

## High-Tech Staff Development

Jane Zeni Flinn and Chris Madigan

How do you refine an old skill (writing) while teaching a new philosophy (process), a new pedagogy (brainstorming, collaboration, peer response, etc.), and a new tool (computers) simultaneously? This is the dilemma a writing program administrator may face in planning staff development for a new writing lab or computer-equipped composition program. Our answer is, "Do it indirectly."

The Gateway Writing Project is a partnership of the University of Missouri-St. Louis, Harris-Stowe State College, and local school districts. Since 1978, we have provided workshops for writing teachers following the successful National Writing Project model. In the eighties, the explosion of microcomputers in the schools created the need for a new kind of training to integrate computers into staff development in the writing process. No model for this training then existed. How to teach what we did not yet know?

We decided to offer summer institutes where teachers would use word processing along with pen and paper as writing tools, and where they could discuss the emerging research. Starting in 1984, we worked closely with our strongest graduates, observing in their classrooms and talking with their students. We watched them weave the computer into the fabric of their process-oriented writing programs. Each year, learning with our teachers, we fine-tuned our model for staff development. Our work has been supported by major grants from the National Writing Project and from the Fund for Improvement of Postsecondary Education.

Our goal was not computer literacy. We wanted to make the technology transparent, integrating the computer without losing the focus on the writing experience. Shakespeare urged, "by indirections find direction out" (*Hamlet*, II.i.66). We have spent five years learning to implement indirection.

We have found that the computer itself often works as a cover for "indirect" staff development, enticing veteran teachers to attend a substantial course in teaching writing. Today most teachers come to us familiar with "the writing process"—all three, or four, or five, steps as set forth in their current textbook. Others teach what Hillocks calls the "natural" process—freewriting and peer response with minimal structure. If we were to say, "Come to our workshop and learn about the writing process," they would say, "We already know about it." But, by

indirection, we say, "Come and we'll show you how the computer can help you teach the writing process." They come, and often learn as much about writing as about computers.

In the National Writing Project tradition, we work with college teachers in the same courses as grade school teachers. The unexpected collegiality shatters myths and raises some good questions (e.g., "If you teach fragments in the sixth grade, how come my freshmen still don't understand what a sentence is?").

However, our approach is equally suited to specialized programs for college writing instructors and teaching assistants. Our institutes are designed to "show," not "tell"—the same principles Sally Reagan suggests ("Teaching TA's to Teach") for staff development at the University. To work with college staff, you may want to condense the schedule we are going to describe into a week or two before classes start. You might also spread it over a semester or an entire year.

The following pages will describe our writing project summer institute and the principles on which it is based. We'll show how writing program administrators can apply what we have learned to setting up workshops for their own staff.

## Institute Design

Today, our computer-assisted institute follows a plan quite typical of the National Writing Project (*Guidelines*). About twenty-five teachers are selected from St. Louis area schools and colleges for the five-credit graduate course, which meets at the University all day, Monday through Friday, for four weeks. The schedule and the invitational admission create a special intensity and fellowship.

Based on the summer institute model, we offer dozens of less intensive workshops. Most are sponsored by individual schools for English department, writing staff, or across-curriculum audiences. Working with these shorter programs has shown us which features of the institute can be changed without sacrificing quality.

We find that the open admissions workshops can be just as exciting as the invitational course. But if attendance is required the morale and the writing suffer. One-shot workshops have little value except for consciousness-raising. To make an impact on what teachers do in the classroom, a workshop should run for twenty to thirty hours. In addition, the group should meet for substantial blocks of time—we suggest sessions of two or three hours to allow for real writing and sharing.

In the summer, our staff is ample: one or two writing instructors from the sponsoring colleges and another from an area high school, often assisted by graduate student or faculty interns. We find that managing a computer-equipped workshop requires extra hands and extra support. Fortunately, that does not have to mean extra professors. In 1984 just 20% of our participants had any prior experience with computers; today about 70% come to us with some experience. We'll explain below how you can train computer-wise participants to assist with your program.

In all Gateway workshops, the syllabus is based on such writing-process topics as planning, revision, and assessment. The computer is not a separate topic, but is woven into each part of the syllabus. For example, when we introduce prewriting and heuristic strategies, we demonstrate idea-prompting software. When we deal with collaborative writing we also discuss teleconferencing and modems. (See Daiute's *Computers and Writing* for an extended example of this approach.) We focus on writing and teach most computer skills when writers need to use them.

Let's look more closely at the schedule of the summer institute. This plan has become the model for most of our full-day staff-development programs, regardless of length.

