Networking into Academic Discourse
by Mark Warschauer, University of California, Irvine

The rapid diffusion of information and communication technologies (ICT) is having an effect on many aspects of modern life, including on how we write. Real-time chatting, electronic mail, and the World Wide Web are all contributing to new forms of written communication in the 21st century.

What significance, though, if any, do these new forms have for the academic writing course? Undergraduate and graduate students alike are still expected to master fairly traditional forms of academic writing, including essays, compositions, and, perhaps eventually, theses, dissertations, and scholarly articles. Does written online communication have any relevance to the process of becoming an academic writer?

Many college instructors believe that it does. In this paper, I will examine the experiences of three instructors in Hawai'i who have attempted to integrate online communication into their academic writing courses. This examination will emphasize that underlying assumptions of what academic writing constitutes are fundamental in influencing how teachers integrate technology in the classroom. As a preface to discussing the experience of the three instructors, I will first examine the main trends in conceptions of academic writing.

Conceptions of Academic Writing

Perspectives on academic writing and composition continually reinvent themselves. Though there have been many different views (see, for example, discussion in Nystrand, Greene, & Wiemelt, 1993; Raimes, 1991), the three principal approaches can be summarized as formalist, constructivist, and social constructionist.

A formalist approach, as its name suggests, places emphasis on correct form, at the level of the sentence, paragraph, and essay. Rooted in trends of teaching L1 writing that emerged in the post-war period, formalism found a welcome home in the field of teaching English as a second or foreign language, where, prior to the 1970s, grammatical correctness was the main focus of overall instruction. Kaplan's (1967) influential article on contrastive rhetoric in the founding issue of TESOL Quarterly further contributed to the formalist trend in second language composition by emphasizing the structure of Western rhetoric. This gave rise to compensatory instruction on how to recognize or write a topic sentence, a well-formed paragraph, and the standard five-paragraph essay (see discussion in Raimes, 1983). Even as formalism started to lose its influence in the field of L1 composition, it continued to hold sway in ESL departments due to their strong emphasis on basic preparation (see discussion in Atkinson & Ramanathan, 1995).
The 1960s-1980s witnessed a decline of formalism in all areas of language study due in large measure to the cognitive linguistics of Chomsky (e.g., 1959; 1965). Chomsky's emphasis on mental models influenced every aspect of language and linguistics, including composition theory (Nystrand et al., 1993). Cognitive psychologists and linguists developed an alternative concept of learning to write that emphasized not the mastery of formal models but rather the development of mental processes (e.g., Flower, 1984; Hayes, 1970; Hayes & Flower, 1983). This constructivist concept and methodology came to be known as the process approach, and it too spread from the L1 to L2 composition community. Pre-writing exercises, journals, peer editing, and multiple drafts were all deployed to assist students in mastering the thinking processes and composing strategies of skilled writers (see, for example, Raimes, 1983; Reid, 1993).

Within a decade of Chomsky's first works, a new turn in linguistics began, this time toward the direction of discourse and community. Addressing a variety of issues, linguists such as Searle (e.g., 1969), Labov (e.g., 1970) and Hymes (e.g., 1972) developed the case that language was as much a social phenomenon as an individual one, and that form and function interacted in the context of real language use (see discussion in Nystrand et al., 1993). This growing theoretical attention to the social construction of language was matched by a very practical concern among composition instructors that the process approach—with its emphasis on the needs of the writer and on narrative genres—was failing to prepare students for the kinds of analytical writing required in the academic world. Second language researchers and educators shared both the theoretical and practical concerns raised within the L1 composition field, and this new social constructionist approach based on writing for academic discourse communities spread to the L2 composition community (e.g., see Leki & Carson, 1997).

This brief history is of course a simplification. Other approaches have been identified, such as a content-based approach (Raimes, 1991) or a dialogical approach (Nystrand et al., 1993). And no approach—either the three that I have identified as the principal ones or any others—exists in complete isolation; many composition instructors mix and match teaching methods eclectically. However, this brief history summarizes the main trends in approaches to the teaching of L2 academic writing since the emergence of the field of TESOL.

