that the formal appearance of the printed text stimulates their interest in the formal features of writing.
- **Less permanence.** Text on the screen is easier to revise than text on paper. Writers are less committed to the first draft; intermediate hard copy is less permanent, too, since pressing a key will generate new hard copy.
- **Stimulating.** Many writers find that they produce vast amounts of material on the word processor, that quick composition and revision changes their style or makes them more aware of style, that they produce multiple drafts by rearranging the text in several different ways, which makes them aware of transitions.
- **No final typing.** When you're done composing, you're done with the paper.

In short, the word processor makes writers—and not only freshman writers—aware of new possibilities in their writing. Let the students discover their own writing methods. Some will write drafts, notes, and outlines before going near the machine. Others will draft at the machine. Some will make many intermediate hard copies; others will hold off until the bitter end. Encourage students to discuss their methods of composing on the word processor.

Incidentally, the students will realize that they are learning a useful skill—though you'll still have to listen to some whining about learning to type. Chiefly, though, both instructors and students will feel that the computer is an aid to writing, not just a fancy typewriter, especially if you add a few of the features noted later in this article.

### **How to get some computer experience yourself**

Whether or not you decide that word processing is the right place to start with computers in your writing program, you can use word processing as a way to introduce yourself to the computer. If you should decide that it is the kind of CAI you want, you will need to be familiar with some of the available systems.

If your school has a computer center, start there. You may discover that your college computer is already set up to do word processing. If so, get a manual and get started. If word processing is not available, you should still be able to get advice from someone in the computer center, and it will be a worthwhile contact in any event.

If you have a friend who does computing, get her to help you with all this. She'll know a lot about it, and know someone who does know about it, and drag you to some computer stores to learn about it together.

Going into a computer store presents some problems. First, the clerks are trying

to sell you a computer, and second, the clerks may know little more about computers than you do. The solutions are simple, though. Be firm about getting a demonstration of word processing and clear answers to your questions. You may well get sprayed with jargon. Don't listen to it. If you can't get straight answers in English, go to another store—there's a Computer Land or Computer World or Computer Town on the next block. There are less visible computer stores, too: check the phone book. Don't limit yourself to Apple, Atari, Radio Shack, and Pet. Try Xerox and HeathKit, Texas Instruments and Hewlett-Packard. Big computer companies will also help you, so call Wang, Digital, IBM, or Honeywell if they have offices near you.

One bit of jargon worth knowing is the difference between hardware and software. Hardware is the part of the computer you can break with a hammer. Software means programs, the sets of instructions that make the computer do things like word processing. The only purpose of hardware is to make software work. Remember your first stereo? Probably, you were content with anything that would let you play your own music in your own room. Later on, you became attuned to wow and flutter, tracking weight, and RMS per channel. Stereo hardware consists of turntable, amplifier, and speakers. Software is the music itself. Computer hardware consists of keyboard, screen, processor (the guts), and printer. Software is the word processing program. Your first concern need only be to see how the thing works. Later on, you'll have no trouble with RAM and ROM, modems and peripherals, and all the rest.

Eventually, you should try to become familiar with one word processing system to get a sense of the variables and to have a basis for comparison. A thorough, unhurried demonstration or a well-organized, very short course may well be enough.

### **Getting computers into the writing program**

Most schools are willing to spend money on equipment, and there are a number of foundations that offer grants for the purchase of computers. The problems are figuring out what kind of equipment and how much money to ask for.

First, of course, find out what computer resources are already available on your campus. Who can get access to the computer? Is it set up to do word processing? Are there plans to expand the computer facilities? Again, insist on clear answers. Computer people are unaware that there are any folks left out there who don't know all about computers. They probably want to help you but find it difficult to break free of the jargon all at once.

What you learn about available resources will determine your next step. You are likely to have three options:

- **Sharing your school's microcomputers.** It is not unusual for schools to invest in scores of such small, self-contained computers, as the Apple, Atari, and TRS-80. As with all computer facilities, access may be restricted to certain departments or courses. But if your school is committed to computerization, you may well be able to put yourself in the computer business with a short internal proposal.

Word processing software for microcomputers costs from \$100 to \$400. A reasonable beginning for a writing program would be to buy or get access to a half-dozen or more microcomputers—about \$3000 each—and a printer or two—about \$500 each. This is enough for some of the staff to learn word processing, to have a few sections of the writing courses, and some students from the writing lab experiment, and still be able to monitor use of the equipment. If you start from scratch this is the kind of setup you can describe in a grant proposal.

Sharing your school's minicomputer or mainframe. These are big computers, despite the name "mini." The computer sits in an air-conditioned room, where its lights blink and its tapes whirl. You get at it through terminals in the computer lab. The smaller minicomputers may have only a few terminals, while the mainframe, s may have hundreds. Word processing software for these may be standard equipment, or priced from a few thousand to tens of thousands of dollars.

As with microcomputers, you may be able to get some terminals in a room of your own, or get access to the existing lab. You don't have to use this equipment simply because it's there, but working on a large, powerful computer has many advantages. Indeed, a minicomputer that supports a dozen terminals is certainly as good a start for your writing program as a dozen microcomputers, and if you have one of your own, your students won't have to compete with the computer science majors for terminal time.

