Wiring The Writing Center

Eric Hobson

Published by Utah State University Press
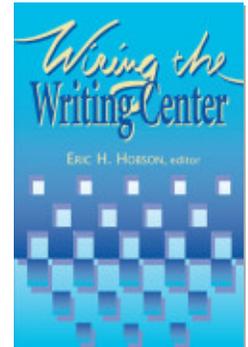
➡ For additional information about this book

https://muse.jhu.edu/book/9314

Virtual High School Writing Centers
A Spectrum of Possibilities

Pamela B. Childers
Jeanette Jordan
James K. Upton

*T*HE THREE OF US HAVE BEEN INVOLVED IN SECONDARY SCHOOL WRITING CENTERS for longer than we like to admit. Although our ages, backgrounds, and schools differ, we agree that computers, when used in writing centers, are tools for teaching writing across disciplines. We believe that writers should not be forced to do all phases of their individual writing processes at a computer [1]. We also are aware of the new literacies (Heath 1990; Selfe 1989) necessary to use this tool and realize that our students are far more comfortable with them than we are. However, we have witnessed the tendency of teachers to use all the whistles and bells without considering whether writing and learning are improving because of them. We agree that word processors have improved our typing ability, but is that what writing with computers is about?

While we each teach writing and English in secondary schools and direct WAC-based writing centers, our situations differ in many ways: Jeannette's school is a large public one, nationally recognized for excellence and situated in an affluent, suburban community with education as a top priority; Jim's school, also public, is urban, with innovative teachers functioning under extreme financial constraints and with a diverse population and discipline problems; Pam's institution is a relatively small, affluent, private day/boarding school for boys, dedicating major financial commitments to technology and educational endowments. The following excerpt from one of Jim's letters exemplifies the dichotomy of our environments:

> Another bittersweet letter. I take pride in that you and others are interested in our writing center efforts, even though we are literally a center without walls . . .or floor . . . or ceiling . . . or chairs . . . or desks . . . or any other physical objects save filing cabinets or resource information in the English office. And, in this age of technology, we have no computer(s) let alone a lab designated for writing center use. I read about what other centers are doing in using technology to enhance their services

and visit other centers which are technology-oriented, and I become very frustrated and even angry that our language arts department and writing center have been virtually ignored in our district's technology utilization plans.

Jim is aware of what technology other secondary school writing centers have; however, Jeanette and Pam have the opposite concerns. They both have the technology but remain cautious about how it fits into their writing center goals. They do not want their writing centers to become computer labs (Graves and Haller 1994), and they do want to keep the important dialogues about writing alive (LeBlanc 1994) and foremost in their facilities. These tensions reveal a number of important questions: Do we as writing center directors adapt our philosophy and goals to the technology or do we adapt the technology to our writing center philosophy and goals? Do we allow the techies to tell us what we must do with the technology in our writing centers and WAC programs? Do we "re-vision" our philosophy and goals based on what we know will empower our students to be better writers in the twenty-first century?

In this chapter, we provide detailed histories of each coauthor's writing center, its mission, and the role(s) technology play(s) in each program. Each coauthor also provides an assessment of technology's advantages and disadvantages within secondary school writing center contexts. Following these presentations, we summarize current technology's advantages and disadvantages and make predictions about technology in twenty-first century secondary school writing centers.

GLENBROOK NORTH HIGH SCHOOL WRITING CENTER

Overview

Glenbrook North High School (GBN) is a public school with a primarily college-bound student body located in Northbrook, Illinois, a suburb about 20 miles north of Chicago. Stu Snow and Paula Williams created the writing center in 1988 when they cleaned out a storage closet and gave up their planning periods to work with students on writing. At about this same time, they collaborated with English teachers from other area high schools to form the North Shore Writing Center Consortium to bring together secondary teachers interested in developing writing centers and to support them as they planned and implemented their programs. Technology was a frequent topic of discussion: Were they going to include computers? If so, would that be the focus? Each school ultimately worked out its own system—some "heavy tech"; others "no tech"; the rest in between. GBN combined its tutorial services with technology as it became available.