**Technology in the Writing Classroom**

From 1996-1998, I carried out ethnographic research on the use of ICT in language and writing classes in Hawai‘i. The entire study has been published elsewhere (Warschauer, 1999); I will focus here on discussing three classrooms focused on the teaching of academic English-language writing. The teachers in the three classrooms each molded their instruction to their own beliefs about the nature of learning to write. Since those beliefs more or less parallel the three main trends mentioned above, the cases present an interesting illustration of the relationship between ICT use and theories of academic writing. I will briefly introduce the first two cases, of
technology supporting formalism and constructivism, and then discuss at greater length the case of technology use in support of social constructionism.

**A Formalist Approach at a Private College**

Mary Sanders at Miller College - a private religious institution-- epitomized the formalist approach to the teaching of writing. Mary believed that ESL students needed to master the formal structures of what she considered the standard academic essay, and she emphasized those structures in her ESL writing course. Her firm commitment to the traditional five-paragraph essay was evidenced, among other ways, by the handouts she gave to her class, which in one typical case included these instructions:

Remember that in comparison writing, you are presenting similarities (NOT DIFFERENCES!).

Your organization is important:
- an introduction of three sentences with a thesis statement at the end,
- development paragraphs (2-3) with
- keyword and "most important" transitions in each paragraph
- comparison transition in the body of each paragraph
- a conclusion of at least three sentences.

Your ideas should be thoroughly developed (5+ sentences per paragraph) for high "content".

All of Mary's assignments were geared toward furthering students' mastery of correct forms, whether at the level of the sentence, paragraph, or essay. And Mary was able to mold the use of ICT to support this purpose of her instruction. The class met twice a week in a computer laboratory and twice a week in an ordinary classroom. The sessions in the computer laboratory began with an online quiz, sent from the teacher to the students via e-mail, that called for identifying and correcting grammatical errors. Additional practice grammar exercises were made available to students on the World Wide Web; a total of 60 grammatical exercises were assigned during the semester. The students worked in small electronic groups throughout the semester, e-mailing paragraphs back and forth that their classmates corrected for grammar and spelling and e-mailed back. The students decided in advance their topic sentences for each paragraph and e-mailed these to their classmates for correction and feedback.

The students! also corresponded with keypals (i.e., electronic penpals) at other universities, an activity used by many teachers to promote writing fluency. However, in this class, writing to keypals principally served the goal of achieving formal accuracy. The keypal activity began with a weekly essay that students wrote and e-mailed to Mary for her grammatical revision. Mary then e-mailed the essay back to the students who made the required grammatical corrections, added a sentence of two of introduction, and sent the correct essays as letters (of a sort) to their keypals. A bold print warning on the first handout notified students that "The instructor will not give
credit for e-mailed keypal letters which have not been submitted in draft form for prior response on the due date."

In summary, though the forms of computer use paralleled those used advocated by constructivists and social constructionists-computer-mediated collaboration in the classroom, interaction with long-distant correspondents, accessing material on the World Wide Web, student-teacher communication via e-mail-the underlying content was strictly formalist. Mary was able to wield technology to her exact purposes.

And she achieved her desired results. Students in her course learned to write acceptable five-paragraph essays. There is of course the broader question of whether the five-paragraph essay actually matches a desirable genre of academic writing (outside the composition classroom), but Mary believed that it did-or at least that it represented a training version of what students would later need. And her instructional approach, and use of technology, thus served her ends.

**A Constructivist Approach at a Community College**

If Mary Sanders was a strict adherent to a formalist approach to the teaching of writing, Joan Conners was equally firm in her adherence to a constructivist approach. Joan taught a course called "Advanced Expository Writing" at Bay Community College. Though it was not formally an ESL course, two-thirds of the students in the class were immigrant or foreign students who did not speak English as a native language.