Starting from scratch. If there are no computers or if there is no room for more users on the existing computers, start to think about writing a grant proposal. Do some shopping. Most microcomputer companies will give you an educational discount, even for small purchases, and some will give you free computers if you're starting a program. Write to:

Apple Computer Inc.  
20525 Mariani Avenue  
Cupertino, CA 95014

Atari, Inc.  
P.O. Box 16525  
Denver, CO 80216

Commodore Computer Systems  
681 Moore Road  
King of Prussia, PA 19406

Epson America, Inc.  
3415 Kashina Street  
Torrence, CA 90505

Heath Company  
Benton Harbor, MI 49022

Hewlett-Packard  
1820 Embarcadero Road  
Palo Alto, CA 94303

IBM Personal Computer  
Armonk, NY 10504

Intertec Data Systems  
2300 Broad River Road  
Columbia, SC 2921

Osborne Computer Corporation  
25600 Corporate Avenue  
Hayward, CA 94545

Tandy Corporation  
1300 One Tandy Center  
Fort Worth, TX 76102

There are many other manufacturers of microcomputers, and new ones crop up all the time. A less well-known company may give you a good deal, but be careful -if the company goes out of business, maintaining your equipment will be very difficult.

The manufacturers of bigger computers will also give you educational discounts and, occasionally, award grants. Contact Digital Equipment Corporation, Maynard, MA 01754; Wang Corporation, Burlington, MA 01803; or IBM and Hewlett-Packard at the addresses above. These companies make both microcomputers and small mini-computers.

Finally, work up a proposal for a "seed" system -a few micros or a mini. You will need to design an experimental program, determine how many students will use the equipment, how many hours a term each student will spend at the computer, where the computer will be housed (micros and small minis don't need special treatment).

how it will be protected, what educational goals it will help you attain, and how you will monitor the program. Some of these items, such as how many hours the students will spend at the computer, are difficult to estimate. But you needn't be too exact. Be sure to see the grant-development officer if your school has one. Getting computers into humanities programs is a hot issue, and several foundations (notably Sloane) have announced their desire to make funds available for this purpose.

### Expanding word processing for writing instruction

A number of computer programs can be added to word processing software, such as spelling checkers and text analyzers. Such programs expand the word processor's capabilities as a writer's tool. A discussion of several programs of this kind appeared recently in *BYTE*, an excellent computer magazine. The author, Wayne Holder, writes:

Word processors have changed the way I think about writing. To be honest, I don't think I would even try to write if I didn't have a computer and a good text editor. A word-processor lets me *experiment* with my prose. It removes the fear of making a mistake. Nothing takes the fun out of writing faster than having to retype pages over and over again.'

Holder describes the embarrassment and anxiety caused by poor spelling and grammar. The anxiety, and most of the errors, can be eliminated by the computer. Many dictionary programs are available that will check your word processing text for spelling errors. These programs compare the words in your text with words in their "dictionary" files. If one of your words is similar, but not identical to a dictionary word, the program asks you if its alternative is what you really want. Holder is a programmer who is developing an extra-large dictionary that will work with several different kinds of word processors.

Other useful additions described by Holder are a word-counter, a simple punctuation corrector that will alert you to unclosed quotes or inconsistent punctuation, a rhyme-finder, and even an anagram-salver. Holder is working on a program for microcomputer word processors that will duplicate the HOMER text-analysis program now operating at USC. HOMER, based on Richard Lanham's *Revising Prose*, counts words, sentences, uses of "be" verbs, and prepositional phrases. It provides a graph of sentence length and prints out messages about possible problems caused by long sentences and overuse of passive voice. Such add-on programs as these are relatively inexpensive-about \$100.

Text-analysis programs don't make changes in the text. Students need to learn why too many prepositional phrases can be a problem, when to prefer the passive voice, and how to make changes when they are called for. Text analyzers are tools, like the word processor itself, not substitute teachers.

Many word processors give you extensive control over the form of the printed text. You can get automatic page numbering, running heads, superscripts and subscripts, underlining, a variety of typefaces and sizes, boldface and italics, right justification, columns, footnotes, graphics, horizontal and vertical centering, different alphabets, special symbols, reverse printing, electronic mail-the list of features increases every month.

All of these enhancements make the writer's work easier and more exciting. To add word processing to your writing program is to treat your students as writers by giving them useful and stimulating tools for writing.

Word processing can hardly fail as an aid to writing instruction. The more you and your students use the word processor, the more you'll want to use it. Word processing makes no claim to improve the writing itself: it makes the work of writing easier. But other forms of CAI, such as grammar drills and computer-prompted composing programs, are supposed to teach writing. Drilling programs have a high dropout rate. After the gee-whiz effect wears off, most teaching programs become boring. Grammar drills simply can't compete with Space Invaders.

Reports on CAI experiments have an equivocal tone. They note "no consistent positive or negative effects," or "a high dropout rate,"<sup>3</sup> yet urge us to experiment with similar programs. Positive results read like this: "Students gained an average of 2.4 months in reading proficiency during the months they used the computer."<sup>4</sup> But for how many months did they use the computer? Again, "once content has been specified, the superiority of CAI to *teach* it is demonstrable. Even then, actual effectiveness *can be deceptive.*" Frequently, a positive tone comes from statements about the potential of CAI: students can get more individualized attention; the computer can record results of workbook exercises and quizzes; students can do drills at their own pace; and teachers are able to use their time better. Nobody claims nowadays that teachers will be replaced by computers.

So far it appears that some drilling programs have some success with some students. A student at a terminal can get a handbook explanation of grammar rules, then do workbook exercises on the screen. A good program of this kind will give the student two or three chances to correct a sentence, show the correct answer if the student gets it wrong, show the rule again after repeated errors, and record the results of the session for the teacher. Some programs provide more examples and exercises if the student makes many errors and fewer exercises if the student consistently answers correctly.

