# COMPUTERS, INNOVATION, AND RESISTANCE IN FIRST-YEAR COMPOSITION PROGRAMS

Fred Kemp

8

Writing instruction has traditionally drawn its legitimacy from an essentially Platonic and largely intuitive presumption that perfect form in writing exists and that successful writing students should model their writing on it. Our long-term dedication to prescriptive grammar and the modes of discourse have both drawn from this presumption and fed it, supporting hundreds if not thousands of years of teacherly admonition first to discover this ideal and then to emulate it. The usual handbook rules of writing, of course, are incrementalized aspects of this form: stepby-step directions leading to the idealized end product.

Postmodernist notions of local knowledge and the authority of discourse communities completely undermine such sclerotic concepts of effective writing, and writing instruction specialists have largely adopted these notions and rejected fixed models of effective writing in favor of adaptive principles usually generalized as the "rhetorical" concerns of audience awareness and responding to context. The problem is that an effective and universally accepted pedagogy has not arisen from a rhetorical rather than prescriptive emphasis in writing instruction. There are reasons for this, but the problem of a lack of accepted pedagogy based upon postmodernist emphases is most acute in large composition programs in which classes are taught by graduate students or paraprofessionals. In effect, the professionally trained scholars-in many cases the WPAs-are saying one thing and many of those who actually do the teaching in the classrooms are defaulting to something similar to what James Berlin and others have called "current-traditional" instruction, or the age-old effort to peel away error until only the ideal expression remains. No matter what we at the top of the theory food chain are learning and espousing, what composition students actually encounter is largely a nineteenth-century approach.

A hugely significant proportion of first-year composition students are thus affected not by a failure of rhetorical or instructional theory but by a failure of administrative implementation. Large university composition programs face a daunting revolving door of graduate-student faculty that, for a variety of reasons, don't buy into the authority of kairos or peer interaction or the drafting process. Instead, intuitive ideas of how people should learn to write better are perceived of as "natural" or "what has always worked" and quickly defeat more sophisticated concepts arising from the scholarship in the field. Many graduate students, like students everywhere, are good at recognizing on which side the bread is buttered and responding appropriately during orientations and workshops, but once inside the classroom, when the door is closed, often default to "tried and true" methods that have certainly been tried but hardly ever been proven true. This action is not the result of malevolence or intellectual sabotage, but of human nature, which often rebels when first engaging counterintuitive theoretical propositions. Some of these graduate students will recognize later in their career the value of what they couldn't recognize in the first several years.

But the problem remains that most of the country's first-year college students are undergoing writing instruction that is not effectively informed by the best thinking in the field. And the problem lies not with theory but with administration, not with ideas but process. Those of us trained in English studies are pretty good with ideas but maybe not so good managing organizations or-dreaded term-human systems. We constitutively don't like human systems, seeing in them an inevitable diminution of individuality, transforming people into the railroad ties described in Thoreau. But we are confronted by the need, if we wish to have any effect at all on what people actually do, to translate ideas into action-into widely distributed action-and if we want our instructional ideas to actually affect what students do to learn to write more effectively, we need to better understand how people must work together to achieve more than any single one of them could. Our effort to transform first-year composition at Texas Tech University is not, as some have said, a response to pressing fiscal demands or a response to pressures from our higher administration, and certainly not a manifestation of our will to control. What we've done at Texas Tech is attempt to merge postmodernist principles of peer interaction and contextualist writing in the usually inhibitive environment of first-year composition. We think we are learning a great deal about our students, our teachers, and-given the response of WPAs-about our colleagues across the country.

### A CHANGE IN COMPOSITION AT TEXAS TECH

In the fall of 2002 the first-year composition program at Texas Tech University implemented a series of instructional and administrative changes that could well prove to be the closest thing to a genuine paradigm shift in composition at the university level in over a hundred years. At Texas Tech the role of "teacher" has been divided into two separate instructional roles, that of "classroom instructor" and "document instructor." In its rawest form, the system separates classroom instruction and draft commentary. The grading and commenting on student writing is spread throughout the writing program, done anonymously, and most student writing receives two readings, with the grades averaged for a final grade. In its first semester of implementation (the fall of 2002), over 91,000 pieces of student writing were entered and successfully evaluated and commented on, but not by the classroom instructor. In the last two years, we have evaluated an average of 110,000 pieces of student writing a semester. We are calling the integration of our local Web application with this separating of classroom and document roles "ICON," for "Interactive Composition Online."

