1-1-1990

Tutors and Computers, An Easy Alliance

Janice Neuleib
Maurice Scharton

Follow this and additional works at: https://docs.lib.purdue.edu/wcj

Recommended Citation
DOI: https://doi.org/10.7771/2832-9414.1228

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.
In 1976, the year the Writing Center began at Illinois State University, we felt lucky to have two electric typewriters for the staff and secretary and a few manual typewriters on which tutors tapped out session notes and dashed out an occasional paper. By 1980 we had a mainframe hookup in the center and were keeping tutoring records on a cumbersome program that made us feel like rocket scientists at the time. In 1984 we flew to a conference in California on using computers for teaching and tutoring. We also visited the computer labs at Utah State and Colorado State to scout out potential improvements for our center and for the English Department. Soon after the trip we ordered our first IBM PC for the center. The six years since have reflected the national revolution in computer use.

By 1986, the English Department at Illinois State taught writing on computers to over 5000 students annually in nine fully equipped labs with IBM compatible Zenith computers, and the center had expanded to include a bank of ten computers for tutoring, tutors trained to assist day and night in the computer labs themselves, and sophisticated programs for every kind of record keeping and text analysis. Every staff member, including the secretary and student secretaries, had a computer and printer. All appointments, reports, and record keeping procedures were done on computers.

In 1988, a networked desk-top publishing lab added the graphic abilities of the Macintosh to the English Department's extensive array of computers. Steps away from the center, "MacLab" is easily accessible to students and staff working on writing projects. Now, in 1990, the only questions seem to be which classroom will be converted to computer use next and how soon all the center staff will have private lines to their offices so that their modems can be handy for communication with other center directors around the nation. We have
ambitions of implementing Joyce Kinkead’s idea, suggested in her article on the electronic writing tutor. She explains that computers could provide an added call-in service beyond the common grammar hotline. Students might use modems to request help during night hours and on weekends as well as during overloaded peak tutoring hours.

The potential for extending center services through electronics is just beginning to be understood. Kinkead warns of the dangers of the electronic revolution as well, noting that administrators long for a method of tutoring that is less labor intensive than one-on-one or small group. Her model of the electronic tutor requires that a real tutor answer the off-hours questions recorded on disk and respond with individualized advice (Kinkead 4), thus enabling tutors to extend their services to a wider audience over greater distances in more flexible time frames. We would like to see a further extension of her idea in the form of a national tutoring bulletin board on BITNET. On this board tutors would be able to seek advice and assistance in working with a client by entering a brief description of the case they were working with. It seems to us that an enormous amount of tutoring lore must exist in the writing centers across the country and that if we begin to record some of our problem cases and the steps we take to resolve them, we might not only refine our own abilities but contribute to the advancement of knowledge about composing.

Like Kinkead, we envision some potential misadventures on our journey into a future glinting with technological promise. To begin with, there will always be administrators who reason that if a computer can extend a tutor, it can eventually replace a tutor. A new president came on board at our school last year, a brilliant scientist who wanted to attach students to terminals to work through grammar exercises, thus saving tutoring costs. We explained that, in our opinion, the software available simply wrapped stone-age pedagogy in a futuristic package. We assured him that while CD ROM science experiments might work as well as real lab research, workbook exercises on parts of speech would interfere with the most valuable contribution the computer could make to writing, freedom to compose and revise at will. We added that research on computers and writing these days is investigating the question of whether composing on disk improves writing (Bernhardt), but that no one in writing centers or in writing instruction is continuing to research whether doing grammar exercises on disk improves writing. He was quite adamant that some students would prefer computers to people. Finally it seemed politic to grant his point, so we promised that we would investigate the idea of developing some sensible computer activities through an authoring system such as HyperCard. He in turn allowed that people were probably a better audience than computers for writing.

Quite recently, in March of 1990, we visited a high school writing center at Maine West High School in Des Plaines, Illinois, that uses split screens and
Hypercard stacks to program research materials into the computer. Thus students can work on complex research topics at the computer since they have the ability to access information through the banks of their own terminal or through the network link with storage in a central terminal in the writing center.