In 1990, GBN's writing center, The Write Place, underwent a massive reconstruction. No longer was the writing center just a closet with teachers volunteering their time. The district purchased 30 Macintosh LC computers for the English Department and expanded the writing center facilities into two additional rooms. Unfortunately, the writing center was closed for the year as teachers waited for the

computers to arrive and the rooms to be remodeled. Meanwhile, the superintendent mandated a writing advisory grade in English, social studies, science, math, health, and business and created the position of a writing specialist in each school.

The Write Place's expansion continues: the writing center has 35 Macs and 1 PC; the school literary magazine, newspaper, and yearbook staffs create all of their layouts in the desktop publishing area, which houses six PowerMacs, scanners, digital cameras, and a multimedia station for digitizing sound and video. Students use the writing center facilities to work on any writing assignment, and all staff may reserve the computers for their classes and consult with the writing center staff. In addition to the center's computers, teachers and students have access to three other Macintosh labs and two PC labs, networked and with a T1 line direct internet access. Twelve Macintosh and four PC laptops are available for staff checkout, and 30 portable word processors are available for student signout from the writing center. Additionally, all departments have access to portable multimedia presentation units.

Although The Write Place is affiliated with the English Department, it is actually a school-wide resource. The writing center is made up of three adjoining rooms: the conferencing area/WAC room, computer lab, and desktop publishing room. The conferencing area/WAC room is where most of the individual conferencing takes place and where we keep the writing resources for WAC. Writing center staff members usually work in this area, but venture into the adjoining computer lab to assist teachers when full classes utilize the center. The computer lab is a large room that can accommodate a class of 30 students and has a teacher station that projects images onto large screens for demonstration/presentation purposes. A smaller computer room, the desktop publishing area, is located off the main computer area. All areas are separated by walls that are glass from about waist high to the ceiling so that people can see into the various rooms. All of the rooms are connected by doors to allow free movement among the rooms.

Another massive renovation project will move the center away from the English area to the very front of the school along with the new library. This location will allow extended hours and easier access for students and community members. Currently, our writing center is open 15 minutes before school starts and 30 minutes after the last class ends.

Despite the physical and staffing changes, The Write Place's basic philosophy remains. The writing center is more a service than a location; it is the staff rather than the technology. It offers a nonthreatening atmosphere designed to help writers identify, understand, and refine their personal writing processes. As stated in The Write Place training manual, staff "offer questions in place of corrections, support instead of criticism, and understanding rather than evaluation."

GBN has made a substantial staffing commitment to the writing center. A computer technologist, writing coordinators, teachers from across the disciplines, and students all work together to keep the writing center a beneficial service to the school.

Technologist: A computer expert with excellent people skills, he staffs the lab throughout the day, assists students with their individual questions, works with teachers, and presents to full classes. He also assists the literary magazine, newspaper, and yearbook staffs, including late-night deadline sessions. Additionally, he services the computers, orders the software, and is entirely responsible for the operation of the computer lab.

Writing Coordinator: This is a 4/5 teaching position shared between Stu and me. Responsibilities include: supervising the writing center, running the writing across the curriculum program, training and supervising student tutors, developing outreach programs, coordinating staff development with regard to writing issues, proofing materials mailed from school, staying current with writing topics, communicating information to faculty, conferencing with students, coordinating all writing contests, maintaining the writing center website, working with faculty on professional writing, and developing workshops for faculty and students.

Cross-curricular staffing: Science, math, social studies, PE/health, and English each have a WAC teacher representative who works in the writing center. They work one period a day in the writing center, attend meetings, and function as liaisons between the writing center and their respective departments. Representatives were selected from these disciplines because teachers in these subjects are required to give "writing grades" on the students' report cards in addition to the regular subject grades.

Students: Approximately 50 students serve as Write Place staff members each year. Students apply as juniors and, if selected, are trained and work in the writing center for their junior and senior years. Students work 90 minutes each week in the center and sign up for their slots based on their free time. They receive .25 credit on a pass/fail basis for their work. In addition to working in the center, students attend monthly training meetings and participate in the center's outreach programs.

With several computer labs throughout the school, we have repeatedly emphasized that we are a writing center and not a computer lab. The premise that computers are merely tools for writers to use guides our choices regarding technology. Students come to the writing center to do their writing for all curricular areas because of the available technical and academic personal assistance. Consequently, we made the choice not to have internet access on the computers in the writing center even though the wiring for it was present. We did this because all other labs have access, and we wanted to keep our focus on writing. Students do their research in other labs, but still come to us when they're pulling it all together for their presentations and papers. The Write Place is, however, networked to the school's other labs so students and faculty may access files they've created and saved elsewhere.