Morning is primarily class time; afternoon is individual writing and reading time. To start the day, groups of teachers meet over coffee and share their journal responses to reading. Currently everyone reads *Teaching Writing with Computers* by Rodrigues and Rodrigues, and a second book by Murray, Atwell, or Calkins, depending on the grade level they teach. They also choose appropriate material from the GWP collection (on permanent reserve in the university library) and from the many handouts.

The rest of the morning features presentations. As faculty, we usually introduce major topics such as "models of the writing process," always illustrating the concepts with an actual lesson to which the group writes. Most of the topics on the syllabus are then researched, planned, and presented by members of the group after coaching by the staff. These hour-long presentations work to decentralize instruction. We schedule three presentations concurrently so that each teacher has the experience of giving a lesson to peers.

You may wonder whether to delegate so much of your workshop to presentations. But we have seen this sharing of expertise pay off in better morale and mutual support among colleagues throughout a department. Presentations also connect theory with practice. We discuss our students' and our own writing processes, try software applications, and experiment with writing (clustering, guided meditation, leads, sentence modeling, and impromptu quickwrites)—sometimes by hand, sometimes by machine.

Later, peer groups respond to drafts of the assigned papers, an activity that spills over into a working lunch.

In the afternoon, participants read and write. During the first few days, we help them get comfortable with the computer through collaborative writing tasks (e.g., partners invent dialogue based on cartoons). Later, individuals may write at the computers, confer with peers or teachers on their drafts, or read from the GWP reserve collection in the library. Staff may help at the computers or meet at the seminar tables.

Along with a great deal of unedited journal writing, participants complete two major papers: a personal experience piece (narrative, memoir, letter) published informally for the group and a curriculum plan published and disseminated to a public audience. We find these two kinds of writing meet different needs and complement one another. Even in shorter workshops running for one or two weeks, we try to publish both.

The first assignment mimics personal essays English teachers often assign to their own students. One of our favorite topics—"Recreate an experience you had (good or bad) with a machine"—ventilates feelings about technology and tends to elicit humorous, not-too-intimate pieces (an exception was one woman's account of hours hooked to a blood platelet machine as her sister was dying of leukemia). Another topic—"Recreate a childhood experience"—generates more personal and varied writing; the child's voice jolts some teachers out of a too-formal, academic style, and the computer makes it easy to experiment with conventions for flashbacks, dialogue, and interior monologue.

Since we start this paper on the first day, people draft by hand in a journal, then enter, revise, and print later drafts with the computer. They save final copies to a class disk, and we prepare a letter-quality anthology. The faculty also write and publish the same assignment. This identifies us all as members of a writing community and demonstrates the power of two important practices: writing with students and publishing with computers.

The second assignment is to plan a curriculum strategy grounded in writing-process theory. The lesson should describe a role for the computer and suggest alternatives for readers with equipment and lab access unlike ours. Topics are based on the oral presentations, much as a journal article may be based on a conference presentation. Participants write these papers for an audience of teachers; most provide such support material as feedback sheets, workshop guides, computer lesson files, and evaluation rubrics. Each paper starts by reviewing theory and research, then proceeds with a classroom writing lesson.

The curriculum paper mimics the research and process papers teachers often assign to their own students. The fact that teachers invariably find it difficult brings home the real challenge of researched writing: to

synthesize data from different sources and to use it for one's own purpose in a text with the voice of a writer, not a committee.

Ordinarily three participants work as a team on such broad issues as "response to literature" or "standard usage." We urge teams to collaborate on the review of theory and research and to illustrate with three individual lesson plans. (After one unfortunate attempt, we don't *require* this; collaborative writing is sensitive, and some teams find it very frustrating to share ownership of a style.) For most, though, collaborative research is the high point of the institute and the task which wins them over to the computer. Each writer can draft a section, then merge files—one person usually revises for continuity, but the team talks and argues through the whole process.

Because all drafts of this paper are written on the computer, participants learn to generate ideas, organize data, and revise for publication on the machine. Because the curriculum guide is sold to schools, participants learn advanced computer commands (hanging indents, varied margins) for professional layout. This assignment is a "need-to-know" point for more sophisticated instruction in word processing.

## Space, Time, and Access

Most of our current summer institute happens in an oversized room with computers arranged around the periphery and conference tables set in the middle. A teacher's desk sits up front, near a rolling cart carrying a single computer under a large TV monitor. With this equipment, we can type in text and display it for the whole group. A presenter can demonstrate sentence combining on the monitor, then ask people to try it on their individual computers (Wright, "Teaching" 36). New equipment linking a computer to an overhead projector is even easier to read and less bulky than the monitor.