Perhaps you are beginning to bristle at all this talk about right and wrong answers. This is indeed a problem. A drilling program will have a limited range of correct or acceptable answers. If the student comes up with an acceptable answer that the programmer didn't think of, the computer will regard it as incorrect. Most drilling programs, for example, reject answers that are misspelled but otherwise correct. Even for drilling, then, computers cannot replace teachers and tutors. In short, if you do drilling in your writing lab or basic writing courses, you may want to experiment with computer drills like this. Such programs are fairly inexpensive and will run on a wide range of computers. Be cautious about buying such programs. Test them before you buy. When you test a program, any program, try to make it fail. Most computer programs will do what they are supposed to do under normal circumstances. You need to know what they will do when the unexpected occurs.

A number of invention or guided-composition programs are becoming available. These programs engage the writer in a dialogue about his or her writing task. To use these programs, you type in your name and some preliminary information and the screen flashes. "Hello, Bruce! What do you want to write?" Bruce answers, "I have to write a paper about the Butlerian jihad." Computer: "What do you want to say about the Butlerian jihad?" Bruce: "I don't know where to start." Computer: "Well, let's start with a list of things we know about the Butlerian jihad." And so on. The computer can go on to suggest that Bruce consider the Butlerian jihad as a wave, particle, and field, that he divide it into parts and fill in a tree diagram, or that he analyze his audi-

ence. When the session is over, Bruce gets a printed copy of the whole dialogue—pages and pages of prewriting material.<sup>6</sup>

While guided-composition programs share the flaws of all free-floating heuristics, which tend to work better for personal topics than for academic-research papers, they may well help the beginning writers who simply cannot generate enough material. The growing interest in such programs suggests that similar programs for more specific writing tasks (like lab reports or close-readings of poems) may appear soon.

A problem with guided-composition programs, and some text-analysis programs as well, is that they do not work in conjunction with a word processor. That is, you type in all of your responses to programmed writing "prompts," but you cannot manipulate your responses as word-processor text—you'll have to retype the material. That is not a terrible drawback for a guided-composition program, though it is for a text analyzer.

One other potential problem: when you buy software, be sure that it will work on your computer. Most microcomputer software is written in BASIC, but different computers use different versions of the language. While programs can generally be translated from one language or dialect to another, translating can be expensive.

### Buying software and other closing comments

Software for microcomputers tends to be inexpensive. Word processing enhancements and CAI programs are usually about \$100. You will find such programs reviewed and advertised in magazines like *BITE*. There are magazines for every brand and model of computer, magazines for microcomputers in general, for micros and minis, for general audiences and specialized audiences, for hardware and for software. Computer stores carry the more popular of these magazines. Computer stores also carry software catalogs, in which word processing enhancements and CAI are becoming increasingly prominent. And don't forget ERIC's five categories of computer-related materials, which include a great many reviews of CAI software.

Software for larger computers is somewhat more machine-dependent and expensive. Stay in touch with the manufacturer or dealer and become a member of the "users' group" for your system. The users' group is a good source of new software. Programs can be translated, remember, and larger computers may have facilities for doing the translating—so the magazines and ERIC reviews are still resources for you.

If you use word processing as your starting point, you'll find that computer literacy comes quickly. Word processing is a good touchstone for comparing equipment and software, and it's fairly easy to estimate your need for additional equipment after your "seed" system has been operating for a while.

Personal help and advice is very important when you're starting out. Contact colleagues at other schools who use computers in the writing program. Contact authors of articles on the subject.<sup>7</sup> When you get close to a decision about choosing equipment, it can be very worthwhile to hire an independent consultant to sort out the vendor's promises.

Getting started is unavoidably awkward. But persist. Before you know it, you'll be computer literate.

## Notes

<sup>1</sup> Bruce C. Appleby, "Computers and Composition," bibliography and presentation at CCCC Annual Convention, 1982.

<sup>2</sup> Wayne Holder, "Software Tools for Writers," *BYTE* (July 1982), p. 138.

<sup>3</sup> Don Norton and Kristine Hansen, "The Potential of Computer-Assisted Instruction in Writing Labs," *Tutoring Writing: A Sourcebook for Writing Labs*, ed. Muriel Harris (Glenview, IL: Scott, Foresman & Co., 1982), p. 156.

<sup>4</sup> Holly O'Donnell, "Computer Literacy, Part III: Classroom Applications," *The Reading Teacher* (Feb. 1982), p. 615.

<sup>5</sup> Norton and Hansen, p. 160.

<sup>6</sup> See Hugh Burns, "A Writer's Tool: Computing as a Mode of Invention," 1980, ERIC/RCS reprint: ED 193 693; and William Wresch, "Computers in English Class: Finally Beyond Grammar and Spelling Drills," *College English* 44, No. 5 (Sept. 1982) pp. 483-490.

<sup>7</sup> Write to me at Bentley College, Waltham, MA 02254, or call 617-891-2950 or 891-2931.