This technology provides an effective technique for tutoring research papers, and it seems to us an entirely sensible extension of the computer. No human memory can match the computer's ability to recall and sift information. However, in the present state of our knowledge about composing, we cannot tell the computer enough about how people learn to make it useful as a teacher.

While we wait for the Godot of artificial intelligence, we have begun to formulate some questions about tutoring on computers. The people who tutor for us now are second generation computer users. That is, they have come through school systems in which computers are a presence, and they have been reared as tutors in our system, in which computers are an assumption. As we wrote this article, we began to wonder whether computers had somehow gotten into their blood, and we began to ask ourselves questions about the quality of the tutoring experience. Is the tutoring different? How do tutors use the computers? What has changed in the way that both the tutors and students approach working on a paper? Has a revolution occurred in the ways that tutors and writers in general think about a writing task? We decided to interrogate tutors and staff on these issues. The answers to our questions yielded some information that gave us cause for reflection on the experience of learning in a writing center.

Our staff is probably relatively large as writing centers go. Four years ago our Writing Center absorbed six other tutoring programs in writing, reading, and study skills to become the University Center for Learning Assistance, eventually accumulating about 120 tutors. Thus tutors answering our questionnaire represented various constituencies and various theaters of operation in computers: the center, computerized writing classrooms, regular classrooms, and writing intensive courses across campus. The twenty-five tutors who work in computerized classrooms all tutor regularly on computers as they work with students, since teachers plan tutoring activities around the writing assignments that are designed for classroom production and revision. Those tutors are not included in our questionnaire data unless they also tutor in the center.

The data summarized here report on tutors who tutor writing in the center as a major part of their assignment.

1. Do you feel confident in the use of at least one word processing program?
   Yes 49   No 2.

   Which one? 36—Wordstar, 17—WordPerfect, 3—Microsoft Word (Some indicated experience with more than one program.)
2. When you tutor writing, do you assume that changes will be made on a computer disk?
   Yes 39   No 10
Does that encourage you to suggest changes?
   Yes 41   No 10
Do you follow up to see that they are made?
   Yes 40   No 5
3. How important is a computer to your own writing comfort?
   I never use one. 0
   I use one for final drafts. 2
   I enter my handwritten papers and edit. 7
   I compose on computer sometimes. 9
   I compose on computer whenever I can. 24
   If I don’t have a computer, I don’t write. 9
4. If you do compose at a computer, how long have you been doing so?
   Several years—3; 4 yrs—2; 3 years—6; 2 yrs—1; NA—39
   The transition was: quick—18, gradual—18, slow—3
5. Do you tutor at the computer terminals?
   Yes 12   No 36
   If your answer is yes, please describe briefly your experiences with tutoring on the computer.

   Responses to the questionnaire indicated that tutors in the center are largely confident in using word processing programs for their own writing needs and that tutors assume the students whom they tutor will use computers for revision of papers. Since all writing in the university is taught on computer, the tutors’ assumption that every student will be at ease when writing and revising on disk is understandable if not altogether warranted. Tutors volunteered that they felt instruction in software use to be an appropriate part of their task. Tutors indicated that they tutored in the use of word processing programs as well as in the use of PageMaker (a program which uses laser printers to produce text similar to typeset copy) on the Macintosh. Tutors also run style checkers such as HBJ Writer with more advanced students and then return to the text to decide whether the stylistic suggestions work in the students’ papers (Emmett, Partenheimer). Tutors’ assumption that everyone writes or ought to write on computers suggests to us that a revolution in our tutors’ thinking has indeed occurred.
What does it mean to assume that everyone writes on a computer? When we began tutoring twenty years ago, we would bring to a tutoring session romantic notions about the lonely writer, memories of the conventional product approach to teaching writing, and inhibitions about asking anyone to do much revision because getting a new final draft was so much trouble. Now we and our tutors believe people draft and redraft with ease and that they can work on a paper right up to the moment it’s due. We no longer picture the writer as the solitary creature laboring over texts which are painfully transcribed to paper. On our campus, to assume that computers are available is to assume that writers work in an environment which is socially constructed not just in a philosophical sense, but in a literal, physical sense. Most students don’t own computers; rather they work in a lab at the elbow of a student who may be a fellow English major or who may be from some far-flung corner of the academic world. Propinquity being the powerful cohesive force it is, students come out of hiding with their work, showing it to others and getting assistance (if not always improvement) from these interactions. The interpersonal dynamic which makes writing centers run and classroom peer groups run has now become available to writers in off hours as well. Of course not all is sweetness and light. We know many writers who are sociable to a fault, spending time helping someone run the laser printer when they ought to be working on their own papers. And the proximity of other writers brings out fierce territoriality on the part of those writers who in pre-computer days were most inclined to be defensive about their work. To assume the presence of computers is also to assume that writers have access to sophisticated graphic technology which can blend photographs with text, import numerical data from statistical programs to create charts and graphs, even do computer-assisted drafting of engineering problems in three dimensions. These expectations and experiences have expanded our sense of self as tutors and writers. We can hope that we model the new sense of self to our clients and that perhaps the next generation of writers won’t suffer from the math anxiety and the artistic phobias which limit our expressive abilities.