ICON is enabled by database-driven Web software written at Texas Tech (TOPIC) for the explicit purpose of supporting a large state university first-year composition program. Students turn in their documents through Web browsers, do their peer critiquing online, and receive their comments and grades online. The database manages the huge distribution of student writing, critiquing, grading, and professional commenting. The Web application handles the considerable logistics of distributing documents for grading and commenting; managing quotas for the document instructors; sharing syllabi, assignments, and writing criteria across the system; managing how many critiques are conducted by whom for whom; assigning late and no-turn-in penalties; maintaining the grade books and absence accounting; and performing a dozen other information management tasks that such a large and necessarily coordinated enterprise entails. At any minute from noon to midnight we can see up to 150 students working on the system from dorm rooms, the library, university labs, and apartments-turning in work, critiquing, accessing their progress, and sending e-mail from the Web application. In my seventeen years working in computers and writing, I have not seen of, heard of, or read of a "paperless" composition instruction engaged so coherently in affecting so many students and instructors.

We have, of course, encountered serious problems-probably the most interesting of which does not concern the computer application or database, the pedagogy, the students' ability to handle computers and the Web, administrative resistance, or a lack of committed, energetic, collaborative effort from our faculty and staff. The most interesting problem has been the resistance of the teachers themselves, a mix of a little over fifty graduate students (equally divided between MA and Ph.D. students) and seven lecturers (or paraprofessionals). What I have called the "psychology of loss" dominated the thinking of most of these intelligent and genuinely dedicated people in ICON's first semester-in spite of numerous orientation and training sessions, extensive attempts to explain the benefits of such a program, and almost universal acceptance of the advantages of what we are trying to do by nearly everyone but the teachers themselves. The rest of this paper will describe those benefits and advantages in relation to a maddeningly difficult-to-articulate sense of sheer "wrongness" on the part of those who have been teaching in the traditional "self-contained classroom" mode.

I believe that what we are doing at Texas Tech is a clear model for composition instruction that will be replicated in many locally specific incarnations in the next ten years, although certainly not accepted universally or perhaps even by a majority of large composition programs in that time. The reason for a lack of acceptance will rest not in instructional value or technological difficulties, but in the "psychology of loss" that we are encountering-a mostly unstated and unexamined attitude that permeates the principal motivation of those who become English teachers. When challenged, in what I consider to be our genuine desire to understand the downside to what we are-at great personal and professional effort-trying to accomplish, those who are troubled by our attempts at a gut level can really say nothing concrete. They agree logically with the advantages and benefits of our changes, but it all continues to seem wrong to them and, personally, a deprivation of sorts. Future changes of this magnitude in English composition programs will undoubtedly encounter such an attitude, perhaps to the extent that English departments further distance themselves from a public perception of relevance and currency.

#### HOW DOES ICON WORK?

Most controversially, class time in ICON is reduced to half of the usual two class meetings a week, and class size is increased from the previous cap of twenty-five to thirty-five students. To compensate for lost seat time and larger classes, the online assignment schedule is nearly doubled, to over thirty writing assignments a semester. We are making the clear assumption that writing instruction is improved when the principal effort for the student is shifted significantly from listening and discussing in a classroom to writing itself and receiving peer and professional commentary. We are moving the center of gravity of teaching from what happens between teacher and students in a classroom to what happens between teacher and students in a piece of writing. Ideally, of course, we would like both, but the exigencies of time and effort make emphasizing both nearly impossible to carry off in a large composition program.

One of the usual arguments against large class size is that it increases the grading for the teacher. Program directors have assumed, and I think correctly so, that more students probably means fewer writing assignments and less robust written commentary, simply because of the load on the teacher. But ICON provides a means of increasing and professionalizing the commentary without placing the burden of such grading on the classroom instructor. The necessary trade-offs end up benefiting the learner.