Advantages of a Secondary School Online Networked Writing Center

Theoretically, students using online services can access the resources of the writing center and ask questions of the staff at any time from any location. Students can log in from their homes late at night and investigate questions that arise as they write. This sounds great because most students do their writing on their own computers at home. High school students have very little free time during the school day because their days are filled with classes and after-school activities such as sports or work. The only time they really have to write is when the writing center is closed. An online writing lab allows accessibility at any time if someone is there to respond. Additionally, the online writing center encourages independence and self-sufficiency. As we prepare adolescents for college, part of what we need to do is to allow them the chance to work on their own and learn what strategies work for them. Sometimes adolescents become dependent on their teachers, lose confidence in their own instincts as writers, and are unsure what to do if their teachers aren't available. Secondary teachers are usually easy to find, however, and students get their questions answered. They won't have that luxury when they go to college and find that their professors have specific office hours on certain days.

Actually, the primary advantages to the secondary online writing center are more for outreach than direct writing instruction with our own students. Accessibility to resources outside our school is a very useful aspect of being online. Additionally, with an online writing center, students can collaborate with and get feedback from other students whom they would never be able to work with under different circumstances. Another advantage is that schools with internet access but limited funding can attain the same resources as those which are more affluent. Online writing centers can remove or at least diminish some of the geographical and financial barriers that many schools face.

Disadvantages of a Secondary School Online Networked Writing Center

Even though I "jumped on the bandwagon" and followed the lead of university writing centers, I see problems with OWLs at the secondary level. That doesn't mean that they shouldn't exist or that I'll be pulling our site off the web. Instead, it means that we as high school teachers must step back and examine what our students really need as young writers. We can't just do things at the high school level because they work at the college level. Even though many high school writing centers are based on university models, high school faculty adapt their writing centers to fit the secondary setting. Even so-called "college prep" high schools such as ours are NOT colleges. Our students may come off as being mature, but they are still adolescents who present unique problems and opportunities.

As such, developmental issues are a main concern in considering online services and high school students. These writers are in the process of learning how to become better writers and need the personal interaction that happens in a face-to-face (f2f) conference. The most effective way to teach writing is through the

one-to-one tutorial model used in writing center conferences. In the writing center, we work in conjunction with classroom teachers, who would like to be able to meet with all of their students but just don't have enough time given the high student load and hectic schedules. Our primary goal as writing center staff members is not to make the paper better but to help students become better writers. To do that, we guide students along, prompt them with questions, respond to their questions while we teach them what kind of questions to ask about their texts. Most questions generated at first by high school students deal with grammatical issues because they often don't recognize the "bigger" problems with their texts. Although the major concepts we work on in the writing center are focus, organization, and development, students don't normally come in with questions about those topics. It's more vague: "Look this over and tell me what you think" or "Check it over to make sure the grammar is right." Part of what we do at the high school level is teach them in the conferences to look at their whole piece and what they're trying to say. It is through this dialogue that students learn. We work with them so that they have a better understanding of themselves as writers and how to approach their texts. Through their visits to the high school writing center, students hopefully learn to ask the bigger questions about their texts and address those issues in their writing. I don't see how this personal interaction can be effectively duplicated online.

Their lack of maturity and confidence poses another problem with online feedback: students are very emotional about their writing and have fragile egos. Comments made online lack the nonverbal cues that help the writer and staff member understand each other.

Another problem with OWLs is the logistics in general. In order for students to access the OWL, they must sign on to the internet and go to the website. For our students, that means using the modem and dialing up their service. It's a time-consuming process that they're not likely to use. If they have a question, they'll ask somebody at home, wait and ask someone in the writing center in the morning, or just blow it off. Also, since many students are working on their papers the night before they're due, the turnaround time that happens with their online questions is just too slow. By the time one of us gets to the questions, the students are already at school and can just as easily ask us in person. Or, it's too late, and they've already handed in the paper.

BURLINGTON COMMUNITY HIGH SCHOOL WRITING CENTER
Overview

Burlington Community High School, located in the city of Burlington, an urban setting in Iowa, is a four-year high school of approximately 1600 students with an "Alternative School" of approximately 150 students at another campus.