Joan's main classroom goal was to immerse students in a writing environment so that they could learn as much possible from their own experience. Her assignments focused on topics that were either highly persona (an autobiography or a biography the students admired) or practical (a brochure or Web page for a community organization). There were no assignments that taught students how to make academic arguments through the use and citation of scholarly sources.

Just like Mary, Joan was able to deploy ICT to her own ends. Virtually the entire course was conducted via computer-assisted discussion. Each day, students came in and communicated with each other and the teacher using real-time online discussion, following instructions and prompts provided by the teacher. This served Joan's goal of providing the maximal amount of practice in the writing process. In addition, the nature of their assignments-discussing the meaning of readings, brainstorming about their own thoughts and ideas, posting and critiquing their drafts of essays-all further served the writing process goals. As in Mary's course, students also submitted their work to the teacher online, but in Joan's class, they received no grammatical or form-oriented comments or corrections of any time. Mary preferred to be a reader and facilitator rather than a corrector of students' work.
In the second half of the semester, students worked in groups on a technology-based service learning project, developing either a brochure or a Website for a local community organization. In many of these student projects, there was very little traditional writing per se; students instead devoted a great deal of effort to taking and uploading photographs, finding and adding other graphics, and designing and laying out their product. For Joan, this too was part of the writing process, which in her opinion is increasingly marked by multimedia authoring skills rather than by text-production per se.

In summary, Joan, like Mary, was able to mold the use of technology to further her own beliefs about writing. For Joan, writing is a highly personal and communicative act. She used technology to help students find their own voice, gain practical writing experience, and develop their writing and multimedia authoring skills, without much attention to whether the genres of their writing matched those of academic scholarship. She, too, was pleased with the results, and, from my observations, students progressed in the kinds of personal and practical writing that Joan valued.

**A Social Constructionist Approach at a Research University**

Luz Santos's ESL writing class at Aloha University differed in several ways from those described above. While Mary and Joan taught undergraduates, Luz taught a graduate course. Mary and Joan's institutions were principally concerned with teaching, while Luz taught at a research university. Finally, while Mary and Joan were older full-time faculty members, Luz was a younger doctoral student who taught part-time. Luz's research background contributed to her social constructionist approach to the teaching of academic writing in two ways: first, by the ideas that she encountered in the recent literature (whereas Mary and Joan had studied TESL many years earlier when formalist and constructivist approaches were in vogue), and second, by her own direct experiences writing and conducting research. A foreign student herself, Joan felt that she had learned to write by gradual exposure to and involvement in a new academic discourse community, and she hoped to provide the same experience to her own students. She explained to me her goal in her course:

I don't believe that this class should teach them language or grammar because I think that's beyond our possibilities for one semester. Some of the students have such a low level of language ability in terms of grammar that they wouldn't benefit from just a focus on that for a semester. I think the problem is bigger than that. What they really need is just learn all the skills involved in studying, writing, reading, relating to their professors and other students in their departments. And they need to realize what graduate life is about, how to become more academic in this system.
Joan's approach to writing thus mirrored those of prominent social constructionists such as Bartholomae (1986) who wrote that a student of academic writing "has to learn to speak our language, to speak as we do, to try on the peculiar ways of knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community" (p. 4). Learning to write was thus a matter of the student reinventing the university itself. Joan sought to help this process along by giving students the opportunity to gradually learn and become accustomed to the ways of knowing, selecting, evaluating, reporting, concluding, and arguing that defined both their own academic discipline and graduate life overall.

In essence then, Luz viewed learning in her class as a form of apprenticeship, as she slowly drew her students into a new academic discourse community. This type of teaching/learning approach has been characterized as legitimate peripheral participation, which Lave and Wenger (1991) explain thusly:

Newcomers' legitimate peripherality provides them with more than an "observational" lookout post: It crucially involves participation as a way of learning - of both absorbing and being absorbed in - the "culture of practice." An extended period of legitimate peripherality provides learners with opportunities to make the culture of practice theirs. From a broadly peripheral perspective, apprentices gradually assemble a general idea of what constitutes the practice of the community. This uneven sketch of the enterprise (available if there is legitimate access) might include who is involved; what they do; what everyday life is like; how masters talk, walk, work, and generally conduct their lives; how people who are not part of the community of practice interact with it; what other learners are doing; and what learners need to learn to become full practitioners. It includes an increasing understanding of how, when, and about what old-timers collaborate, collude, and collide, and what they enjoy, dislike, respect, and admire. In particular, it offers exemplars (which are grounds and motivation for learning activity), including masters, finished products, and more advanced apprentices in the process of becoming full practitioners (p. 95).