The basic assignment unit in the curriculum is the "essay cycle." The essay cycle includes drafts, peer critiques, writing reviews, and—in the research course—annotated bibliographies. The pattern of assignments in the essay cycle is repeated weekly and usually includes three turned-in written assignments: a draft, two prompt-driven peer critiques of other students' drafts, and a writing review, which reflects on previous efforts and feedback and projects changes for a new draft. The student develops the writing review from the comments received from peer reviews and the program's "document instructors." The next week proceeds to a second revised draft, new peer critiques, and another writing review.

The typical essay cycle repeats this pattern over three weeks. Therefore, a semester in 1301 (the initial composition course in first-year composition) requires four of these essay cycles, with each subsequent essay's criteria growing more rigorous in a movement that begins with the typically conceived "personal essay" to a concluding "classical argument," modeled on coherently defended academic writing. All these documents are submitted to TOPIC, a Web application that stores the documents in an extensive database (Microsoft's SQL) and then makes them available for a myriad of purposes. Document instructors will read them, comment on them, and grade them. Drafts for peer critiquing and for instructor commenting are stripped of identifying information and directed to staff and peers automatically. Drafts are read by at least

two document instructors and any differences in grades reconciled or, if the difference is too great, made available to a third reader who is not informed that he or she is a third, rather than a second, reader.

Following commentary and grading, the student writer can read the commentary and see how the grade affects the compilation of the student's overall grade for the course. As soon as peer critiques are completed and the student writer has completed his or her two critiques of others' drafts, the critiques are available and are used (together with document instructor commentary) for writing the writing review—a critical assessment of what needs to be changed for the subsequent draft. Additionally at this point, the document instructor's commentary and grading can be reviewed by administrators and rated and commented on.

This and much more information related to the students' turned-in writing assignments (a little over thirty a semester) is held in fifty-eight database table fields (integer, text, dates, and Boolean types) associated with each piece of student writing. The prodigious and complex movement of various kinds of writing and assessment could logistically be managed only through a digital document management system like TOPIC and accessed by students, instructors, and administrators only through a dispersed global medium like the Web and Web browsers. Using paper, ICON's current scale of interactivity and automatic distribution would be impossible and, undoubtedly, never attempted. ICON is a true instructional and administrative application of the Internet and digital capabilities.

But do students learn to write better, engaged as they are in all this writing and critical reflection of their own and other students' efforts? The technology infrastructure is clearly driven by a peer-interactive process pedagogy extending back to the early work of Peter Elbow, Kenneth Bruffee, Ann Ruggles Gere, and other advocates of drafting and peer review. More about the pedagogy later, but now I will consider some rather obvious benefits of the system to assigning and handling student work.

## BENEFITS TO ICON

I don't have enough space to present the program in its full richness and complexity, but the principal gains, instructionally and administratively, are as follows. I have listed them in descending order of importance.

By objectifying the grading, we remove the long-standing student complaint that some teachers are biased. What my daughter has called, when she heard about what we are doing, the "suck-up value" is mostly eliminated. So is the charge that a particular teacher simply doesn't like a student for such and such a reason and has therefore given him or her a bad grade. The classroom instructor avoids Elbow's "contraries" of coach and cop and becomes simply and significantly the coach, the mediator, and the students' advocate. If a student finds the grade received from the document instructor to be problematic, then he or she appeals to the classroom instructor and defends an increase, which the classroom instructor can provide depending on the effectiveness of the defense in terms of the shared criteria.

By distributing grading and commenting across the entire system of fifty-seven professionals, we have required all those engaged to share the same criteria and terminology of effective writing. Nobody likes the idea of coercion in English departments, but the simple fact is that eighty sections of the same course should, in all rationality, be teaching and evaluating in terms of the same general criteria of what is effective and ineffective writing. Such has not been the case in the courses that I have supervised and, it seems clear to me, not in the courses of the great majority of composition programs in the country, no matter how we WPAs may have finessed the whole requirement for consistency. In Texas Tech's composition program, ICON, a grader who is not evaluating in terms of what the classroom instructor is teaching quickly comes to light, as does the classroom instructor who is not presenting the criteria that the pool of document instructors is basing their judgments on. In some ways, we have turned our students into quality control agents, for they are the first to recognize discrepancy between what we say we teach and what we look for in our evaluations. There is a kind of "truth in teaching" dynamic in our program that gives me hope that even writing instruction can be handled fairly across a large group of students.