This environment is open and flexible. Activities flow freely as writers move about from the machines to their writing groups or conference sessions. We also have two breakout rooms for concurrent presentations. The rolling cart can be moved into one of them if needed.

Our setting now approximates that of a model writing center (Wright, "Hazelwood" 10-11). It is much more "user friendly" than our early settings for the institute. In 1984 we had two rooms—a writing classroom with movable chairs and tables and a lab down the hall with computers in straight rows. The physical and temporal setting gave a message that the writing course (AM) and the computer course (PM) were two separate entities, a message that contradicted our goal of an integrated experience. This kind of facility is still common at many colleges. If you have a poorly-designed lab, your best solution may be

working with the maintenance staff to rearrange the computers, then reserving a classroom adjacent to the lab.

We now have full-time access to about 20 Apple IIe's and 10 IBM PC's during the institute. We value having one computer for each participant, with access to the same machines their schools use. Everyone uses Bank Street Writer III (Scholastic), which includes a spell checker and thesaurus. Since we cannot teach the software of choice in every school, we choose a standard that is easy, menu-driven, and popular among both Apple and IBM users.

Each teacher normally spends about three hours a day actually writing at the computer, so even those who arrive with no knowledge of word processing become quite fluent. Each year, more people find computers to use off-campus (by borrowing machines from their schools or by purchasing them for their homes), gaining still more access time.

## Institute Principles

### Computers as Tools

Except for the first day when we talk about working memory and how to handle a floppy disk, our focus is on writing. Computers are taught at need-to-know points and most technical learning comes through "indirection." For example, when writers ask how to return the cursor to the start of the next line, we explain word-wrap. When they're ready to go home on the first day, they learn to save files.

### Reflection on the Process

Although much learning in GWP is indirect, the staff develops that learning by commenting as it happens. When a demonstration is delayed because a cable lacks an adapter, we talk about how to handle such crises in the classroom. When a writer calls a colleague to review a draft, we discuss how to foster spontaneous peer editing. Our most "telling" insights have come through this Deweyan reflection on activity in process.

Similarly, we encourage reflection on writing tools (Madigan 143). We may write with keyboard, pen, pencil, chalk, or even fingerpaint—but each tool lends itself to certain processes more than to others. Chalk on a blackboard is easy to erase, but hard to block-move. Text on a monitor is easy to rearrange, but must be fixed in hard-copy to take outside the lab. Sometimes we ask people to write, half working by hand, half by machine—then reflect on the differences. We also discuss the advantages of writing with multiple tools, perhaps clustering freehand in pencil,

drafting directly on the computer, recording peer response with pen on printout, and revising again at the computer (Flinn 24).

### Community of Teachers

In the National Writing Project, "teachers teaching teachers" has always been a key principle. Writing groups and presentations to peers help teachers gain the confidence they will need to teach their colleagues. When computers arrived in our institute, we found they brought new opportunities for peer teaching and shared leadership.

Rarely will teachers have enough staff in their labs to help their writers through the first stressful days. So we establish multiple sources of help in the institute, letting computer-wise participants assist the novices. Teachers learn by indirection how to manage a computer-supported classroom.

We train peer tutors by example. Untrained tutors tend to do too much for computer novices. We simply try to protect learners from disastrous mistakes, encourage experiment, help with problem-solving rather than give advice, avoid confusing beginners with multiple solutions, and practice debugging aloud. To encourage problem-solving at "stuck points," the tutor can verbalize what the writer's questions should be. Whenever possible, the tutor avoids taking control of the keyboard.

Instead of talking about peer tutoring, we model it, so that teachers can help it happen in their own classes.

### Community of Writers

Although we have always valued collaboration among writers, we find it tends to increase in our computer-assisted institute. Why collaborate? Some teachers resort to partner composing due to a shortage of hardware. Others try collaboration to reduce computer anxiety. We use collaborative tasks and texts to help writers grow more aware of their own composing processes (Bruffee, "Writing and Reading") and to create a context typical of business and professional writing but still rare in schools (Bernhardt and Appleby, "Survey").

In part because of such collaboration, we believe the computer has enhanced the context for writing in our high-tech institute. Since most participants still do not have computers at home, much of the drafting takes place in the class setting. The writing process has become public, open to view—a private struggle that we risk in a supportive community. The computer serves to intensify the focus on writing, instead of competing for attention as we once feared.

## Change at a Realistic Pace

However, in the first years of using computers in the institute, we found they often did claim center stage. A presenter would fumble with plugs and lose the point of the demonstration; a writer would fumble with primitive software and lose the flow of ideas. To survive, we had to ease our expectations for a time. We learned to be realistic about what staff and participants could handle, at least until all of us were comfortable with the technology.