## Educational software for computers: very pretty, but can it teach?

*Dennis Gendron*

Breathes there a harried WPA with soul so dead who never to him- or herself hath said, "If we can put a man on the moon, why can't we invent a machine to make this job more bearable-and produce more quantifiable results?" Well, current pedagogical literature assures us that such a machine has indeed been invented and that, if we humanists would only use it, the computer could relieve us of many dully repetitive hours of tutoring, could assume efficient-and quantifiable-control of our class records, could conduct meaningful educational relationships with students, and could generally enable us to become the teachers we all dream of being. In 1962, R. B. Fuller envisioned an automated future for education, and even the title of his book captures the dream: *Education Automation: Freeing the Scholar to Return to His Studies* (Southern Illinois University Press). However, in addition to representing crass self-interest, computers represent the press of progress. One information scientist has observed that the computer will be the "dominant device in teaching in higher education during the next twenty-five years," and others are already envisioning educational programs mating the computer with the video disk.

Granting computers the future-and we might as well grant them the present-how do we WPAs free the technological genie to do our bidding? After all, our background is in *belles lettres*, not BASIC; and we, and all our teachers, are overworked. Unfortunately, for teachers and administrators in writing programs the answer to that question is neither simple nor really satisfactory.

Computers only do what we want them to because we give them very detailed instructions in a language they can process. These detailed instructions constitute application software, and producing application software for microcomputers (e.g., Apple, Pet, TRS-80) has become one of America's most profitable cottage industries. Sifting through this software to find reliable, effective programs complementing an English course has become one of America's most frustrating campus duties. The alternative to sifting is writing our own programs, a prohibitively costly activity; so WPAs who are incorporating computer-assisted instruction (CAI) or computer-managed instruction (CMI) into the curriculum must be skilled judges of software claims and capabilities.

Whatever the claims of the producer, software capabilities depend ultimately on what the computer itself can and cannot do. It can count, calculate, compare, and print prepared statements, figures, and graphics. It cannot make value judgments, understand, appreciate, grade a theme, or answer questions. These capabilities and limitations fairly define the roles of computers and computer software as:

- drill-and-practice master
- tutor
- simulator
- record-keeper

As a drill-and-practice master, the computer provides the kind of repetitive practice traditionally used to teach vocabulary or multiplication tables. On the college level, this application has limited use except in remedial classes, and even for these classes the effectiveness of drill and practice is questionable. Most canned educational programs today are of the drill-and-practice variety and are aimed at precollege students.

As a tutor, the computer supplies information and questions the student on his or her grasp of the information, moving the student backward or forward in the program according to the student's response. Tutorial programs are effective because they require the student to respond constantly to new information and because they provide a constant measure of the student's understanding of that information. One of my own programs on sentence structure supplies definitions and examples and then calls for the student to answer a series of questions. If the student answers incorrectly, he or she is sent to a subroutine which supplies additional information and asks more questions. Continued incorrect responses prompt the message that the student should see me before continuing the program. The program also maintains a file of students who are taking the tutorial; it lists their scores, noting how long each run took, and it provides an item analysis of their responses. Obviously, such programs can become quite complex and are limited only by the programmer's time and imagination-and by the student's ability to ask questions.

As simulator, the computer creates a controlled model that the student affects by changing any of a number of variables; the computer then reflects the student's changes by altering the model. Although simulations can be exciting as educational programs, I have never seen one with an application to composition courses.

Finally, as a record-keeper, the computer can be invaluable to teachers and to students. It can maintain current grades and rankings for all students, as well as class averages and comparisons of one class with another. It can also analyze the tests themselves and provide files of effective test items. And it can monitor progress of students using CAI for self-paced learning. Software that facilitates record keeping is especially effective and adaptable to composition courses.

Behind these operational capabilities of computers and software stands their motivational effect on students. The look and feel of the hardware, the stimulation of graphics produced by effective software, the need for the student to take direct action to make the program run, the immediate response to his or her entries-all of these can be powerful inducements for learning, especially in a remedial or developmental setting. I have seen freshmen in remedial composition courses repeatedly refuse human help with their work but spend hours daily in the computer center. Therefore, computer software can significantly enrich our courses, engage students in worthwhile learning activities, and assist us in the management of our classes. However, as we rush over to our requisition forms to begin inundating the dean with orders for appealing software, we must also keep in mind at least three harsh realities of life with educational software:

1. No software, however exciting and sophisticated, has any real value unless it serves the special goals and philosophies of our institutions or departments. If we do

not have remedial students or if we do not believe in the transferability of drills to the writing process, drill-and-practice programs would not contribute much to our courses.

2. Most educational software is poorly conceived and organized. Vicki Blum Cohen reviewed six curriculum packages produced by national publishers and, in her report to the Educational Product Information Exchange in New York City, concluded that "software did little more than aid memorization of previously examined facts."<sup>2</sup> Another reviewer noted that "About 95 % of all educational software is ... simple tutorials, games designed to improve skills, and some less sophisticated simulations."<sup>3</sup>

Moreover, producers and committed users alike frequently claim more for their software than it can deliver. One such claim is that a software package can grade students' themes; it can if we are willing to accept fluency as a total number of words used, diction as word length, and so on.<sup>4</sup> Another advocate sees a new frontier in the use of Socratic-dialogue software to generate thoughtful essays. In this program, the computer responds as follows, regardless of the student's comments:

"Yes, that seems okay."

"Go on."

Super. "<sup>5</sup>

This is hardly the Socrates of the *Phaedo*.

The point is to be skeptical when considering a software purchase. Before buying a program, make sure it does what you want it to do as effectively as you want it to. Also, call the supplier if you have questions, and only buy software that you can return if it fails to satisfy. The most helpful sources of information on software are other users and the associations and publications listed at the end of this article; many of these provide reviews and detailed descriptions of software packages.