We can, *as a system*, turn our pedagogy from one that values seat-time in class to one that values writing, critiquing, rewriting, and reflection. For years I have promoted peer interaction and a process model of multiple drafting in teaching orientations and workshops, mostly to no avail. The graduate-student classroom teachers, principally interested in their own literary, creative writing, or technical communication studies, constantly devolve to what Seymour Papert has called "teaching by advice." It is, frankly, much easier to talk in front of a room than it is to assign many pieces of student writing and respond to them competently. ICON requires from thirty to thirty-five pieces of student writing a semester, all of it graded and commented on by document instructors. The focus on numerous pieces of student writing and on commentary as a separately engaged act allows us to train effective and specific commentary in ways not possible previously.

Training of new graduate-student faculty is hugely facilitated. We experience about a 30 percent turnover of graduate-student composition instructors every year, for the usual reasons of graduation from the MA and Ph.D. programs and of moving on to sophomore level literature, creative writing, and technical communication classes. At least 50 percent of our incoming graduate instructors have never taught in a classroom or experienced any kind of teacher instruction or, for that matter, taken the class (freshman composition) that they are teaching. A considerable portion of our teachers, perhaps as high as 75 percent, state openly that they are not interested in teaching composition as a professional goal or a personal interest. ICON allows for a graduated integration of these folks into the classroom instruction and document instruction tasks, as opposed to the old process of putting them through a class in teaching composition and then giving them one or two selfcontained sections, often a traumatic experience both for new teachers and their students.

Those graduate students, and this may include as many as 20 percent, who do not want to teach composition but want to be employed as graduate part-time instructors, can, *if they want*, not ever handle a classroom but simply fulfill the terms of their employment by responding to student documents online. For those Ph.D. students in the semester of their dissertation defense, or for technical communication MA students who want to go into industry and not teach at all, this option is a godsend.

The separation of document commentary from classroom instruction admits possibilities for complex management of discipline-specific writing and writing across the curriculum that can allow engineering students, for example, to write about engineering subjects in a composition class, or engineering students in an engineering class to write documents that are "document instructed" by English Department graduate students. Plans for both are underway.

The stunning amount of discretionary data that is captured by the online interaction of so many pieces of writing, critiquing, and commentary gives us a sort of running assessment of correlations between assignments and student writing, student writing and instructor commentary, and peer critiquing and reflective judgments on effectiveness—all of it tied to grades, retention, attendance, turn-in rates, and student evaluations.

There are many other advantages to ICON, certainly not the least of them being oversight and accountability. Since all student writing, commentary, and grading is online, administrative staff can monitor the quality and timeliness of such work. Many teachers look askance at this, of course, but we should not privilege the prerogatives of the graduate-student instructors over the instructional gains that we hope for the freshmen. People who are conscientious and proud of the work they do should not balk at having that work reviewed. The collection of large amounts of data relating to the efforts of students, instructors, and administrators allows for what is being increasingly called "courseembedded assessment." The data necessary for collection and distribution of so much student and instructor writing is to a considerable extent the data that reveals the effectiveness of the various writing and evaluation tasks in which the participants engage. The objective nature of student writing evaluation provides a consistent ongoing measure of writing effectiveness that does not require outside testing and evaluation.

Even more important than oversight and accountability is the "learning organization" character of ICON. The extensive amount of data collected in the system during its normal instructional process can be "fed back" into the system in a feedback loop that informs the participants in the system of what and how the system is producing and how best each individual member can improve the process. Web interfaces are constructed that configure and display the data the system collects to students, teachers, and administrators in a way that informs them, on-the-fly, of how their efforts (collective and individual) are influencing whatever "product" of the system is defined. An example is that all second readers of a draft must read the comments posted by the first reader. What is "good" or "bad" about such comments (reviewed anonymously, of course) makes an impression upon that second reader, and undoubtedly influences further commentary by those second readers (who become first readers on other documents). In this way, good commentary tends to drive out bad and the entire commentary system experiences what we consider an automatic norming of draft commentary.