For example, we began by demonstrating a variety of software. When this brought unnecessary confusion, we focused on just one word processor. Fewer programs meant less time fighting with the software and more time writing with it. Soon, we learned to use our standard word processor for a variety of applications. Instead of demonstrating special invention or sentence combining programs, we show how to use word processing to generate ideas or combine sentences. Rodrigues and Rodrigues provide many examples of such lesson files.

We also learned to be realistic about workload. People do most of their drafting during class hours, which can create an agonizing time crunch. We first dropped most participants' oral presentations to allow more time for writing. As more teachers came to us with computer experience, and as we grew more confident teaching in a lab, we re-introduced the presentations.

Similarly, for a time we eased our expectations for the written products. When teachers had to struggle with software and access, the quality of their publications suffered. But within three years we saw that trend reverse. Since papers are submitted on a class disk, we can quickly proofread to catch typos, standardize format, and even repair last-minute content inaccuracies. Today, our summer publications are more professional than ever.

## Conclusions

To summarize, we can offer three fairly simple pieces of advice to those planning to computerize a staff development program:

1. In planning your facilities, arrange as flexible a space as you can. We strongly recommend a large room with movable tables and chairs in the middle and computers on the edges. Invest in some form of computer projection equipment. Add computers and breakout rooms as you can. Physical layout, more than the number of machines, may be the key to building a community of writers.

2. In planning your curriculum, aim for a writing workshop and keep the computer in a supporting role. Teach computer skills and pedagogical

techniques indirectly, by modeling and by reflecting on the learning process. But recognize that the technology will temporarily claim center stage. At first, cut back on your expectations. As your staff and teachers become more computer literate, you can add assignments and raise editorial standards.

3. In directing your workshop, encourage all forms of collaborative learning: peer tutoring, paired composing, peer response, team research. Rely on your computer-literate participants as peer tutors. One of our teachers hangs a poster in her lab: "Ask three. Then ask me." Collaboration makes process public. It blurs the distinction between teachers and students, fostering community as you and your participants learn together.

These principles will help make you and your participants more comfortable during the transition to high-tech staff development. Just as important, they will probably transfer to teachers' own classrooms and labs. While learning to write with computers, participants will also be learning the writing process in a supportive workshop environment. What teachers do in the institute, far more than what they read or talk about, is the model for what they will do with their own students.

## Works Cited

- Atwell, Nancie. *Writing, Reading, and Learning with Adolescents*. Portsmouth, NH: Boynton/Cook, 1987.
- Bernhardt, Stephen, and Bruce Appleby. "Collaboration in Professional Writing with the Computer: Results of a Survey." *Computers and Composition* 3.1 (1985): 29-42.
- Bruffee, Kenneth. "Writing and Reading as Collaborative Acts." *The Writer's Mind: Writing as a Mode of Thinking*. Ed. Janice Hays. Urbana, IL: National Council of Teachers of English, 1983.
- Calkins, Lucy McCormick. *The Art of Teaching Writing*. Portsmouth, NH: Heinemann, 1986.
- Daiute, Colette. *Computers and Writing*. Reading, MA: Addison-Wesley, 1985.
- Dewey, John. *Democracy and Education*. 1916. New York: Free Press, 1967.
- Flinn, Jane Zeni. "Computers in the Writing Process: A Rhetoric of Tools." *National Writing Project/Center for the Study of Writing Quarterly* 9.2 (1987): 24.
- Hillocks, George, Jr. *Research on Written Composition: New Directions for Teaching*. Urbana, IL: National Council of Teachers of English, 1986.
- Madigan, Chris. "The Tools that Shape Us: Composing by Hand Vs. Composing by Machine." *English Education* 16.3 (1984): 143-150.
- Murray, Donald. *A Writer Teaches Writing*, 2nd. ed. Boston: Houghton Mifflin, 1985.

National Writing Project. *Guidelines for Site Development*. Berkeley, CA: National Writing Project, 1987.

Reagan, Sally Barr. "Teaching TAs to Teach: Show, Don't Tell." *WPA: Writing Program Administration* 11.3 (1988): 41-52.

Rodrigues, Dawn, and Raymond Rodrigues. *Teaching Writing with a Word Processor, Grades 7-13*. Urbana, IL: National Council of Teachers of English, 1986.

Wright, Anne. "The Hazelwood West Writing Lab: A 'Center of Excellence.'" *National Writing Project/Center for the Study of Writing Quarterly* 8.3 (1986): 10-11.

Wright, Anne. "Teaching Writing while Jumping through New Technological Hoops." *English Journal* 77.7 (1988): 33-38.

