

## **The Semi-Virtual Composition Classroom: A Model for Techno- Amphibians**

by Rich Holeton

### **Teachers and Students as Techno-Amphibians**

“Can I e-mail you my paper?”

“Does this class have a Web site?”

Replacing the classic “Do we have to *type* our papers?”, these are the techno-savvy, first-day-of-class questions for the late ‘90s. Especially at elite universities like Stanford -- but increasingly everywhere -- students have begun arriving with technical knowledge, experience, and expectations exceeding those of their teachers. While a few of them still have never touched a computer, a significant number have helped create networks or design Web pages for schools or businesses, and a majority communicate with widespread friends and family by e-mail and electronic chat programs. Stanford freshmen now create home pages on the Web as part of their one-unit “Introduction to Macintosh” courses in the dorms.

As their teachers, we feel the pressure to keep up from all sides. As scholars increasingly perform research, converse, collaborate, and publish their work electronically, composition teachers are in the position of helping students learn academic writing and research conventions while those conventions themselves are in flux. With once-comforting distinctions between books, TV screens, and new electronic discourses breaking down in the larger society as well, composition teachers are charged with increasing literacy and fluency at a time when the nature of literacy itself seems to be undergoing a paradigm shift.

We are teaching in what Charles Moran has called the “amphibious condition” between the page-text conventions that have

dominated literacy and academia for several hundred years and new, evolving virtual-text conventions (14). Like our students, whether or not we actively use computers in our courses, we have one foot in the traditional classroom and one foot in cyberspace. While this condition can be confusing, I think it also offers -- like the border areas in chaos theory, which harbor the most creative potential -- tremendous opportunities to look freshly at our teaching practices as well as our subject matter.

### **Teaching Goals for Cyber-Times**

“What are students to do with this [electronic, networked] access to information and people?” asks John Keeling in his thoughtful piece in the last issue of *Notes*, “Writing in the Information Age” (10). In my work with the WCT Computers & Writing Project, I have framed this question as:

(1) *What teaching and learning activities are best done (or only done) using electronic tools, and which are best done (or only done) face-to-face or using conventional techniques?* And more specifically,

(2) *Which particular electronic and face-to-face tools and techniques are most useful for which specific teaching and learning activities?*

In the following section, I propose a set of answers to these questions intended to address our current amphibious state. My model reverses the usual emphasis, in which instructional technologies are seen as supplements to the “main action” of the course. If we define the main action of a writing course as its various forms of critical dialogue (student texts, course texts, commentary and discussion about these texts by students and teacher, etc.), then in my model *that action takes place mostly in virtual spaces* using computer network technologies. Large-group, face-to-face class meetings are still important, but supplementary to that main critical dialogue.

The particular technological balance that a thoughtfully-amphibious teacher might strike depends, of course, on his or her own instructional goals. Significantly, new *instructional* technologies -- word processing, e-mail, electronic conferencing and other

computer-mediated communication, and the hypertextual World Wide Web -- are also the *writing* technologies that today co-exist and compete with book and print technology. Therefore, students in what I'll call the the Semi-Virtual Classroom have, I think, the best chance to examine critically what they read and write at this precise historical point of rhetorical tensions. Moreover, they can share, self-consciously and with eyes open wide, in the exciting process of creating new conventions for electronic discourses, online research, and virtual forms of community.

My own more narrow instructional goals, in trying to break down or transcend the physical classroom walls, are to:

- (1) increase the quantity and quality of critical dialogue among my students (including the quality of the traditional product of writing courses, the academic essay);
- (2) decenter my classroom roles as discussion leader and rhetoric teacher; and
- (3) focus more of my teaching energy on individuals and small groups.

These three goals, mutually reinforcing, lie behind all the examples of particular techniques that I suggest below.

### **The Semi-Virtual Classroom: A Composition Model for the Electronic Age**

I've organized my model around four major activities of writing classes: rhetorical exercises and lessons; class discussion; essay writing; and peer and instructor response. Most of the electronic techniques I discuss employ widely-available tools such as e-mail, our campus Appleshare network, and the World Wide Web.<sup>1</sup> Only a few of these techniques require specialized software or hardware in an electronic classroom like the WCT Computer Classroom; shortly, however, even real-time electronic discussion will be possible and practical directly on the Web.

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<sup>1</sup>At Stanford, all freshmen have access to both the local Appleshare (server-based) network and the Internet through direct Ethernet connections in their rooms and/or dorm computer clusters, and they have technical support available from live-in, upperclass Residence Computer Coordinators. Virtually all students have e-mail accounts.