The writing center is literally "the idea of a writing center." After investing $100,000+ to research and develop a writing center and after documenting its

valuable services for students, staff, and the community (and winning an NCTE Center of Excellence Award), the district discontinued funding. We continued to operate the center with volunteers who worked during their prep time (which raises many ugly contractual issues and professional/personal conflicts)—currently four teachers. We do utilize student tutors for many of our services, but even these efforts are limited by lack of location.

Our center's mission statement involves providing four services: (1) drop-in or assigned remediation, reinforcement, or enrichment services to individual students or groups of students; (2) in-class presentations and interactions about writing-learning activities, i.e. research processes and products, prewriting graphic organizers, response techniques; (3) work with all staff on development of writing-to-learn and writing-to-show-learning techniques and strategies by also functioning as the clearinghouse for storage and sharing of such teacher-developed activities; (4) 'extra' writing and learning related activities beyond the school day such as our 'Study Skills Night' and our work with students and parents on college entrance and scholarship writings. These efforts have expanded to work with local business managers, secretaries, etc.

The staff is obviously a paradoxically diminishing increasing problem. While seven teachers volunteered to work with students or other classes during their planning periods, now four do. I work part-time as the district's 'Excellence' facilitator, so my time for center work has been lessened. Some volunteers became tired of harassment from other teachers about their choice of how to use their prep time and frustrated that the administration and board have never expressed any appreciation for their efforts and have made no indication that future funding is possible. I provide this background not to suggest those of us who continue to work are somehow heroic/idiotic, but the background of the center and how it is viewed by staff, administration, and the board will dramatically impact the teachers' attitudes in using any future technologies we may be able to designate for center use.

Clearly, our center operates on a most informal basis. The list of teachers willing to work with students either during their planning period or before/after school is posted outside the English office, and students who wish to meet with a teacher contact the teacher directly or leave a note in the teacher's mailbox. Most teachers who work as writing center tutors either stay in their rooms during their planning period or leave a note indicating their location.

The most 'public' of our work is the activities we sponsor after the school day; i.e. our 'Study Skills Night,' 'Read Around the Clock,' work with writing contest entries, work with college applications and scholarships. As I indicated above, we do work with local management and secretarial groups in improving communication skills.

Our use of technology in center work is clearly in the B.C. (Before Computer) age. Our computer availability in working with students is limited to a computer a teacher may have in his/her room or the computers available in the small computer lab in the library. Some writing teachers used to utilize the Mac lab in the

business department to teach writing when the lab was free, but staff reduction has eliminated any free periods in the lab.

Despite our past of doing without, there have been some indications that we may move into technology-supported education. As part of our 'Excellence' program, all teachers have been afforded the opportunity to take computer courses through the district, and many have taken advantage of this opportunity. However, not all teachers have access to computers or to the software used in the classes.

Beginning in the 1997-98 school year, the State of Iowa is providing $325,000 a year for the next five years for our district to implement an approved technology plan. At BHS, all teachers will have a Mac 475 or Mac 575 computer installed by the fall of 1997, and the entire building will be networked to the office. Supposedly, each teacher will also have access to the internet. There has been little discussion of how many printers will be available or where these printers will be located. Many have asked about scanners, HyperText, HyperStudio, PowerPoint, and other sophisticated software, but no one has an answer as to what software will be included with the machines or will be available as options.

The language arts department made a most effective appeal/argument to use either the 'technology' or 'Instructional Support Levy' money to create a networked computer lab for the department, but we were told that there is no room available for such a lab."

Advantages of a Secondary School Online Networked Writing Center

Those of us who work in the 'idea of a writing center' can only speculate about the myriad of advantages of an online writing center to individual students and to our center's efforts. Clearly, such a center would enable a student to seek and provide a wider range of responses to works-in-progress, allow for greater information access through the Net and students in other schools, submit writings electronically, develop technologically supported relationships through email sharings, and a host of other benefits to the individual.

We see the networked lab as a more effective means to teach prewriting and revision skills, to practice effective proofreading/editing skills, to teach research via the Net, and other technological dreams.