That, of course, was not the original perception of many of the graduate-student instructors and the lecturers. And herein lies the most intriguing issue in the implementation of ICON at Texas Tech University, what I am calling the "psychology of loss." When confronted with the advantages to undergraduate students in terms of consistent and coherent across-the-board writing criteria, active learning

(writing-based, not listening-based), objective assessment, distributed work load, and so forth, the usual response is agreement, but with the additional comment: "But this is not why I became an English teacher."

The tension, therefore, is between the instructional advantage for students and the personal predilections of the teachers. And a number of those teachers make the argument that, in essence, what is good for them is also good for the students. The general proposition is that "something" happens personally between teacher and student in the self-contained classroom that will be diluted or eliminated when the assignments and evaluation are spread across the system of 2,600 students. Something will be lost.

I am not entirely unsympathetic to this point of view, often sincerely and emotionally conveyed to me in the numerous discussions I had with the instructors over the spring and summer of 2002 who were destined to be most engaged in these changes. I think I understand the desire to influence young people personally and the reasons why teachers resent any forces that seem to interfere with that presumed relationship. But my constituency is the 2,600 undergraduate students who take composition courses each semester. As WPA for Texas Tech, I have invested a sense of personal mission in giving all those students the best and most consistent instruction I can. My own personal "psychology of loss" has been played out year after year when a minority of first-year students, perhaps no more than 5 or 10 percent, has encountered erratic, possibly random, and even harmful instruction. Ten percent of the first-year students in our program may seem inconsequential, but that percentage can number 260 individual young people. Maybe I can discount them as a percentage, as a batting average, but I cannot discount them as 260 individuals who can be seriously affected by their experience in their first few classes at the university. Of course, the number could be higher. Lacking the kind of data capture that ICON provides, we are only guessing at the previous system dynamics.

It is a systems problem, and English departments are notoriously resistant to (even repelled by) systems problems. But if we are to escape essentially nineteenth-century models of instruction and take full advantage of the new information management and distribution capabilities of the Internet, as most other professions have, then we must look at the deep-seated attitudes of our teachers and compare their hopes and fears to the advantages new processes can provide our students. If we are indeed losing something by rearranging the student-teacher relationship the way we are at Texas Tech, then that loss must be better articulated by those who most feel it. On the other hand, those of us promoting what we consider to be changes for the better must understand these difficultto-pin-down attitudes and address them specifically or risk experiencing unexpected and sometimes shockingly passionate resistance.

## THE REASON FOR ICON

ICON is the result of a nearly twenty-year exploration at Texas Tech of what was called at first "computer-assisted," and then later "computerbased," writing instruction. The English Department at Texas Tech was among the very first departments on campus to have a "microcomputer lab" for instructional purposes (1985); the first department to schedule classes full time in the "lab"—soon to be called the "computer-based writing classroom" (1988); the first department to install Ethernet connections throughout all offices and computer-based classrooms (1989); the first department to deliver instruction from its own computer servers (1989); and the first department to establish its own Web servers (1993). Belying the usual perception of English department at Texas Tech has actively sought out new pedagogical uses for computer technology and especially computer networks.

At the heart of this long effort (and its affection for computer networks) has been the conviction that students learn just about anything better through structured peer interaction—in the case of writing instruction, by reading each other's writing and responding to it in accordance with well thought-out prompts. The prompts guide critical investigation of the elements of effective writing, and by so doing establish an explicit understanding of those elements in the peer reviewers. The act of explicitly articulating the effectiveness or lack of effectiveness of a piece of writing back to the writer firms such understandings in the mind of the peer reviewers and strengthens their ability to assess their own writing critically during revision. The peer reviewer is the one who gains most from the critical act, although the writer gains too as the skill of the reviewer increases.

The problem with such peer interaction has always been logistical. It is difficult if not impossible to distribute or "publish" the students' writing across a wide group of readers. Using copy machines for such purposes has always been awkward and expensive, and the amount of paper such machines produce inhibits the sharing of comments among students; students end up with stacks of papers that get read only by the most diligent. Although writing theory almost exclusively centers upon cognitive issues (how students learn), I've found that the most inhibiting issue in peer interactive or collaborative learning to be simply how to get the right words distributed to the right people.