Other more exotic tools that I don't discuss, such as MOOs and MUDs (real-time, text-based virtual reality spaces), have much classroom potential and indeed are already being used by many composition and literature teachers, but they require more extensive technical knowledge to set up.

#### *1. Rhetorical exercises and lessons*

Studies have long questioned the value of teaching grammar or rhetorical principles out of the context of individual student writing. With file-sharing and data display technologies, it's possible for students to do exercises together, share and discuss results, and immediately apply lessons to their own (electronically stored) writing.

Exercises that emphasize the dynamic or visual aspects of text -- such as revision work or paragraphing -- are more effective on computer monitors than on paper. For example, students can try out and compare several versions of a sentence or paragraph, on an individual or shared computer monitor. Likewise, students asked to insert paragraph breaks in a text can instantly see and compare the visual-cognitive effects of various paragraphing decisions, something not possible using paper handouts. In the WCT Computer Classroom, I ask students to remove paragraph breaks from their own essay drafts, have a classmate re-paragraph a portion of their essay for them, and then compare and discuss their results. In the Meyer Flexible Classroom, Marjorie Ford has her students write collaboratively in small groups using Powerbook laptop computers, then share their work on the room's large display screen.

Students working actively on their writing, especially in groups, already present a decentered model of the composition classroom. In a computer classroom or lab, this work is easier to do, easier to share, and potentially more valuable because the "liquid," dynamic nature of electronic text encourages a general openness to revision, a resistance to final forms. With computers available right in the classroom, teachers have the most possible flexibility as techno-amphibians: they can integrate electronic techniques directly with more conventional face-to-face group work, as in these previous examples, or they can experiment with new

techniques made possible only with network technology, as in the following section.

## 2. *Class discussion*

Conventional face-to-face discussions of course readings are too often characterized by superficiality, dominated by a few (usually male) participants, and impeded by socialized nonverbal cues based on gender, appearance, race, class, etc. Comments tend to be directed towards the teacher or to please the teacher, even when students lead the discussion.

While we try to mitigate these tendencies of course, the nature of the face-to-face medium -- and perhaps the nature of first-year college students -- works against us. In my experience with electronic discussions, (a) participation is much more widespread, because everyone can “talk” at the same time and students are enthusiastic about using the electronic medium; (b) participation is more democratic, because nonverbal cues are eliminated; (c) ideas are emphasized more than personalities, because the medium is text-based; (d) discussion can be deeper and more complex, because participants can develop ideas more fully, follow and return from digressions, and carry on several different “side discussions” simultaneously.

In the following excerpts from one of my classes last year, students are discussing the “cultural baggage” that Americans carry when traveling in Third World countries, based on readings from Maya Angelou, Paul Bowles, and others. Mark is the lone white male in a group of five; the other four are male and female Asian Americans. Through the early parts of the discussion, Mark has been resisting the group’s near-unanimity about the importance of cultural heritage, and finally about halfway through, he states his “politically incorrect” opinion directly. He is greeted by a barrage of disagreement:

*Mark* : I don't think I really care a whole lot about my heritage.

*Angela* : Mark...why not?

*Caron* : Why don't you care about...

*Edison* : Mark, isn't your heritage what defines you?

*Austin* : I think everyone should know their heritage. Whether or not they choose to accept it is another thing.

In the electronic forum, Mark is able to deal with his detractors one at a time, as in these exchanges:

*Mark* : Angela, I don't think my heritage is much of a reflection of me as a person. I figure where I am now and where I'm going is much more important. I don't think you should allow your heritage to define you. That would limit you, I think.

*Angela* : I don't think heritage limits you, it just shows where you came from and how that influences you now. It gives you something to go back to and measure yourself against.

*Edison* : Mark, even if you don't care about it, that heritage will influence the way you believe, the way you grow.

*Mark* : Edison, you're right, but we can choose to some degree the effect it will have on us.

As this process continues, Mark and the others are able to hone their ideas and qualify their arguments, in writing and under the test of direct, immediate resistance. Angela eventually offers a compromise position; by the end, Mark’s own position has evolved from a personal reaction to a more complex, psychological view of the individual in society:

*Angela* : I think our present culture affects us, but it is not part of our heritage. We have no control over our heritage. But, we have the choice to accept a culture or not.

*Mark* : We can also choose how much value we give to our heritage.

*Caron* : How can you reject your own culture when you're constantly surrounded by it?