Disadvantages of a Secondary School Online Networked Writing Center

We literally don't know of advantages or disadvantages of an online center . . . except we already work with students who see the computer and software (research paper software) as the end of the writing/learning process. They assume that work done on a computer is somehow superior ('good enough') simply because it was done on a computer. They fail to see that the computer is a tool just as a typewriter and paper and pen are tools to help people discover and share their perceptions of the world in which they live. We do sit with students at monitors and work with them on their writing and thinking skills, and we believe the

interaction between the writer and the reader and the text, whether on paper or on screen, is the key to effective tutoring.

THE McCALLIE SCHOOL WRITING CENTER
Overview

The McCallie School, located on historic Missionary Ridge in the city of Chattanooga, Tennessee, has approximately 760 day/boarding students in grades 7-12. It is an all-male college preparatory school with an afternoon coordinate program with Girls Preparatory School, is active in the Tennessee Association of Independent Schools and the National Association of Independent Schools, and is accredited by the Southern Association of Colleges and Schools.

I started the Caldwell Writing Center (CWC) at The McCallie School in the fall of 1991 after a year of planning. Having previously created a writing center at Red Bank Regional High School in Little Silver, New Jersey, I was aware of the advantages and disadvantages of computers in a writing center. When I first visited McCallie, all offices contained computer terminals, all faculty had Mac Classics and printers, and students had access to Macintosh computers with dot matrix printers in the computer lab. Because these were the computers of choice at the school, I designed the CWC with all Mac Classics and HP DeskWriter printers. The computers were connected to a Mac SE30 fileserver, plus we had an LC and Apple LaserWriter at my station for faculty use. Over the next five years, faculty began purchasing computers for home use through a school no-interest payroll deduction program, and we added a Quadra 650 to the CWC. As software required more memory, we began adding to the memory of the Mac LC and Classics to make them last another year. In the meantime, a unilateral decision was made over the summer of 1995 to convert to an all-PC campus. Two new PCs with an HP DeskJet printer were added to the CWC, and I was given one of each at my station as well. The following year all Classics were replaced by PCs, and the three DeskWriters were replaced with one HP LaserWriter. Even though I had requested a Power Mac, I was told that there was not money for such "questionable technology." The LC and Quadra were put in a special area with the Apple LaserWriter. As more students needed access to Mac computers, another LC was moved into the CWC. Also, over those years we have added four Alpha Smart or Alpha Smart Pro portable word processors for students to sign out. These became very popular with students who did not own computers. Students would take them to class or home for the weekend, then they could come to the CWC and send their text directly into a Word file to print on either a Mac or PC. By the fall of 1997, there were over 250 computers available on campus, with internet access and email capability for the use of all students and staff.

The initial commitment to the CWC computers fell mainly in the hands of the Caldwell family who had created the endowed chair in composition and funded the computers in the CWC. By 1995, McCallie had taken on a major commitment to technology throughout the school. By the fall of 1995, all faculty had a PC and

printer on their desks, courses in Windows, Word, Access, Excel, Netscape, and html were offered, and DTFs (Designated Technology Facilitators) were selected for each department. As a member of this group, I have remained involved in what is happening with technology, yet most of the decisions are made elsewhere in a technology committee that includes administrators and the director of technology. The commitment has included the addition of computer projectors in many classrooms and a technology room called the Sand Box where teachers may use scanners, digital cameras, editing equipment. Through funds provided by many alumni, McCallie has made a major financial commitment to technology.

The CWC's philosophy has not changed since we opened its doors in 1991. It is "a low-risk environment where there is a reverence for writing." Just as Jeanette's and Jim's facilities, we provide many services for students, faculty, staff, and parents. Our students may drop in, come with a class, or schedule individual conferences. Through workshops in the CWC or in classrooms, we are able to focus on particular aspects of writing from how to take a timed essay to how to determine authentic research on the internet. Our faculty and staff use us as a resource for creating writing assignments and assessment tools, designing writing-to-learn activities, helping with fund-raising letters, using online/phone grammar hotline, answering questions regarding use of technology, and serving as a resource for finding appropriate writing materials. Each year I offer workshops for new teachers and departments to meet their writing in the disciplines needs. Faculty come to the CWC to ask about writing contests, professional writing, grant proposals, and ways to work with other teachers to help their students learn. We also answer parents' questions and help them with projects, as well as serve as a resource for alumni.