Luz organized "legitimate peripheral participation" for her students in a number of ways. First, students were encouraged to analyze and master the genres of their own academic disciplines. For example, for their main paper, they were required to write on a topic related to their own scholarly field and were even encouraged to work on a research paper that had been assigned in one of their academic courses. Students were also assigned to learn about and use the particular citation, reference, and style formats that were most common in their own disciplines.
As a component of this strategy, Luz organized a good deal of discussion, with students assigned questions and issues to talk about with their classmates, their subject matter instructor, and the writing instructor. With classmates, students explored together the nature of academic writing in the US and how it differed from that in their own countries. With the writing instructor, students had the opportunity to ask a mentor (herself a successful foreign student/doctoral candidate) about her own experiences and ideas regarding academic writing and the broader academic life of a graduate student. With their subject instructors, students were supposed to discuss more narrow issues about writing in their own discipline, for example, to inquire about the most important journals and the most common reference style.

Like Joan and Mary, Luz was able to successfully deploy technology to her ends. For Luz, ICT served the purpose of helping her students network into new academic discourse communities. Specifically, ICT served the function of facilitating three forms of apprenticeship learning: (1) collaborative apprenticeship (with students providing scaffolding for each other, see discussion in Bayer, 1990); (2) tutor-tutee apprenticeship (in which students learn from a mentor, see Wertsch & Bivens, 1992); and (3) direct engagement with the broader academic community outside the classroom.

**Collaborative Apprenticeship**

In a process of collaborative apprenticeship, students work together, under the guidance of a teacher, to support their own learning and development. Luz, like Joan, made use of computer-assisted classroom discussion to support this type of learning. However, unlike Joan, Luz employed this kind of discussion only occasionally, rather than regularly. Secondly, the topics of discussion were different. Luz chose topics that closely related to life as a graduate student and academic writer in the United States. She used computer-assisted discussion when she felt that participatory discussion on these topics would be especially valuable, since the students-most of whom were Asian, and many of whom had been socialized to be quiet in class-tended to participate more fully in the computer-assisted discussion than in face-to-face classroom talk.

One quite interesting example of a computer-mediated classroom conversation was on the topic of plagiarism. Plagiarism is often simplified to the issue of wholesale copying, without attribution, of others' papers. But the issue actually involves much more subtle decisions about whether, and to what extent, one can use phrases or sentences from other writers (or even from one's own previous work) with or without citation. It is an especially important issue for non-native writers, who have to make narrow decisions as to whether imitation is a successful language learning strategy or whether it is "stealing." Finally, as Pennycook (1996) points out, perspectives on plagiarism vary greatly across cultures, and there is nothing inherently more logical or morally superior about the North American/European perspective than any other.
Joan felt that a face-to-face class discussion on plagiarism would be less than ideal, because the majority of students would listen passively without expressing their views. In the computer-mediated conversation, students shared their opinions readily, addressing issues such as the relationship between using someone's ideas and using their words, the differences between citing published and unpublished information, strategies for avoiding plagiarism, and even the possibility of graduate students themselves being victims of plagiarism. When Luz did engage in the conversation—both via computer and in ensuing face-to-face discussions, she could respond to students' expressed beliefs on the issue rather than just trying to convince them of an official perspective.

