Circa 1984 early practitioners in the composition field imagined a potential blossoming of early efforts in computers and writing that subsequent developments in the field have lost sight of. The expense of developing personal programs, the emergence of word processing software that incorporated many of the mechanical aspects of spelling and style checking, and the shift to classroom-based techniques all restricted the scope of these visions by the late 1980s. Composition scholars and teachers turned their attention to the "tools" already available, usually developed for non-instructional communication or business applications, as adaptable for writers in academic contexts. And these tools have settled comfortably onto the tool belts teachers and writers bring to writing assignments. Even the most forward-looking technologies now used in writing instruction have largely replicated or improved upon models based on print texts and traditional classroom instruction about how to write those texts. Rather than reconceptualizing the textbook, writing educators have built bigger, better, and more accessible textbooks. But these constraints can be broken in thinking about how people learn non-school subjects. This paper describes two alternative models of instruction, one based on guided practice or apprenticeship, and one based on cultural context or acculturation. The paper then discusses building a learning environment from the theoretical models.
This Isn't Where We Thought We Were Going:

Revisiting our Visions of Computer-Supported Writing Instruction

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CCCC 2002

In 1984, the National Council of Teachers of English published a collection of essays, *The Computer in Composition Instruction: A Writer's Tool*, (Wresch 1984) that brought together descriptions of most of the significant projects then underway in the fledging field of computers and writing. The hopes for the projects now seem sadly disappointed:

- "...the interactive dynamics of this electronic medium, well programmed, can enlarge a writer's awareness of his or her own processes and model an inquiry method." (Burns, 32)

- "...computer-assisted instruction ... offers English teachers a sophisticated and interactive program that addresses all parts of the composing process from the initial planning of a topic through the polishing of a final paper ... [and provides] students with tutorial help outside of regular classroom hours." (Selfe, 174)

- "To bridge this gap between active and passive learning ... a computer program ... [can] help students create, support, and refine a hypothesis." (Schwartz, 47).

These teachers, researchers, and innovative thinkers were not making grandiose claims that their work with computers would not support. Rather, these early practitioners in the field were imagining a potential blossoming of early efforts in computers and writing that subsequent developments in the field have lost sight of. Instead, the expense of developing our own programs, the emergence of word processing software that incorporated many of the mechanical
aspects of spelling and style checking, and the shift to classroom-based techniques all restricted
the scope of these visions by the late 1980s.

Through the next decade, integrating electronic communication tools (especially
asynchronous forums and electronic mail) and Web-based resources assumed center stage for
most teachers of writing. (See, for instance, Cooper & Sefie, 1990; DeWitt, 1996; Greenleaf,
1994; Hawisher, 1992; Hawisher & Sefie, 1991; Minock & Shor, 1995; Sirc, 1995; Spooner &
Yancey, 1996.) With all these commercially accessible tools available to writers who could work
under the guidance of a teacher of writing (often in computer-networked classrooms), teachers
and researchers soon lost sight of some of the early goals—"to enlarge a writer's awareness of
his or her own processes and model an inquiry method," to provide "students with tutorial help
outside of regular classroom hours," and "to bridge the gap between active and passive learning."

In short, composition scholars and teachers turned their attention to the tools already
available, usually developed for non-instructional communication or business applications, as
adaptable for writers in academic contexts. And these tools have settled comfortably onto the
tool belts teachers and writers bring to writing assignments:

• Word processors have increased the ease of creating and revising text to such an extent that
  many writers would find it difficult to compose solely with pen and paper.

• Electronic communication tools and Web browsers have simplified the process of
  researching, distributing, and reviewing written documents.

• The Web has made available tens of thousands of pages of instructional and reference
  information to writers through sites such as Purdue University's OWL
  (http://owl.english.purdue.edu) and Colorado State University's Online Writing Center
  (http://writing.colostate.edu).
More recently, as instruction has moved online, we might have hoped for a return to the more inclusive, interactive vision of the early 1980s, but instead developers of Web-based course management systems, such as WebCT and Blackboard, have reorganized this same palette of communication tools used in physical writing courses for inclusion in virtual writing courses and contexts.

Even the most forward-looking technologies now used in writing instruction have largely replicated or improved upon models based on print texts and traditional classroom instruction about how to write those texts. Web sites that support writing instruction, such as the many Online Writing Labs that have been developed over the past eight years, provide information that largely replicates the format used by print handouts, worksheets, and textbooks. Course management systems, such as WebCT, are based on a model of teaching that differs little from traditional, lecture-based classrooms.

In effect, we remain in a transitional stage where new technologies have been used largely to improve upon earlier teaching and learning practices. Rather than reconceptualizing the textbook so that it takes advantage of the latest interactive technologies, we have built bigger, better, and more accessible textbooks. Rather than reconceptualizing the writing classroom, we have created course management systems that present analogues of those classrooms on the Web. Our teaching and composing practices, as a result, remain firmly shaped by the legacy of the printed page and the institutional model of classroom instruction that dominates traditional education. But we can see ways to break out of these constraints if we think, for a moment, about how we learn non-school subjects.
An alternative model of instruction

Think about the ways you’ve learned new physical skills as an adult. For instance, I'm learning to do some rudimentary home carpentering. My mentor tells me the names of tools and gives advice. Then he shows me how to do certain parts of the process. After I watch once or twice, I start to practice with him watching and guiding my hands or giving more advice as he talks me through the process. Finally, he walks away to let me work on my own until I run into a situation we haven't talked about. I'll ask for help and he'll respond by asking what I think will work. Before I make a costly mistake, he'll step in, but he mainly lets me learn from minor mistakes and from the small successes that accumulate as we go through this process. Could my father install a chair rail in 20% of the time it takes me? Sure, but after we go through this process we both know what he's learned through his long experience and what I could now pass along to others who want to learn these carpentering skills from me.