Located in the middle of the hallway on the third floor of the Academic Building, the CWC has full windows towards the hallway and overlooking the city and mountains in the distance. The room contains a divider that can be closed to separate the computer side from the workshop side. The computer lab is located in an adjacent room and can be used for overflow during non-teaching periods. The staff includes a full-time director, part-time assistant director, and night writing assistants. All staff have been trained in responding to student writing as well as use of computers for writing. Just as in Jeanette's writing center, we focus on asking questions to help students become empowered to improve their own writing. As director, my job involves overseeing the daily functioning and staffing of the writing center, teaching the peer tutoring course, counseling faculty on writing assignments and assessments appropriate for meeting their goals, giving mini-lessons on writing in the disciplines to classes, assisting faculty with their own professional writing, acting as a liaison in pedagogical debates between classroom teachers and administrators, keeping all records of use of the CWC, offering faculty workshops, preparing materials for faculty and student use, and acting as a writing resource person for the school community. Steve Reno, my assistant, spends his mornings teaching composition at the University of Tennessee at Chattanooga, then works

with our students in the CWC as well as teaching one tenth grade English class. Just as Jeanette has a male counterpart, I highly recommend teams of male and female writing center staff. Students, in our case boys, often prefer to work with Steve because of the outstanding rapport he establishes with them.

A peer tutoring elective course is offered; sometimes 3-4 students will sign up for the course taught by the director. The CWC is open weekdays from 8 a.m. - 4 p.m., Sundays from 7-9 p.m., and Monday through Thursday from 6:30 - 8:30 p.m. Students also have access to staff through email and phone during other hours.

Students primarily use the 15 PCs and 3 Macintosh computers for word processing, email and internet access. We have T1 lines, networked lines and servers that enable students to go directly to Eudora and Internet Explorer from the CWC. They may check their mail from home, dormitory room or anywhere on campus. They may also access their files anywhere, so that if they start a file on Word 97 in one location, they may save it to their own file on the T Drive and access it from any other location. Our standard software includes Office 97.

Unlike some writing centers that consider themselves computer facilities, we are a writing resource for students and for staff that uses computers to teach writing. CAI software is not part of our environment in the sense of "drill and kill"; rather, we use software programs as resources for particular writing, thinking and learning activities. For instance, we have NIV Bible Study, CollegeView, StudyWorks, and other CD programs installed on many of the computers for use in conjunction with discipline-specific writing assignments.

This year the school is providing an ordering service so that students may purchase Toshiba laptops that can be plugged into our own network. Although not currently required, the administration is studying the possibility of making McCallie an all-laptop school in the near future.

Advantages of a Secondary School Online Networked Writing Center

The greatest advantages of an online, networked writing center should be immediacy of access to information, but then that assumes that the system is working, that everyone knows to back up all files, and that students know how to locate credible research online. I especially like the speed at which one can ask and receive answers from colleagues, collaborators, experts, and students. Phone tag can take days, and one may still not get the information in a timely fashion; whereas, an article, a URL or other information may be shared within a single morning or afternoon. For instance, when I am helping a teacher design a writing activity he wants to use for his math classes when they visit the writing center, I can send him a draft of the assignments and assessment, he can revise and return them to be logged on all computers before the students arrive. We don't have to photocopy the directions; they are merely downloaded. Instead of hard copy for the students to print out, they email their writing to each other and/or to the

teacher with copies to me. I set up new mailboxes for different projects so that we can keep records of all this work. Also, we conduct writing and thinking projects as part of collaboratives with college students. Without email and internet access, the students would not be able to discuss the readings on a website and email each other for writing and response. These are a few advantages as well as the more obvious ones of ease with collaboration and publication.

Also, having an online, networked writing center prepares our students for other college experiences with writing and technology. Former CWC peer tutor Tripp Grant emails from college: ". . . working with Eudora last year saved about thirty stress points for me this year. Learning the whole email and internet thing last year has helped me so much already this year. I have so many teachers who want homework emailed to them. All my new friends hate to use it because I think they are unfamiliar with it. I am very comfortable with the technology used here because I used it at McCallie" (9 Sept. 1997 email).