**Tutor-Tutee Apprenticeship**

Tutor-tutee apprenticeship between a mentor and learners was facilitated by the use of student-teacher e-mail. This provided an additional venue to raise and discuss issues related to academic writing and academic life. This interaction took place in part through formal e-mail journals that were submitted every two weeks. Journal assignments dealt with topics such as the nature of the writing process, the structure of an academic paper, students' own writing experience, students' experiences with subscribing to academic e-mail lists, and students' thoughts and questions about the role of e-mail and the World Wide Web in academic communication and networking. In previous semesters, Luz had assigned journals on paper, with a poor completion rate, but this semester the e-mail submission process got much better results. In addition, it facilitated a higher degree of interaction, with Luz replying by e-mail within 24 hours, and then often receiving follow-up questions and comments.

An example of the effect of this type of electronic apprenticeship is seen through the case of Miyako, a first-semester master's student in Asian Studies. My personal interviews with Miyako indicated that she was feeling somewhat overwhelmed by the newness of being a master's student and wasn't quite certain what graduate school was really all about it. She was also coping with cultural differences between Japan and the US in terms of what was expected from students. However, like many female Japanese students US universities, Miyako was very quiet in class and thus didn't raise these issues orally. However, she participated avidly in e-mail, sending messages about once a week to Luz as well as many additional messages to classmates. Whereas her early e-mail messages were all in response to teacher-initiated journals or other assignments, during the second half of the semester about half her messages were at her own initiative. She often used her messages to Luz to raise questions, doubts, and concerns about academic life in the U.S. And, over the course of the semester, this process appeared to contribute a good deal to Miyako's coming to grips with her new role as a graduate student.

A look at some of Miyako's communications illustrates this process. Halfway through the semester, the students read an article published on the World Wide Web called "Networking on
the Network" (Agre, 2001). The article discussed the importance of professional networking for graduate students and offered suggestions on how to effectively take advantage of computer-mediated communication to carry out this networking. In computer-assisted classroom discussion on the article during class, Miyako first started to reflect some of her doubts, explaining that she was having such a hard time catching up with her studies that she didn't have time to think about academic relationships or academic culture. Another student responded, explaining how his own academic networking provided him with invaluable advice and also helped him form a viable thesis committee.

Following the classroom electronic discussion, Miyako sent an e-mail to Luz, further inquiring about the value of professional networking for graduate students. Luz replied by e-mail explaining the various way that student-student networking and student-professor networking serve a graduate students' career, in terms of getting feedback about assignments, courses, and papers; getting ideas about research topics; obtaining professors' positive attention and, eventually, recommendations; and ultimately creating a "graduate student persona." The e-mail exchange with Luz on the issue continued, and soon thereafter Miyako reported that her attitude toward relationships within her department started to change. In follow-up interviews, she told me that she started attending more social events in her department and became closer to both faculty members and other students. Through these new contacts, she gained a lot of information about books and articles of interest. She also developed relations with other students who could help fill her in on things that she hadn't quite grasped in her class. She learned about colloquia taking place on campus that she had missed before. And one of her newfound contacts, a third-year student, provided her "some excellent advice about my thesis." She concluded that before "I didn't know what a grad student is, what I was supposed to do. But now I can imagine what I'm going to do to earn a master's degree." She also confessed that this type of close teacher-student interaction had evaded her in other courses, when she had to rely on face-to-face communication, but that the opportunity of using electronic communication had made it easier to approach Luz and access her knowledge.

Now, if one sees academic writing only as the final putting down of words on paper, it may seem that what Miyako accomplished through this exchange was for removed from learning how learning how to write. However, if we accept the social constructionist viewpoint, learning academic writing involves a lengthy process of discovering what university life is about and what one's own role in it is. From this perspective, Miyako may not have finished writing her master's thesis in Luz's class, but she may well have taken some important early steps in she learning how to write it.

**Engagement with the Broader Academic Community**
Luz also sought ways to assist students in engaging the broader academic community. Technology served this process in a number of ways, especially through student assignments related to creation of Web pages and participation on academic e-mail lists.

Luz required each of her students to create their own professional Web page. Luz tried to emphasize the role that Web pages could have in projecting a professional presence by including a curriculum vitae, a description of research interests, or the students' published or unpublished papers.