3. Many of the *objectives* that software is designed to *achieve can be achieved more easily and less expensively* by resources already present on the campus. For example, colleges with fully equipped reading centers probably do not need software to teach reading. As an aid to memorization, computerized packages are *terribly expensive substitutes* for flash cards. The list of misapplications is endless.

Having in mind what educational software can and cannot do and boldly recognizing the realities of the marketplace, we can begin to review specific software with application to the teaching of language skills. The following review is by no means complete and it is heavily weighted towards programs for use with the Apple, but it can provide some insight into the kinds of software currently available.

### CAI

"Canned" software that requires no modifications by the instructor

Compu-Read (Edu-ware, \$30) is essentially a developmental-reading package aimed at students from elementary to college levels. It is useful for increasing reading speed and memorization skills. The program is well-documented and easy to use.

*Language/Reading Development* (Unicorn, \$30) is another developmental reading package. It builds perceptual and concentration skills, provides controlled readability *files* in basic vocabulary, synonyms, antonyms, and analogies, helps students prepare for standardized tests, and produces item analyses of students' achievement.

Senior *High Vocabulary* (Educational Audio Visual, \$200) can also be used with the TRS-80. These programs present multiple-choice vocabulary drills. On the college level, they are obviously only for developmental use.

*Alexander the Great* (Krell Software, \$40) is an interesting fantasy game requiring students to answer vocabulary questions quickly and accurately, with the assistance of Aristotle, to conquer Ra, master of evil. Version II is suitable for college students.

Minicrossword (Program Design, \$15) is an easy-to-use, well-documented program that sharpens students' vocabulary and spelling skills by presenting a standard crossword format in one game and by calling for students to guess words in ten tries in a second game.

*Sentence Diagramming* (Avant-Garde Creations, \$25) provides drill in diagramming, parts of speech, types of sentences, and word usage in four sets of related exercises. It also keeps a file of student performance and allows the instructor to specify grades necessary to move the student up in the program.

*Spelling Builder* (Program Design, \$27) is for students who have mastered spelling rules; it teaches rules that apply to difficult words through drill and tutorial.

*Graduate Record Exams* (Krell Software, \$289) is a series of twenty-eight programs that provides students with a limitless selection of questions based on past GREs. It includes sections on vocabulary, word relationships, logic, analytical reasoning, sentence completion, and reading comprehension.

### Author Programs

Software that provides a frame for instructors to construct their own packages *Aristotle's Apple* (Stoneware, \$35), despite its lack of documentation, is an easy-to-use, reliable program that accepts instructors' test questions and "formats" them into multiple-choice, fill-in-the-blanks, or matching quizzes. This is an especially effective "frame" program.

*Create Your Own* (Educational Audio Visuals, \$30) is another very useful frame program, requiring no knowledge of computers but allowing teachers to use their own examples and questions to create multiple-choice tests, reading comprehension exercises, and vocabulary lessons.

ZE.S. (Avant-Garde Creations, \$250), a completely menu-driven system, is a complex program allowing teachers to create tutorial lessons, graphics and animations, multiple-choice tests with hints and alternate answers, and branches to provide additional instruction when students respond incorrectly. Z. E. S. also includes an elaborate and useful records system. Unfortunately, the program is prone to bugs, poorly documented, and requires some programming capability in order to use it effectively. It is, however, an example of software potential and could be invaluable if the limitations to its use were corrected.

*Testing Group* (Educational Courseware, \$32) is a useful program that allows non-programmers to create infinitely variable multiple-choice, true-false, completion, or matching tests. It also keeps a record of student progress.

### CMI

Software that keeps records and analyzes results of instructional strategies *Apple-Statistics* (Ed-Sci Development, \$95) is a complete statistics and data-management package that calculates the mean, standard deviation, frequency of distribution, paired and unpaired t-tests, Mann-Whitney U-Test, Wilcoxon Paired-Sample Test, Chi-Square Test, linear regression, and other statistics-an extremely useful program.

It permits additions and deletions, ranks the class for each grade set, and produces updated class lists with grade scores, total weighted scores, and letter grades assigned.

*Apple Gradebook* (Creative Computing Software, \$25) accepts up to thirty-five sets of grade scores for a class and generates class rosters, lists of scores, amended rosters and scores, individual student records, class statistics, and a catalog of disk contents.

### Software Suppliers

Avant-Garde Creations  
P.O. Box 30160  
Eugene, OR 97403

ComPress  
P.O. Box 102  
Wentworth, NH 03282

Creative Computing Software  
39 East Hanover Avenue  
Morris Plains, NJ 07960

Educational Courseware  
3 Nappa Lane  
Westport, CT 06880

Educational Audio Visuals  
Pleasantville, NY 10570

Ed-Sci Development  
460 Beacon Street  
San Francisco, CA 94131

Edu-Ware Services  
22222 Sherman Way, Ste 203  
Canoga Park, CA 91303

Krell Software  
21 Millbrook Drive  
Stony Brook, NY 11790

Program Design  
11 Idar Court  
Greenwich, CT 06830

Stoneware  
50 Belvedere Street  
San Rafael, CA 94901

Unicom  
297 Elmwood Avenue  
Providence, RI 02907

Although CAI software is largely unsatisfactory, the representative selection of author-program and CMI software demonstrates the availability of excellent programs for generating specific, class-related learning activities and for maintaining accurate statistical analyses ordinarily beyond all but the leisured instructor. As with most activities in life, the computer programs we design ourselves-with the help of appropriate software-are most likely the best. I have intentionally not included the technical specifications of programs, the hardware and disk operating systems required to operate them. Prospective buyers must actively investigate the software they intend to buy. Remember my second harsh reality. The following list of books, associations, and periodicals should provide a beginning for WPAs seriously interested in developing a "library" of software. However, implicit in this general introduction to educational computing is the obvious need for software users to form a reviewing network specifically for language-composition programs on the university level. If WPAs had such a network, we could significantly improve the educational computing packages students are subjected to, we could minimize our number of purchasing mistakes, and we would achieve the ultimate goal of all university administrators: genuine cost-effectiveness.