Disadvantages of a Secondary School Online Networked Writing Center

The biggest disadvantage of an online, networked writing center is the possibility of losing f2f time with students and dependency on computer technicians and programmers who may control what hardware and software you get without considering how you might use it. In many situations, I know that if I had the student read his draft aloud to me, he would have caught his own mistakes. However, when he merely sends a draft to me and I respond with comments in all caps, brackets or bold, there is no dialogue. Less responsibility for learning seems to fall on the student.

Just in the last week, our networked system was down periodically over four out of five days. Students who planned to have their work done early couldn't do their research anywhere on campus, work on their writing, print out drafts, or even get on the system. My fear with a school full of laptops is that the now more-frequent excuses of "the network was down" for not doing one's writing on time will increase even more.

Another problem with technology in writing centers is that writing gets pushed further from the physical space unless we stay on top of the situation. We have become more technologically trained people "policing" computer use in writing centers and trying, at the same time, to maintain some sense of atmosphere appropriate for writing.

Every year more students are coming to secondary schools computer literate; newer operating systems and versions of software become available, and we are focusing more on the subtle differences of software than on organization, content, structure, purpose, and audience for a piece of writing. I hear many of my secondary and college friends, too, talking about getting hardware and software changes with no manuals or consultation before the decision has been made. What then occurs is that writing center personnel, just as classroom teachers,

spend more time worrying about the operation of the technology and less time responding to writing, thinking and learning. What I hear again and again is that the top priority has become technology rather than learning. Schools talk about budget crunches for salaries and decent learning facilities, while spending sometimes hundreds of thousands on technology. It's a tradeoff for sure.

CONCLUSION

Summarizing our thoughts about technology in secondary school writing centers is not easy. We certainly agree that we must prepare our students to use technology *before* they go to college or to work. We also agree that the technology should be used to support our WAC-based writing center philosophy and goals. That is, technology should be used to support and enhance writing, thinking and learning as well as to improve student attitudes toward writing. Finally, whether working at a monitor or with hard copy (paper), fact-to-face interaction is a vital part of what we do and why we do it. That part of our job involves much more than just writing, thinking and learning; it involves verbal exchange, negotiation, and socialization skills in a "low-risk environment," as Pam calls it. Jeanette makes the point that our secondary students "are in the process of learning how to become better writers and need the personal interaction that happens in f2f conference . . . I don't see how this personal interaction can be effectively duplicated online." Jim agrees, saying that the interaction among writer, reader and text, "whether on paper or on screen, is the key to effective tutoring." We see technology as merely something to support what we do but not to replace it.

Jeanette brings up an interesting question about email and internet use: Do we eliminate email and internet access in the writing center if it is available elsewhere on campus so that our facility focuses on writing? Pam's feelings are mixed. Although she hates "policing" internet and email abuse while students are in the writing center, she uses both for writing activities in classes across disciplines. The whole question of credible research on the Net is part of our work with writing of research papers, explaining about plagiarism, and teaching appropriate use of citations. She knows, too, that many colleges also use both as part of their everyday writing.

Don't get us wrong; we appreciate the ease of professional communication with colleagues through listservs and email, and of writing collaborative works such as this (If Jim had been able to email his drafts, they could have been cut and pasted into this piece rather than typed. Also, we would have been able to communicate more frequently to get feedback of drafts. Believe us, we would have preferred writing this chapter with everyone online). However, for secondary school students, how does an online writing center help them? It is easier and faster for them to pick up the phone and call us or wait until the next morning to catch us in person rather than to send a question or document and wait for a response in a timely fashion. Since many secondary school students still don't

have access and/or don't write their papers until the wee hours of the night before they are due, how would an online writing center help them?

In his latest letter to Pam, Jim admitted that he has actually "received a new Mac with an email address. It is a Mac IIsi, and no one knows where it came from." Since he spends so much time on new learning and teaching innovations, we look forward to seeing how he will effectively use his limited technology. One thing is clear to all three of us; we will continue to learn and discover new ways to improve student writing and thinking with technology as a tool. Our heads are not in the sand; however, we will also not be brainwashed or "glitzed" into believing that any technology is more important than our interaction with students of all ages and ability levels to improve their writing, thinking and learning.

NOTES

1.   One irony of working collaboratively on this chapter is that two of us have access to email, while the third must resort to "snail mail."