And here is where digital electronic media present a specific value for those who want to distribute student writing among peers. When one clicks "send" on an e-mail, that message can be sent to a thousand people (or ten thousand) as easily as to one, and for the same cost and practically instantaneously. The same is true for a piece of student writing.

In fact, computer networks are miraculous publishing devices. Scholars in the humanities have for too long focused on dogmatic assumptions about computers based upon classic works such as 1984 and ignored the rather obvious fact that publishing and publication capabilities are immensely increased by digitalization and computer networks. Words, through computers and computer networks, can be duplicated and distributed with practically infinite iteration, at practically zero time, and at practically zero cost. The core of the humanist capability—the written word—experiences greatly enhanced replication and distribution through the computer.

This increase in publishing capability should provide a benefit for those who want to see students reading more of each other's work, and it does. Student writing which is put online can be viewed by any number of students and responded to—with no copying or paper costs, no transmission costs, and no costs whatsoever outside of maintaining the infrastructure (which is usually in place for other purposes anyway). There is a long-standing argument, of course, that some students don't have the computer access that other students have; but in fact, as the computer becomes more and more a standard instrument in the homes and apartments of people (and even more so an assumed tool of higher education), the "computer-access" argument declines in relevancy.

## THE PROBLEM WITH THE PEDAGOGY

There is a problem with what might be called a "peer-interactive pedagogy" that directly addresses the difficulties encountered at Texas Tech with the three-year implementation of ICON. The peer-interactive pedagogy assumes that students learn most effectively by working with each other about and through their own written documents, not by listening to teachers in a classroom or memorizing writing concepts from textbooks.

Defending such an idea with teachers who may not be inclined to consider the matter so intently becomes a problem in a large composition program. The focus must be drawn to what it is specifically that enables one writer to write effectively and causes another to write less so. Can one person teach another how to write effectively by providing what might be called "general writing advice"? The model for depending on "general writing advice" draws from an intuitively powerful sense of mentorship, the presumably unassailable notion that the novice learns at the feet of the expert. It seems reasonable that those who wish to write better should study the texts and listen to the words of those who are more effective writers. Experienced writers try to distill their own "writing knowledge" into various forms of "general writing advice" in order to inculcate in the novice the rules, habits, and experiences are encapsulated in more or less generic form in textbooks, instructional material, classroom lecture, and (among more enlightened instructors) in classroom activities of one kind or another.

The assumption is that *how* to write well can indeed be so encapsulated, transmitted, and reconstituted in another human being. Most writing instruction is based upon a not closely examined assumption that the *stuff* that enables effective writing can and should be managed as a sort of freight moved from one place to another. From this assumption arises the usual dependence on textbooks, teacher prescriptions, and drill and practice. A teacher moves the freight however best he or she personally thinks will "get through" to the student, and the presumption is that some textbooks and some instructional presentation gets the freight through more competently and with less loss in transit than others.

The presumption at Texas Tech under ICON, however, is that learning to write well does not actually engage the "freight" that the field is so eager to move from expert to novice, that such freight (which I am calling "general writing advice") is the result of a kind of self-conscious analysis that certainly hones one's ability to analyze writing but does not directly assist one's writing ability. Writing is largely an unconscious act that engages a huge set of relatively hidden decisions determined mostly through habit and based upon one's "verbal ear." Most people who write well have achieved the requisite skill by doing a lot of reading, usually beginning at an early age—developing a sense of how the written word is effectively manifested through sheer reading experience in much the way that spoken languages and dialects are acquired. A facility with "the King's English" is most capably gained by being around people who speak it a lot, and the same is true of writing ability.

This presumption of how one learns to write well would seem to encourage a return to reading-intensive writing courses (the "reunification" of reading and writing in composition courses that many of my graduate students yearn for), but it doesn't. The reading habits and "verbal ear" acquired over ten or fifteen years cannot be gained in fifteen weeks of force-feeding essays by E. B. White or even Erma Bombeck to nineteen-year-old freshmen. Those who read a lot like to read, and those who read very little don't like to read, and that rather self-evident dynamic cannot be reversed in a first-year composition course without coercive measures too draconian to contemplate. For most of the nineteenth century, the written word was the principal means of distance communication, nightly family entertainment, and access to the revealed word of God, and as such was intimate to the daily activities of the educated and about-to-be-educated. The current competition that the printed word encounters among information and entertainment sources is too evident to be detailed here, but one need not look to failures in modern schooling and writing pedagogy to see why Johnny and Susie don't write well: Johnny and Susie are now engaging hour by hour a confusing welter of verbal and visual activities that strip the printed page of its once transcendent allure.