**Books**

The following is an annotated list of selected books that survey the role of computers in education or provide descriptions of educational software.

*Apple Computer Education Software Directory (Visual Materials*, Gurnee, II, 1982). The directory describes over 1000 available programs for kindergarten through college-level instruction, supplying names and addresses of producers.

*CAI Sourcebook* by Robert L. Burke (Prentice-Hall, Englewood Cliffs, NJ, 1982). Designed as a reference for experienced programmers and as a source for novices, it provides instructions for developing CAI programs and provides twenty sample-program frames as guides. Also includes criteria for evaluating software and a glossary for making sense of CAI terminology.

*Computers in Education*, Bob Lewis and Donovan Tagg, editors (Elsevier North-Holland, New York, NY, 1981). Contains papers from the first world conference on computer education. Broad overview of computer-aided learning. Describes the impact of informatics on teaching, CAL techniques, and needs as well as successes of CAL.

*School Administrator's Introduction to Instructional Use of Computers* by David Moursund (ICCE, University of Oregon, Eugene, OR, 1980).

*Reference Manual for the Use of Microcomputers (Jem Research*, University of Victoria, Victoria, BC, 1981, \$75). Volume includes an index of educational software by subject and level. Lists distributors, evaluates more than 200 representative programs, provides a bibliography of books, magazines, and journals, and suggests criteria for evaluating software.

*The Book of Apple Computer Software, 1982*, Jeffrey Stanton and John Dickey, editors (The Book Company, Lawndale, CA, 1982). Describes in detail "the majority of known Apple software on the market." The authors explain what each program does, rate the program for reliability, documentation, ease of use, and other pertinent criteria.

**Nonprofit Organizations**

The following organizations provide services and publications supporting educational computing.

Computertown  
USAI, POB E  
Menlo Park, CA 94925

Conduit  
POB 388  
Iowa City, IA 52244

CUE (Computer Using Educators)  
c/o Independence High School  
San Jose, CA 95133

HumRRO (Human Resources  
Research Organization)  
300 North Washington Street  
Alexandria, VA 22314

MECC (Minnesota Educational  
Computing Consortium)  
2520 Broadway Drive  
St. Paul, MN 55113

Microsift  
Northwest Regional Educational  
Laboratory  
300 S.W. Sixth Avenue  
Portland, OR 97204

TERC (Technical Education  
Research Centers)  
8 Elliot Street  
Cambridge, MA 02138

**Professional Associations**

The following professional associations support educational computing in their national meetings and publications.

Association for Computing Machinery (ACM), 1133 Avenue of the Americas, New York, NY 10036. This organization has several subgroups related to educational computing:

Special Interest Group on Computers in Education (SIGCUE)  
Special Interest Group on Computer Science Education (SIGCSE)  
Elementary and Secondary Schools Subcommittee (ESSS, pronounced 'ES-cubed')

Association for the Development of Computer-Based Instructional Systems (ADCIS), c/o Computer Center, Western Washington University, Bellingham, WA 98225.

Association for Educational Data Systems (AEDS), 1201 16 Street, N.W., Washington, D.C. 20036.

National Educational Computing Conference, c/o Gerald L. Engel, Computer Science Department, Christopher Newport College, 50 Shoe Lane, Newport News, VA 23606.

National Council of Teachers of Mathematics (NCTM), 1906 Association Drive, Reston, VA 22091.

**Periodicals**

*T.H.E. Journal*, P.O. Box 992, Acton, MA 01720, surveys technological horizons in education by presenting discussions of current issues in the area, reviewing books, hardware, and software, and previewing relevant professional meetings. (Best of all, it is free.) A list of periodicals available to educators follows.

*Byte*  
70 Main Street  
Peterborough, NH 03458

*Classroom Computer News*  
51 Spring Street  
Watertown, MA 02172

*Computers and Programming*  
380 Lexington Avenue  
New York, NY 10017

*Educational Technology*  
140 Sylvan Avenue  
Englewood Cliffs, NJ 07632

*Electronic Learning*  
902 Sylvan Avenue  
Englewood Cliffs, NJ 07632

*Popular Computing*  
70 Main Street  
Peterborough, NH 03458

*Softalk*  
11021 Magnolia Boulevard  
North Hollywood, CA 91601

*The Computing Teacher*  
ICCE  
Department of Computer  
and Information Sciences  
University of Oregon  
Eugene, OR 97403

## Software Catalogs

The following is only a sampling of the many software catalogs currently available. Their listings include general programs and are not limited to educational programs.