*Angela* : Caron...we’re surrounded by culture, but do we really have to accept everything that it says.

*Caron* : No, but does anyone accept everything in his/her culture. I don't think so. I don't necessarily agree with all of the values of American culture, but I definitely see myself as an American.

*Mark* : You don't have to accept everything it says, but if you're against a lot of what's in your society, I don't think you can be happy. Too much conflict....

We can see in such electronic discussions the potential for what Lester Faigley calls a "reconfiguration of discursive relations" (180) or Mikhail Bakhtin's "multivocality." In a face-to-face discussion, it's unlikely that Mark would have voiced his minority, anti-PC opinion to begin with, much less had the time to test and develop it against a series of thoughtful challengers.<sup>2</sup> Likewise, Angela and the others would have missed the chance to understand Mark's position more deeply and to modify their own counter-arguments accordingly. In "live" discussions of sensitive issues, it's all too easy for differing viewpoints to ossify into oversimplified oppositions and stereotypes. Moreover, these students are "talking" directly to one another, not to the teacher; although they were aware that I would review their comments at a later time, the dialogue is still highly decentered.

The kind of depth and thoughtfulness about complex matters that these students approach in discussion is of course what we encourage them to achieve in their essay writing as well. Because electronic discussion is already in the form of text, it can be translated more directly into formal writing. Discussion software such as Aspects or Daedalus InterChange allows us to record transcripts of each session (like those excerpted above). These transcripts can be used as additional course texts, texts that are obviously constructed collaboratively.

My classes hold several electronic discussions simultaneously by dividing into groups, each led by a student facilitator. Thus each day's discussion is actually three or four discussions, each with its own transcript. When students download these transcripts across the network after class, as I ask them

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<sup>2</sup>In fact, early in the quarter, Mark did not speak up much in face-to-face class sessions. But later in the quarter he overcame this reticence, a phenomenon I've observed in other students who, like Mark, gained confidence by first articulating their ideas in electronic discussions.

to do, they can benefit by reviewing several other, different discussions as well as the one they participated in. Further, I ask them to incorporate ideas from their classmates -- by quoting, paraphrasing, and citing comments from the discussion transcripts -- into their formal essays. In a process that Fred Kemp calls "privileging the student text," the connection between informal and formal texts is made concrete and students truly become collaborative scholars and knowledge-makers (Kemp).

Finally, electronic tools make possible the continuation of class discussion outside the physical classroom too, in asynchronous (not simultaneous) media such as e-mail or a class newsgroup. I think newsgroups are superior for this purpose because they offer a separate, dedicated "space" for discussion, instead of mixing course-related messages in with people's other e-mail, and because they allow the discussion to be "threaded" (organized by topics and replies; see Figure 1). Newsgroup participants can take the time to reflect and compose their responses more carefully and thoughtfully than when they're under pressure of a real-time discussion, whether electronic or face-to-face. Especially as a follow-up to in-class discussion, a class newsgroup gives students the chance to develop their ideas further, and like other types of electronic discussion it potentially creates a decentered dialogue with classmates that can be saved as text for future reference or use in formal writing (see Figure 2). A newsgroup can also increase the sense of class community, since the class continues all week long in virtual meetings.

I think that all forms of electronic discussion are most effective when the class also develops rapport in some of the usual face-to-face ways, in both small and large group meetings. For example, my students may face each other in a small group to agree on some interesting questions before engaging each other online. In the Semi-Virtual Classroom, students can also supplement electronic discussion with follow-up face-to-face discussion and debriefing about the process. In my experience, students quickly perceive the relative advantages and disadvantages of these various media, and they're more than ready to discuss their experiences with classmates. With

opportunities for such meta-discussion (which I encourage them to take up in the class newsgroup), students can become increasingly self-aware about the ways in which their writing and thinking and collaborating in these media are interrelated. One freshman in my fall quarter class who vigorously argued his preference for face-to-face class discussion in opposition to computer-mediated communication eventually transcended his either-or construction of the issue, realizing the irony that he had developed his strongest arguments in writing, online, in dialogue with others.

### 3. *Essay writing*

From one viewpoint, the layers of electronic dialogue I describe above constitute a significant amount of "prewriting" for formal essays. From another viewpoint, these electronic texts are not precursors to anything but are valid forms of writing in their own right. Many of my students have composed and posted to the class newsgroup what are essentially mini-essays, complete with references. While some of these postings are meaningful only in the highly-interactive context of the newsgroup (to the extent that they are inseparable from the history of previous messages and responses), others translate directly into more formal academic work.