As I write out this process of guided practice or apprenticeship, I'm reminded of other situations in which I learned to sew, to cook, to bake bread, to crochet, even to ice skate. For me, learning all these physical skills started when I worked closely with a knowledgeable "insider" who explained the process, positioned my body, answered questions, and stood ready to intervene as I moved from initial tentative steps into new territory with my new understanding and growing skill.

Writing, however, isn't exclusively a physical skill. It has a physical component, but most of our students don't need physical guidance about how to hold a pen and form letters, and most would be appalled to have someone position their bodies in front of a keyboard as my typing teacher did over 30 years ago. Rather, what our writing students need falls more into the category of cognitive apprenticeship (Brown, Collins, Duguid, 1989). In addition to the physical skills
required of the ice skater, cognitive skills draw much more on habits of mind than body. Writers need to draw on what they already know about the language to craft both grammatical sentences and coherent, generically appropriate texts. Writers need to draw on what they know about communication more generally to fill in how rhetorical context shapes their writing. Writers need to know how to draw on their past experiences that might be appropriate as content for their texts as well as any reading they could use as source material. Juggling all these cognitive constraints makes writing every bit as cognitively demanding as performing a triple axle on ice skates is physically demanding. But while we would never consider sending a new skater onto the ice to try to do jumps and spins, teachers often do send writers into complex writing situations without the close personal mentoring that helps learners build on their successful first steps of learning.

A second alternative model of instruction

Many literacy theorists, however, would argue that writing doesn't fit smoothly into the model of cognitive apprenticeship because, unlike problem-solving, writing isn't guided by a search for the right answer or for the best resource management solution. Instead, writing falls much more into the realm of human interaction and communication, so problem-solving is not a particularly good model for understanding language processes. Rather, other theoretical perspectives on language would point toward normalized and marginalized discourse as more appropriate explanations of how and why we use language. Although theorists disagree about the underlying principles that govern language use—power, gender, identity—many would agree that cultural context plays a far more important role than individual cognition. For example, a conversation among friends around a dinner table typically drifts from topic to topic over time, but no one person can jump into an animated conversation with a brilliant but unrelated insight.
and expect others at the table to view the insight as anything other than a disruption. No matter how stunning the individual insight, cultural convention demands turn-taking; changing topics abruptly violates this cultural principle.

We learn the cultural conventions through acculturation, a process by which we discover through observation, trial-and-error, and even punishment where the center and margins of the culture are. (Think about the child whose interruptions at the dinner table lead to being taken away from the table. Only when the child can behave by not interrupting does she return to sit with the adults.) Adults who push the margins or boundaries may be hailed as visionaries or madmen, but we assume that children and adolescents just don't know the conventions yet. Disruptive comments from children are typically ignored, not brought into the center of the conversation. However, as children "mature," they become acculturated and adopt conventional behavior. Eventually, conventional behavior, now completely normalized, becomes the unquestioned standard, and "insiders" see clearly the differences between the avant-garde and the insane.

**Building a learning environment from the theoretical models**

Clearly, I've used "insider" when talking about both theoretical models for a reason. Although the traditional model of apprentice/journeyman/master would undoubtedly identify the skilled guide as an expert, I prefer to use "insider" to tie the two theoretical approaches more closely together. An insider might not be consciously aware of what he or she knows. For instance, how many of the friends and family that I had dinner with last Christmas could consciously articulate the conventions of conversational turn-taking? Similarly, when I ask my dad why he makes certain moves as a carpenter, he often has to stop and puzzle out the reason...
because acting in a certain way has become so ingrained as to need no conscious justification.

But "insider" is a better term than expert for a much more powerful reason. Although few of us would claim to be expert writers, all of us who have experience as readers and writers in academic contexts become increasingly comfortable as insiders the longer we use that academic discourse. Consider, for example, the parallel discourse of "fan fics." Fans who watch a particular television show or read other popular culture fictions create their own fictions about established characters. Some of the electronic bulletin boards that host these fan fics have editorial boards that review submissions and post the "best" ones, according to criteria the board agrees on. Other bulletin boards allow all the participants to review each other's postings and comment about how successful the "fics" are. When writers violate the unarticulated conventions of the fan fic insiders, their postings can be thoroughly trashed by other posters. And even though most of the postings are anonymous, fan fic readers and writers will avoid reading the work of someone with a signature characteristic in their fan fics. In short, insiders who "know" the conventions of normalized discourse or insiders who "know" how to write fan fics can powerfully shape the work of any newcomers to the context by telling them how to write more successfully or even by punishing those who violate conventions too radically.

I'm not advocating punishment by ostracism for writers who can't meet the conventions of academic discourse; rather, my point is that writing teachers are not the only ones who can act as insiders in helping other writers to write more effectively within academic contexts. We recognize this principle at work in peer review workshops and in Writing Centers built on a tutoring model. We believe that the same kind of insider support can help us reconceptualize writing instruction on the Web in ways that will get us back to the vision of Burns, Selfe, and Schwartz. Mike will now pick up with the specifics of our Writing Studio and flesh out how this
theoretical framework lets us bridge the gap between active and passive learning, model inquiry, and provide tutoring support when students need it.
Title: This Isn't Where We Thought We Were Going: Revisiting Computer-Supported Writing Instruction
Author(s): Kate Keifer
Corporate Source: 
Publication Date: March, 2003

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