Consider too the fact that most of the tutors find composing on the computer to be important to their “writing comfort.” We got a sense of how much our own thinking had changed when we realized that we were surprised to find that we employed as many as nine tutors who did not compose on disk and another nine who did so only part of the time. We who direct the center do not write when we do not have a computer, short of grocery lists and postcards. We noted that nine of our tutors have contracted this new compulsivity, a kind of reverse computer phobia. Since we consider it an imposition to be asked to work without a computer, we transmit our feelings to tutors and they to students. Thus a powerful force is operating in the tutoring situation to socialize writers to the new medium of transmission of knowledge. Text is no longer paper; it is electricity. No longer fixed in its logical or aesthetic form, writing can assume an infinite variety of shapes and sizes, and it becomes more like singing than
speaking. In the computer world, we can all have a voice like Pavarotti’s. By comparison with text produced on a color monitor, print on paper is a pale and lifeless imitation of writing. When we bring to text the assumption that there are few if any limits on the forms of self-expression and when student texts become physically indistinguishable from the printed final copy of expert writers, student writers are encouraged to view their own work more seriously and published writing less idealistically.

One of the most desirable changes as far as we are concerned, the transition to composing entirely on screen, has been slower in coming than we wish. We know that most people can produce legible handwriting at no greater rate than thirty-five words a minute. A mediocre typist can produce sixty words a minute while a hundred words a minute becomes a fairly comfortable rate after one has been composing at a computer keyboard for a while. We don’t see writing as a race, but we do find the flexibility of composing rhythm an important part of our writing routine. We like to be able to work at the speed of thought, however fast or slow that may be. People who balk at composing on screen deny themselves this flexibility. We used to say that keyboarding skills were of no great consequence, that people would pick them up naturally as they worked with computers. We have evidence to the contrary now, and we would very much like to see keyboarding begun in the first grade. We are stern with tutors on the issue. We tell them, “You need to get past this morbid preoccupation with drawing in the dirt.”

As we asked the question about the transition from earlier writing preferences to writing on disk, we believed that most would say that the change had been “gradual.” We did not provide or ask for definitions of “quick,” “gradual,” or “slow,” feeling that the subjective sense of speed in the transformation was more important than a particular length of time. In fact, nearly half those who responded indicated that once they began to write on disk, the transition was quick. We interpret this response to mean that, after the program was mastered, tutors experienced the move from pen or typewriter to computer composition as a kind of new developmental stage. Our experience as teachers and tutors using word processing lends credibility to the developmental model. In our years of teaching writing on computer, we have found only one student who decided to return to her earlier mode of composition after she became accustomed to writing on disk.