In addition, I ask students to e-mail me their ideas for an essay well in advance of the initial draft, which gives me time to respond with questions or suggestions. Sometimes I'll have several such exchanges with students as they hone their ideas. Some students write paragraphs or even pages as they work out an argument. E-mail is ideal for this kind of "prewriting," I think, because of its informality; students are generally quite comfortable brainstorming in this medium without worrying about mechanics or grammatical constraints.

For longer research projects, e-mail offers amphibious teachers the chance to intervene in the process earlier and more often than face-to-face conferences alone. I ask for initial topics by e-mail, then revised topics and tentative thesis statements which students also e-mail to the reference librarian who will conduct our library workshop. The librarian can then reply directly to each student with

individualized suggestions for research. Because of the reply function that allows one to quote selectively from an incoming message, e-mail is also ideal for responding to detailed research plans or outlines.

For essay drafts themselves, e-mail is not ideal. Some e-mail programs (such as Eudora) allow users to attach documents (such as an essay in Microsoft Word) in a way that preserves their paper-text formatting, but many don't, including the e-mail systems used by most Stanford students. Documents can be preserved in their original form and shared, however, using a file server on a local area network (such as Stanford's Appleshare network). "Until most text is read on-screen," Elizabeth Klem and Charles Moran suggest, "some alternation between screen and paper will have to be managed" in composition classes (138). File servers allow us to manage as amphibians, working online with the page-text conventions that students still need for much of their other academic work. For class publication of revised work or portfolios, file servers can save trees while increasing students' sense of audience. Printing is optional. With electronic publication, each student can create his or her own, customized class anthology.

Preserving page-text conventions raises an interesting issue: Given the traditional "service function" of composition courses (i.e., acculturating students into academic discourse), if academic discourse itself is changing, to what extent should we merely follow -- or actively lead -- that change? At a minimum, I think writing teachers must begin to grapple with new media in order to maintain some influence over emerging conventions and to keep up with some of our best students as fellow literary pioneers. My own amphibious solution for the present is to require my students to produce at least one essay (out of three) that follows traditional academic page-text conventions, while encouraging them to experiment with other forms. Web "papers" are increasingly popular, and (as an additional, unintended benefit) students often collaborate for such projects. Two examples of innovative student work: Jennie Caleshu and Stephanie Pieczenik's "Censorship of Pornography in Cyberspace" at

<http://www.stanford.edu/~jcaleshu/wct/toc.html>

has been linked to other Web sites that examine the same issue and now receives thousands of visitors per month. Austin Jou's "Cloning: Ethics and Technology" at <http://zonker.stanford.edu/~soma/wct/> includes an interactive form and bulletin-board area for readers to post their own opinions about human cloning issues.

One way that our writing program could try to lead our students, not merely keep up with them, would be to create a new category for our annual writing awards, the Boothe Prizes for Excellence in Writing. If we created, for example, a "New Media" category for the Boothe Prize, we could begin to work out criteria for excellence like those established for our traditional prizes.

#### 4. Peer and instructor response

When all students can read all their classmates' work, the class potentially becomes a real community of writers. Using a file server, students can electronically annotate and exchange essay drafts from remote locations. The process I'll describe can also be done during class if computers are available, although "live" annotation has no particular advantage; remote annotation is probably most useful when contact time with students is limited, as in our relatively short class periods at Stanford.

Text annotations in Microsoft Word are represented by unobtrusive icons; when the icons are double-clicked, comments appear in separate windows on the computer screen. The advantages of this form of peer response over traditional margin scribbling include: (a) respect for and preservation of the original text; (b) convenience (annotators can work across the network); (c) legibility; and especially (d) potential interaction of several readers. Subsequent annotators can comment on previous annotations, establishing a dialogue about the work in progress: "I agree with Maria; your introduction goes nicely from general to more specific." Instructors can then comment in terms of the existing annotations, joining an ongoing conversation: "Like Maria and Alan, I think you introduce your topic clearly. But I worry that your main idea as you've stated it is too broad...."

At their home or dorm computer, writers can download and review their annotated drafts online by placing comment windows

adjacent to the relevant place in their own text (monitor size permitting). Writers control the way they view the responses -- they can read the annotations as they appear inserted in the original text, they can read through just the annotations in linear order, they can follow through a single reader's responses, or they can print everything out to read on paper. (For a complete lesson plan describing electronic annotations, download my "Lesson Plan for LAN" from the WCT Server > WCT Instructors > WCT Computers & Writing Project > Guidelines & Handouts.)