*Commodore Software Encyclopedia*,  
(Commodore)  
Commodore Business Systems  
300 Valley Forge Square  
King of Prussia, PA 19406

*K-12 MicroMedia*  
(Apple, Pet, TRS-80)  
P.O. Box 17  
Valley Cottage, NY 10989

*Purser's Magazine* (Atari)  
P.O.B. 466  
El Dorado, CA 95623

*Skarbecks Software Directory*  
(Apple)  
Skarbecks  
11990 Doresti Road  
Maryland Heights, MO 63043

*The Book of Apple Software*  
(Apple)  
The Book Company  
6720 Hawthorne Boulevard  
Lawndale, CA 90260

*TRS-80 Applications Sourcebook*  
(TRS-80)  
Catalog #26-2113  
Any Radio Shack Outlet

*Vanlove's Software Directory*  
(Apple)  
Vital Information Company  
350 Union Station  
Kansas City, MO 64103

## Notes

<sup>1</sup>Alfred Bark, "Computers in the Classroom", in *On College Teaching*, eds. Ohmer Milton et al. (San Francisco: Jossey-Bass, 1978), pp. 184-5.

<sup>2</sup>David Grady, "A Hard Look at the World of Educational Computing," *Personal Computing*, 6 (August 1982), 42.

<sup>3</sup>Daniel Watt, "Close Encounters with Software," *Popular Computing*, 1 (August 1982), 36.

<sup>4</sup>Martha Maxwell, *Improving Student Learning Skills* (San Francisco, Jossey-Bass, 1979), p. 251.

<sup>5</sup>William Wresch, "Computers in English Class: Finally Beyond Grammar and Spelling Drills," *College English*, 44 (September 1982), 489.

## Expanding the writing center audience

*Jeanette Harris*

We often remind our students that an awareness of audience is central to the writing process. From the initial prewriting stage, when an idea has merely begun to emerge, to the final stages of revising and editing, writers must consider the needs of their readers. And as writers ourselves, we know that our audience determines to a great extent the purpose, form, and content of what we write. In writing this paper, for example, I assumed that my readers would primarily be writing center directors who are knowledgeable about tutorial programs. This assumption played an important role in shaping the content and form of my discourse.

A writing center also has an audience—the students and faculty whom it serves. And this audience, like the writer's audience, determines to a great extent the purpose of a center and the role it plays. The concept of audience awareness is, in fact, as basic to the directing of a writing center as it is to the writing of a paper.

Writing centers were born, for the most part, during the back-to-basics movement that dominated education in the 1970s. These early labs were primarily remedial programs, designed to give failing freshmen assistance with their writing. Today, although we have not relinquished our responsibility to developmental students, they no longer constitute our sole audience. It is not that we have given up on the basic writing student with his Pandora's box of language deficiencies. Rather it is that our audience is not exclusively limited to these students. We have moved, as William Stull points out, "beyond remediation."

But we have grown in other directions as well—not just beyond remediation but also, in a sense, beyond composition—out of the English department and into the university community as a whole. As long as we view ourselves only as adjuncts to a composition program or an English department, our audience is obviously limited. If, on the other hand, we perceive ourselves as university-wide centers, serving instructors and students from every discipline, our audience expands dramatically.

In moving beyond the confines of remediation and composition, we are, in effect, identifying ourselves with the writing-across-the-curriculum movement. The recent emphasis on multidisciplinary writing programs affords us an opportunity to expand our audience in a way never dreamed of by those who established the first writing centers. As our colleagues from other disciplines become increasingly interested in writing and increasingly willing to assume responsibility for the teaching of writing, we are in an ideal position to assist them in their endeavors.

Presented with this opportunity to expand our audience across the curriculum, we must modify our programs to serve the diversity that such an audience represents. The primary modification is merely the realization that a multidisciplinary writing center serves not only students but also the instructors who teach these students. Unlike centers

that function only as support services for English departments, university-wide multidisciplinary centers must share with instructors as well as students their knowledge of the process of writing and the skills involved in that process. Thus our role becomes a dual one: to offer students instruction that is specifically related to their academic and professional goals and to provide instructors assistance in using writing to stimulate learning and to improve the writing skills of their students.

Students who are enrolled in composition courses are frequently interested in writing only as an abstraction. Asked to produce certain writing assignments that are designed to teach writing as *writing*, they fail to see the relationship between their composition assignments and their professional future. Many, in fact, have no definite career plans at the time they take freshman composition. Thus, they write as in a vacuum, their discourse having no meaningful context. For these students, writing is an academic exercise rather than a means to an end. But for the student who has determined a major and is involved in the preparation required for his or her chosen profession, writing has some significance. The education student, for example, needs to be able to explain subject-verb agreement to the students she will soon be assigned. She must also be able to recognize errors in their writing and to submit coherent, correct reports to her principal. The journalism student, on the other hand, is concerned about punctuation and spelling. And the social work student must write case studies and reports. Even the science major must be able to write descriptions of her experiments. Writing has real meaning for these students. As a result, they are more receptive to instruction at this point than they were as freshmen enrolled in a general studies English course.

Instructors who are interested in improving the writing of their students and in using writing as a tool in their classrooms also need the writing center's services. Although all instructors are familiar with writing as a means of evaluating what students have learned, many need assistance in devising assignments that use writing to generate learning. For example, such heuristic strategies as journals, free writing, brainstorming, and mapping can stimulate thinking in a political science or management course as well as in a composition course.

Most instructors outside of the English department are also naive about the process of writing and they need assistance in devising assignments that are realistic in terms of that process. They need to know that prewriting activities facilitate composing, that an incubation phase helps students formulate ideas and achieve focus, that an informal outline is often more conducive to good organization than is a formal outline, and that several preliminary drafts are necessary to produce a polished final draft. Most important, instructors need to recognize that allowing students to revise and rewrite papers enables them to learn from their writing experiences. These insights into composition theory, as simple as they may seem to one who teaches writing, can be a valuable addition to the teaching of an instructor whose background is in another discipline.