So far it would seem that a presumption that one cannot learn to write better by assimilating "general writing advice" and trying to translate it into specific writing habits, or by catching up on fifteen years of lost reading in a fifteen-week course, would seem to make any writing instruction a hopeless business. But there is another way to "jump start" writing ability even in nineteen-year-olds that does not require a lot of memorization or reading (or at least the memorization of writing precepts and the reading of great essays, neither activity being suited to the temperament and patience of most of our composition students): this pedagogy can be called "peer-interactive process pedagogy."

Most good writers have what I call in my introduction to teaching composition course an "unarticulated capability" in writing. They write well and make few errors, but until they become teachers themselves, they are often at a loss to describe what syntactically or even stylistically they are doing well. When one has assimilated effective writing habits (usually through all that out-of-school reading), one does not need a self-conscious analytic knowledge of what one is doing. It is only when a writer tries to critique another person's writing that such analytic terminology comes into play, a problem that often constitutes a year or two of angst for new English teachers. Establishing this "articulated capability" in writing, building, and applying an analytic nomenclature in order to report back to a writer the characteristics of effective or ineffective writing does two important things: (1) it allows for a self-conscious negotiation of those characteristics, and (2) it brings them into conscious play when the critiquers write and revise their own words.

What a "peer-interactive process pedagogy" employs is an extensive set of student activities that requires students to explain writing elements or the characteristics of effective writing *to other students*. It is only through the act of articulating specific characteristics of writing that the students learn those characteristics and develop a personally useful nomenclature of effective writing that then can be brought into play when writing decisions are needed. It is certainly important what the student knows, but that knowing is achieved principally through the act of telling. It is also through the student's telling that the evaluators can determine whether the student does indeed know or not know what we presume we are teaching. The huge amounts of distributed feedback such a pedagogy requires can only happen, as I said above, in a databasedriven Web application.

This peer-interactive pedagogy makes sense to the composition theorists at Texas Tech, but it doesn't necessarily make sense to teachers who have responded well, even affectionately, to a mentorship model. The mentorship model is deeply invested in the assumption that learning is tied to the personal, perhaps even inspirational, relationship between a teacher and a student. And almost all of us in teaching have arrived here because we wanted to be like one of our own teachers. We have found something powerful in one or more teachers we have had in the past and want to be like those who have so influenced us. Nothing could be more natural.

What complicates this desire in the case of graduate students teaching first-year composition is that the teachers and the students are thrown together in a coercive situation. Few general education first-year composition students want to be taking composition, and few English department graduate students want to be teaching composition. The former don't see a need for it, and the latter desperately want to teach literature or creative writing to students who want to learn about literature or creative writing. The academy has managed to thrust large numbers of people together who don't particularly want to be together. Most of the courses that one takes in college are, we presume, taken by people who want to take them and are, we also presume, taught by people who want to teach them. First-year composition is, in this regard, quite aberrant.

Some English graduate students who are teaching composition want to invoke the mentorship model, sometimes quite emotionally so, and are very often disappointed when their students do not respond as they themselves responded to their own teachers in the past. Being new teachers, they are often influenced by romantic notions of teaching that don't fit the first-year composition classroom well. Complicating all of this is the fact that composition courses engage a skill, writing, that bears large psychological implications about one's intelligence and education. One may not be able to "do" math or biology and not feel too bad about that lack, but to not be able to "do" writing well suggests deeper personal deficiencies. Criticism of one's writing strikes hard, even with those we tend to think of (perhaps fallaciously) as intellectually unsophisticated. The disconnect between the presumed relationship between first-year undergraduate students and graduate-student teachers in composition that both sides are sometimes harshly aware of makes a mentorship model of instruction impossible except in the rare cases of graduatestudent teachers who have an overwhelming charisma and transcend the attitudes described here. If you are a very likable person, then the problems related in the last two paragraphs disappear. Unfortunately, likeability is not teachable.