While the idea was a good one, it was perhaps ahead of its time, in two senses. First of all, since most of the class were beginning master's students, they did not yet have much of a curriculum vitae, were unclear of their research interests, and had not yet written papers that they would be proud to share. Secondly, since the Web at that time was just taking off as a mass phenomenon, when they searched the Internet to look for home pages of other faculty or graduate students in their own departments, often they found very little and thus had few models to work from.

Because of these difficulties, few of the home pages amounted to much. Though a couple of them were quite professional in both content and form, the majority were done cursorily and did not have the academic tone that Luz had wished for. A typical example was the Web page of a student named Ping, which included his picture his picture, a few of his favorite links, and the following content:

Ping Chu Homepage

under construction
This forthcoming homepage is under construction. Come again.
Well, I am still confused on what I can put on this homepage, and I am busy to make some changes as well, may you have any suggestions, please let me know. Any help from you would be much appreciated.
E-mail address: ping@hawaii.edu
Ping Chu is a Hong Kong graduate student studying political science.

Luz also required that students subscribed to and participated in e-mail discussion lists related to their academic interests. Students were taught ways of searching the Internet for appropriate lists, and some did manage to find useful lists either through searches or consulting with other students or faculty. Ping found and subscribed to a list that sent out a weekly newsletter about events in China which provided much more current political news than he could find in the library. Miyako subscribed to a list about Southeast Asian affairs and said that she benefited from newspaper articles from Southeast Asian countries that were regularly translated.
and posted there. Xiao Hui, a female graduate student in linguistics, became a real enthusiast, subscribing to five lists related to her major.

Few students however were bold enough to actually send messages to lists. One exception was Atsuko, a first-semester master's student in Teaching English as a Second Language. Atsuko, like Miyako, was a shy, soft-spoken Japanese student. And like Miyako, Atsuko also took well to the electronic environment. She e-mailed Luz regularly to discuss her work and twice posted messages to academic e-mail lists to seek support for her writing assignments. On the first occasion she was writing a critique of a textbook. Through e-mail she was able to find teachers who had actually used the text in their classes. Atsuko solicited their comments and incorporated them in a paper that was quite well done for a first-semester graduate student.

On another occasion, Atsuko sent a message inquiring about professional journals that teachers found helpful. Again, she received some very helpful responses, but she also received a very hostile reply that attacked her for having made grammatical and spelling mistakes. The response intimidated her from further venturing out onto professional lists. Atsuko's experience shows both the value and danger of using the Internet for out-of-class contact. On the one hand, such use provided a valuable medium for engaging in the student's chosen discourse community in a written fashion. On the other hand, though, it exposed them to greater than desirable risks. In today's electronic world, though, with such types of online networking so vital to professional communication, such risks are probably unavoidable, and the best we can do is prepare our students to handle them.

The computer-based activities that Luz integrated into her classroom took a fair amount of time and focus. Many of the students in her course entered with little computer or Internet experience, and thus it was necessary to devote a couple of class sessions to topics such as how to use e-mail and the World Wide Web. As time goes in, this type of direct, basic instruction will be less necessary. In this class, though, Luz felt that the computer was not only a medium of academic networking (i.e., by allowing students another channel of communication with their classmate, teachers, and broader community), but also that computer use was critical to academic research and writing skills. She thus concluded, and most of her students agreed, that the time devoted to learning computer skills was time well spent. Students from developing countries, who generally had had the fewest prior experiences using computers, were particularly satisfied with this element of the course. For example, an Indonesian student told me that his university had few library resources, so that he greatly valued the experience in learning how to access materials on the World Wide Web. A Cambodian student reported that jobs in his country almost always require a combination of computer and English skills, and that he too valued learning both in one class.