In order to establish a writing center program that encompasses a diversity of disciplines, we must, therefore, modify our public relations approach somewhat so that instructors as well as students are involved. Good public relations are important to any tutorial program but are especially vital to one that is expanding in new directions. Although most public relations efforts are student directed, aimed at students who might use the center, a multidisciplinary program must direct its efforts primarily toward instructors. Once we go beyond the English department, where most writing centers are housed and where nearly all have very close connections, we no longer have direct, easy access to the instructors with whom we are dealing. A definite ef-

fort must be made to contact those instructors who belong to other disciplines. In addition, communication with these instructors is more difficult because they do not share our background in composition as do the instructors in an English department, where even those whose interests are decidedly literary have had exposure to the teaching of composition and are familiar with the terminology used to discuss writing. Any contact we have with instructors outside of departments of English must involve to a certain extent our educating them about the writing process and how it can be used to advantage in their classrooms. Thus, as we expand across the curriculum-out of our comfortable, but restrictive role as support services for departments of English and into the challenging world of science, business, and education, we must be willing to make contact and communicate with instructors whose backgrounds and interests differ from our own.

One of the most effective means of accomplishing this task is to arrange individual conferences with instructors. Whereas group presentations and memoranda are obviously a more efficient means of making contacts, they are far less effective. Individual conferences, time-consuming though they may be, afford the opportunity of not only communicating suggestions and ideas to instructors but also of gaining valuable information from them concerning the types of writing assignments that are typically made in their disciplines. In order to facilitate this exchange of information and to identify in advance those instructors who might be amenable to suggestions about writing assignments, a preliminary survey or questionnaire can be sent to instructors in each discipline or, if possible, to all instructors. This questionnaire, which should be as simple and brief as possible so as not to require much time on the part of the respondents, can elicit from instructors the types of writing assignments that they make in their classes. Then, using this information, a writing center director can make informed decisions about which instructors to approach and can enter the conference prepared to make specific suggestions concerning the assignments already used and to introduce appropriate new assignments and techniques.

Faculty writing workshops are another effective means of establishing contacts for a multidisciplinary writing center. These workshops can be made available to instructors from various disciplines but work better if they are designed specifically for a definite department or organization. Thus a workshop for business teachers might focus on new or changing rules of punctuation-for example, the use of the apostrophe in forming the possessive or the use of the hyphen in compound modifiers. Or a workshop for graduate teaching assistants might deal with the writing of resumes. If a general workshop seems more feasible, it should be devoted to a specific aspect of the writing process, such as prewriting activities or revising.

Once instructors are interested in the possibility of improving their students' writing and in using writing more effectively in their courses, a director can suggest a content-specific program that the writing center can administer to supplement a particular course. Such programs should be specific and focused, using, if at all possible, materials from the course involved. For instance, a supplementary program for a social work course could involve the students' learning how to write abstracts using appropriate journals from that field. Or a program for a language arts education course might concentrate on a review of sentence structure, using an elementary textbook. Although some new materials will obviously need to be developed for such programs, this task can be vastly simplified by using existing materials from the discipline in question. Not only does this simplify the problem of providing adequate materials but

also ensures that the materials used are appropriate to the purpose and content of the course that is involved.

Thus writing centers can play an important role in ensuring that students continue to receive instruction in writing after they complete their English courses. By working individually with instructors, offering them specific suggestions as to how writing instruction may be used in their courses and how we can supplement their course content with writing programs designed for their courses, we can expand our audience to include students from every discipline.

Writing center administrators were once portrayed as lonely figures, battling against the insurmountable odds of improving writing skills in a sea of illiteracy. If allies existed, they were thought to be found only in departments of English, where instructors were involved in the same task of attempting to teach students everything they needed to know about language, composition, and rhetoric. Other faculty members were all too often thought to be either sitting in judgment on our efforts, shocked by our inability to produce students who were competent writers, or to be themselves ignorant of the skills that we deemed of such importance.

So long as we continue to pursue our goals alone, we shall remain lonely and, for the most part, unsuccessful. Successful writing programs are those that involve the entire university community. Writing instruction, in order to succeed, must be reinforced in every course students take during their college careers. Just as writing proficiency is not attained in one English course, nor in two or three, neither can writing centers, no matter how illustrious their reputations or how dedicated their staff, effect a permanent improvement in the quality of a student's writing skills if these skills are not reinforced by writing experiences in other classes. If students are to learn how to write effective, literate prose, they must continue to receive instruction in writing and be encouraged to produce good writing throughout their *college* careers. As Richard Lanham observes, "Good prose does not come from a one-time inoculation,"<sup>2</sup>

In order to sustain the success that writing centers have enjoyed thus far, we must be willing to redefine our roles and expand our audience. Not forgetting our obligation to the remedial and freshman composition student, we must also look beyond these students to those who are not failing and are not taking an English course, but who are, nevertheless, interested in improving their writing skills. If we stop growing, if we cease to explore and expand in new directions, we become self-satisfied at best, stagnant at worst. Our expansion is limited only by our lack of imagination, our inability to recognize that an audience can change and grow.

## Notes

<sup>1</sup> William Stull, "The Writing Lab's Three Constituencies," *Writing Lab Newsletter*, Vol. VI, No. 5, p. 1.

<sup>2</sup> Richard Lanham, *Style: An Anti-Textbook* (New Haven: Yale University Press, 1974), p. 7.