So the central problem we experienced in the fall of 2002 is that we had a pedagogy that depended on student peer interactivity opposed to a teacher base that wanted, expected really, a more personal relationship between students and teachers, what I am calling the "mentorship model." Peer interactivity, especially in the writing-intensive distributive model that ICON employs, dramatically reduces the influence of the personality of the teacher. To detractors, of course, that means an assembly-line mechanistic model of instruction that undercuts the humanity of writing itself. To those who support the peer-interactive online pedagogy, it means better learning about writing. We at Texas Tech, in regards to first-year composition and that alone, have decided that a raw dependence on teacher experience, enthusiasm, and talent reveals distinct liabilities in too many cases to ignore. If we care about our freshmen, we cannot assume that the graduate students who enter our program are all capable, dedicated, and-most importantly-pedagogically informed teachers.

Frankly, past assumptions about this group of people—most English graduate students who teach first-year composition—have rested upon two beliefs: (1) writing is something that graduate students in English understand in an "articulated capability" sense, and (2) that knowledge

of how to teach is either innate in everyone who can read good literature or is essentially unimportant. Both beliefs, based upon my long experience, are completely false. Writing well and *knowing* about writing well are two different things. Second, knowing how to read and interpret literature has nothing to do with knowing how to teach, especially knowing how to teach writing. It has only been a disregard of both the college freshmen student *and* the nature of writing skill itself that has allowed so many universities to staff first-year composition courses with English graduate students without the kind of caveats that we have applied at Texas Tech.

That said, as so many of my administrative colleagues remind me, writing skill among college students remains dismal. If how first-year composition is taught continues to be as problematic as I describe, what can we do?

#### A SYSTEMS APPROACH

My suggestion, which will remain highly controversial, is that we shift the principal instructional responsibility from the individual teacher to the *system* of instruction we employ. That is what we have done at Texas Tech. We have attempted to create in ICON a means by which students manage their own learning. They learn by *doing* things that *teach* them things. They don't learn by attaching themselves or their ideas to a teacher. The system gives them writing problems, and they solve those writing problems, and then they go on to other writing problems. They are a part of a complex set of writing interactions that informs them about writing itself. The teacher is there as a help, not a guru. The teacher assists them and doesn't indoctrinate them.

I have long understood why teachers become teachers, principally because I myself became so engaged for the same reasons. We as program administrators have an obligation to encourage our graduate students in their enthusiasm to teach. We also have an obligation to provide our first-year composition students as fine an instruction in writing as we can. Indications moving into ICON's second full year are that once over the hump of a new and strange experience, supported by a well-coordinated team of faculty and graduate-student assistants, our graduate-student instructors eventually grow aware of the instructional benefits of our program—both to our students and to them. For the academic year 2002–03, we served 4,394 students and graded and commented on 139,704 pieces of student writing, including 43,682 essay drafts and 58,189 peer critiques, an average of about 31 documents per student per semester. Our student evaluations regarding teacher effectiveness in the spring of 2003 were the highest ever recorded for the composition program, and the perceived increase in our consistency and instructional rigor has led the provost to eliminate College Level Examination Program (CLEP) exemptions for composition courses. I believe that other colleges and disciplines on campus are beginning to believe what was once highly suspect—that composition instruction at Texas Tech is coherent, accountable, rigorous, and (above all) useful for their students.

Is ICON a solution to the multiplicity of problems affecting composition programs across the country? Unlikely, at least as a package. All such solutions are local. It is not the computer networks or the software that succeed but the local mix of personalities and resources. However, ICON provides an administrative model that for Texas Tech, at least, is pulling us out of holes we have become far too familiar with. More importantly, we have encountered the dark side of such seismic changes in a composition program—the unarticulated fears of teachers that too often make change unthinkable—and have survived the backlash. Our unabashedly systems approach, so automatically unpalatable to many, should provide at least a conceptual alternative to what has become on many campuses—after the glory days of the "New Rhetoric"—a discouraging business indeed.