**Conclusion**
Technology does not constitute a method; rather, it is a resource that can be used to support a variety of approaches and methods. As the examples of Mary, Joan, and Luz demonstrate, technology can be used to support diametrically different approaches to the teaching of academic writing. Luz's use of technology is particularly interesting because it represents an approach that consciously tried to scaffold students' entry into the world of academic discourse. This can be a challenging task because the language of the academy is not "a monolithic discourse that can be packaged and transmitted to students," (Zamel, 1995). Rather, as Harris (1989) points out,

The borders of most discourses are hazily marked and often travelled, and...the communities they define are thus often indistinct and overlapping....One does not step cleanly and wholly from one community to another, but is caught instead in an always changing mix of dominant, residual, and emerging discourses (p. 17).

Harris goes on to suggest that "rather than framing our work in terms of helping students move from one community of discourse into another,...it might prove more useful (and accurate) to view our task as adding to or complicating their uses of language" (p. 17, see also Coles, 1988; Williams, 1977).

This "adding to" or "complicating" of uses of language, if it is to take place, clearly involves a process of critical reflection rather than one-way transmission of ideas. Students need an opportunity to compare their own ways of thinking, acting, and communicating with the ways of different communities, and decide on their own which borders to attempt to cross and how. It becomes a matter not only of reinventing the university, but also of reinventing their own relationship to the university, and perhaps even of reinventing themselves.

For the students in Luz's course, technology was an important part of this process, in several ways. Learning about technology gave them better access to the tools needed for success in academic discourse. And the students were able to put the tools to immediate effect in writing about their own experiences, questions, thoughts, and concerns. They could put out their own experiences in a written form that other students and the teacher could reflect on and respond to. In at least some cases, this proved to be a powerful tool for assisting students in invention and reinvention, discovery and exploration, reflection and negotiation-enhancing students' opportunities to think critically about the academy and their role in it. Computer-mediated communication was not the only means by which the process of critical reflection occurred, but it did seem to be an effective medium for facilitating this process.

Perhaps understanding the processes that took place in Luz's class also help us overcome the dichotomies that exist between the constructivist approach-based on writing as an individual cognitive process-and the social constructionist approach, which sees writing as conforming to the norms of a discourse community. A more integrative view might be found in the dialogical
perspective of Bakhtin, who viewed discourse as a forum where the forces of individual cognition and social ideology and convention "dialectically interpenetrate" each other in a co-constitutive relationship (Volosinov, 1929/1973, p. 41). And this kind of dialogic interpenetration of the social and the individual is perhaps finding its fullest expression in the era of online communication, when students can most readily and rapidly appropriate the discourse of others into their language use. Students need no longer choose between the advantages of speech (which allows rapid interaction) and of writing (which maintains a permanent record for reflection). Rather, using the speech-writing hybrid of computer-mediated discussion, their own discussion takes a written form, thus allowing students' interaction to itself become the basis of epistemic engagement (Warschauer, 1997). This process can be seen in the experiences of Miyako, who through electronic interaction and reflection began to reinterpret an online article in terms of her own immediate needs as a graduate student, combining the perspectives of the original author, her classmates, her teacher, and herself.

Those who see learning to write as a matter of mastering forms will find little of interest in the experiences of Luz, or of Joan for that matter. For them, the experiences of Mary will perhaps serve as a model. However, for those who see writing as a developmental process—both as an individual and as a member of a community—online communication offers exciting possibilities. Through promoting students' computer-mediated interaction among themselves, with their instructor, and with the broader scholarly community, we can help our students network into academic discourse.

Notes

The supposedly standard five-paragraph essay consists of an introduction, a conclusion, and a body of three paragraphs each putting forward a major point in defense of the essay's thesis.

The names of individuals and institutions have been changed for the sake of anonymity.

A software program called Daedalus InterChange (Daedalus Inc., 1989) was used for the discussion. For information, see <http://www.daedalus.com/info/interchange_info.html>.

But with the same software; see preceding note.

I have cited here the most recent version. The students accessed a previous version that is no longer online.

Though the book was published under Volosinov's name, the author is widely presumed to be Bakhtin; see Clark & Holquist (1984).

References


Leki, I., & Carson, J. (1997). "Completely different worlds": EAP and the writing experiences of
ESL students in university courses. TESOL Quarterly, 31(1), 39-69.