In the Semi-Virtual Classroom, students still meet in small-group, face-to-face workshops to discuss their essay drafts. But if they've already electronically annotated one another's drafts, the live workshops become a supplementary form of feedback where writers can ask their readers specific follow-up questions or seek clarification of confusing or contradictory responses.

For individual conferences, however, I think we should see the face-to-face meeting as the "main action" and electronic techniques as supplementary. The teacher-student conference has long been considered one of the most effective ways to teach writing (e.g., see Freedman, Sperling). I'm sure many of us agree, although I'd add that not every teacher has the personality or skill to use live conferences most effectively. Teachers who are less skilled or comfortable with face-to-face conferencing can take advantage of electronic tools to do more of their tutoring online, in text. A recent special issue of *Computers and Composition* guest-edited by Joyce Kinkead and Christine Hult (vol. 12, 1995) has several articles about this kind of cyber-tutoring.

Even teachers whose styles and skills are well suited for face-to-face conferencing, however, can enhance these meetings with electronic tools. E-mail, again because of its informality, can be very useful in preparing for or following up on a conference meeting (e.g., "What questions are most on your mind to discuss with me in conference?" or "Now that you've met with your peer group and with me, write us all a brief summary of how you plan to revise your essay"). And during the conference, instructors and students can work more effectively on individual problem areas -

- from essay structure to dangling modifiers -
- by using a computer to try alternatives.

Most of us have had a range of conferencing experiences, I'm sure, from the sublime to something more like root-canal work, and hopefully it's a process that we get better at with practice. I'd like to spend more one-on-one time with my students, and theoretically electronic tools can make this possible. So far, unfortunately, I haven't gained any extra time, but I have been able to *redirect* some of my teaching energy to individual students. I spend less time preparing lectures or other teacher-directed activities and more time answering e-mail from students, reading their newsgroup postings, and poring over transcripts of their electronic discussions. I get to know them, individually, much better than I did when our only contact, besides conferences, was in large-group class-time settings. In class, too, I spend less time talking and more time listening. When we confer face-to-face, therefore, it's now in a richer context of an ongoing dialogue. Much of that dialogue has a written record (e.g., in e-mail files) to which we can refer. We have more to build on, so we can get more done.

### **Conclusion: W(h)ither the Physical Classroom?**

One might expect, with so much class business conducted online, a decline in the sense of class community and associated benefits in student interest and motivation. The opposite has occurred in my experience. My fall 1995 course was the most online-intensive I've taught to date, yet a majority of the students came to class as much as a half hour *early* most days to talk and work together face-to-face. It bears repeating that they were not coming early to see *me*, as in a teacher-centered cult of personality, but to see one another. They even made plans (online of course!) to bring cameras for the last meeting and took class portraits. The sense of closeness they developed from working together and communicating so much *outside* of class was clearly reflected in their in-class behavior.

To make what Melanie Sperling and others refer to as "the social nature of written text" (1) concrete for students -- to make the

audience for their ideas, their writing, real and meaningful -- we should encourage them to have as much dialogue as possible, both online and in person. Likewise, as Sperling suggests, teacher-student writing conferences work best as "critical dialogic events" in courses based on a social view of learning (23-30). In network terms, face-to-face communication has a very high "bandwidth" (a measure of the amount or range of information that a signal can carry), so surely it will always be useful in teaching anything, including writing. Personal interaction allows teachers to apply all their human and professional experience to make judgments about how to help individual students.

If, like individual conferences, large-group face-to-face meetings are still necessary and useful, what *happens* in the physical classroom can change dramatically with the thoughtful use of technology. If text-centered work is largely shifted to virtual spaces, as I've suggested, physical meetings can focus more on supporting and augmenting that work -- formulating goals, planning criteria for evaluating texts, practicing electronic tools, sharing common problems, and discussing the whole process on a meta-level. Whenever students talk in class, in the model I've presented, they are continuing a discussion already in progress and they know that the conversation won't stop at the end of the class period.

Partly as a result of using electronic tools, we can reconceptualize our roles as teachers. We can be less information-givers, more information managers; we can be less the center of knowledge, more a facilitator for knowledge-making; we can be less a director, more an organizer. Working together in the Semi-Virtual Classroom, our students have the opportunity to think more critically and complexly about what they read and write, and we have the chance to get to know and help them better as individual writers. Techno-amphibians, unlike real amphibians whose swimming and running skills don't match those of their gill-breathing or land-locked cousins, can make the best of both worlds.

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