The change has been reminiscent in a way of the seemingly miraculous transformation that six-year-olds undergo as they learn to read. Our own memories of learning to read resonate with the swift acquisition of computer literacy reported by many of our tutors. Once we had broken the code of language and, later, of computers, a relatively simple set of procedures gave us command of breathtakingly powerful modes of expression. The eighteen tutors for whom the transition was gradual remind us of our classmates who dutifully
completed their reading exercises, who were at length convinced of the utility of reading, but who never seemed to find the joy that we did in the process. The few who still do not like to use the machine are all too sadly familiar as the non-readers who struggled and eventually fell by the wayside, unable to understand the symbols that would give them access to the world of text. We can still see their faces. These observations bring us to the final question, which confirmed our intuitions about what kinds of tutoring were going on in the center itself. Many of the tutors who work in the center also work in freshman composition classes where they tutor at the terminals by making a suggestion here and there, assisting with an idea, or suggesting any of the varied changes that can happen in a multiple drafting process common in a computerized classroom. In the center, however, tutors and students both chose to work over hard copy at the tables rather than to work together at the terminals, despite the presence of more terminals for any given hour than there are tutors assigned. We usually have from six to eight tutors on duty each hour during the eight-to-five time slots, and there are ten computers for tutoring in the center. The terminals in the center are in use all day long, but the users are tutors or students who work individually on personal projects and then come together to share hard copy of a draft.

Tutors indicated when asked about this phenomenon that they felt more effective discussing the hard copy and sending the students back to the computer to work when a new draft was completed. The tutors agreed that working together at a terminal hampers efficiency and does not contribute to good communication between tutor and student. Only a few tutors felt comfortable making suggestions for revision at the terminal next to the writer. Perhaps the sense of appropriating the paper was stronger when the copy was so vulnerable to alteration. One tutor, Gretchen B., described her emotions as she worked in a computerized writing class: “What they had written was not necessarily bad, but my fingers itched to start them over from scratch. I know I can’t do that; after all they are the authors. I do my best to suggest revisions and help them to understand their teacher’s comments.” She resisted her temptation to appropriate the text and let the writers go on alone at the terminal. In any case, the tutor’s itch to move in too closely on the writer at the terminal accords with our strong feeling, voiced in conversation with our new president, that the computer has as much potential for impairing as for improving communication.

It’s important that tutors continue to consider text as a human, not a mechanical, issue. Back in the days when writing centers were called “clinics,” we used to think about tutoring as a form of intensive care. We were glad when the term lost currency because we don’t know many medical people who are capable of dealing with humans humanely. In all too many cases, human services of every kind are so heavily mediated by procedure and technology that the people involved lose the satisfaction of relationship. Just speaking for ourselves, we detest mechanized and institutionalized forms of charity, and we did not go into teaching because we wanted to dispense aid with impersonal efficiency.
Finally, though, we applaud nearly everything about the use of the computer in the writing center. Consensus indicates that computers help writers at all levels, especially those who have basic problems to overcome (Rodrigues). So what should a center director do to get started on computer tutoring? Bonnie Sunstein offers a useful checklist for choosing software (1), but we think that the issues go far beyond software. The computer facilities on campus limit or empower a center director’s creativity in using computers while the philosophy of the center and the school also provides limits and opportunities. We would urge an aggressive pursuit of the best technology available. Waiting to be noticed and given computers won’t do, and neither will a timid memo to the next person up the chain of command. Center directors should visit the best facilities they can find, take not just a notebook but a camera with them, make an appointment with the president upon their return, and argue that having a computer in front of every writer is a legitimate institutional priority. That kind of argument will work at the highest levels, and it will increase the center’s visibility.

Since our center began, we have seen a steady stream of dignitaries parading through, accompanied by campus officials who can finally point to something concrete and impressive in the humanities area. We used to be annoyed that they couldn’t see the importance of the human contacts we were making, but we now realize that to those who are not part of the tutoring enterprise, computers make an a fortiori argument for the value of tutoring: an activity that takes so much technology must be important. We explain to our visitors that the computers are there to close the personal distance between writer and tutor. So far electricity has warmed our tutoring atmosphere; we hope to keep it that way.

Resources on Computers

The following list of sources includes recent works on computers as well as useful earlier works on computers in writing centers.


Janice Witherspoon Neuleib directs the University Center for Learning Assistance at Illinois State University. She teaches courses in tutoring and pedagogical theory. She has published in *College English, College Composition and Communication, The Journal of Basic Writing, The Writing Center Journal*, and the *Writing Lab Newsletter*, as well as contributing to other publications on writing centers.

Maurice Scharton has directed the writing assessment program at Illinois State University since 1980. He teaches rhetorical theory and writing. He has published in *College English, Research in the Teaching of English, the Journal of Developmental Education, Computers and Composition*, and the *Writing Lab Newsletter*, among others.