Multiliteracies Meet Methods: The Case for Digital Writing in English Education

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Our focus here will be on how Information Communication Technolo-gies (ICTs) matter to English language arts and literacy education. [1] We are very much interested in how English educators might better pre-pare teachers to use ICTs effectively in writing instruction, but we think it is necessary to reimagine the "technology-writing" relationship as a new type of situated literacy practice in order to do so.

We are moving in the right direction. Conversations in English and teacher education that originally centered on *how* to use technology quickly moved to questions about *why;* moreover, critical and more generative ques-tions about how *and* why should use technology are becoming the norm (e.g., Alvine, 2000; Bowman, 2000; Bush, 2003; Carroll & Bowman, 2000; Pope & Golub, 2000; Pope & Christopher, 2004; McGrail, 2005). Given NCTE's current focus on multiple literacies, we hope that our discussion of technol-ogy helps us think about the future of "multiliteracies" and their place in English education. Our contribution will be an attempt to link, at a deeper level, multiliteracies and the technologies that make them possible. We will do so in a way that might help us rethink Fecho's (2003) question— Are new media and other technology-driven literacies being adequately addressed through methods courses?—and offer a rationale for the inclusion of ICTs at the core of English Education. [2]

Multiliteracies in the English Classroom

To get a sense of history related to technology in the English classroom, there are two interwoven strands that we must pursue: the concept of multiliteracies and common perceptions of technology in teacher educa-

tion practice and research. This is one way to understand the important "technology-literacy (writing)" relationship.

First, an abbreviated look at the changes in English education and related changes in how we understand literacy, particularly as they are a response to technology. Many representations of teaching with technology continue to focus on the logistical concerns of implementing technology, or on the relative costs and benefits (e.g., Hill & Ford, 2000, and the "Learning with Technology" column in *English Journal*), or on how teachers who use technology are fighting against the "grammar of schooling" (Tyack & Cuban, 1995). For instance, Zhao & Frank (2003), who are interested in more widespread and effective technology adoption, have recourse to portray technology as an invasive species in their attempt to understand the difficulties of adoption. Hogue, Nellen, Patterson, and Schulze (2004) see themselves as subversive for using ICTs for student-directed production. And the field has its fair share of overt criticisms of technology in education (e.g., Cuban, 2001).

These examinations of the difficulty of incorporating ICTs into schools have been taking place at the same time that literacy theory has been accounting for multiple modalities and the deeply contextual nature of literate practices (e.g., Barton and Hamilton, 2000). Perhaps most representative for our discussion here is the work of the New London Group (1996), whose conception of literacy as a linguistically, technologically, and socially-situated practice calls for us, as English educators, to rethink traditional literacy practices. This suggests that teaching English has become a field that relies on the socially-constituted nature of literacy itself, which in turn entails new understandings of "texts," reading, and writing. These changes in literacy practices are often lost in the conversation about using the technology itself.

However, we can see some evidence of changes in understandings of literacy and in how teachers talk about technology use in their classrooms. Here we use the conversation taking place in *English Journal* as representative. The teaching practices described are quite diverse. Krucli (2004) presents technologically sophisticated (yet user-friendly) ways of commenting on student texts that rely on a completely electronic way of reading and interacting with students and their writing. Patterson (2000) reports on the new reading dynamic fostered by hypertextual structures, a dynamic that is marked most profoundly by the lack of linearity. Rozema (2003) discusses using—and writing—a MOO to enable students more effectively to enter into reading *Brave New World*, a text students had previously found distancing.[5] Through the MOO project, Rozema and his students engaged in the writing

of the MOO itself—its own brave new world—to the benefit of student engagement with the text. And Catherine Elliott's (2000) discussion of how to help students learn to search computer networks examines an absolutely essential inquiry practice .

Perhaps the most common thread in these teacher conversations is the use of ICTs to communicate (e.g., Blase, 2000; Sipe, 2000). Borsheim (2004) writes of the use of e-mail exchanges between her 9th graders and preservice undergraduates at a nearby university, a pedagogy that enabled the very different learning trajectories of students in her classroom. Similar transformations can be seen in Van Whye's (2000) discussion of her school's sustained, online, poetry-focused exchange between students and a poet. And Hogue et al. (2004) have "donned the electronic trappings of mouse, digitized text, and images" to help students become "scholars," to become producers of media and knowledge.

These teachers show tremendous dexterity in their pedagogies, and they recognize that interactivity is what is most dramatic about their use of ICTs, an argument we will both emphasize and expand below. However, given the kinds of questions teacher educators (e.g., Fecho, 2003) raise, we believe that these teachers' experiences might be the exception, not the norm. It is also important to note that, despite the discussion here, the general focus in English education still seems to see technology as a tool rather than using ICTs to open spaces for socially-situated rhetorical and pedagogical practices. Most significantly, many still accept a conceptual separation of literacy from technology, despite all the theory connecting them. In other words, multiliteracies are relevant to English classrooms because we—students perhaps more importantly than teachers—have the advanced ICTs that allow multiliteracies to happen. We want to explore this situation and why it is so important by exploring a simple question: Why teach digital writing?

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Why Teach Digital Writing? [4]

Why (and how) does technology matter to writing? Let's begin with some commonplaces from the history of thinking about the relationships between computers and composing. It is generally accepted by now that computers are not merely tools for writing but have changed the processes, products, and contexts for writing. It is also generally accepted that teaching writing in technological environments, both physical and virtual, is quite different

from teaching in environments mediated by more traditional technologies (e.g., paper, pens, books, desks, and chalkboards). Many writing technologies have streamlined the writing process (the typewriter is one example), but only a few writing technologies have had truly dramatic social impact. So when we use the term "digital writing," we refer to a changed writing environment—that is, to writing produced on the computer and distributed via networks. Connectivity allows writers to access and participate more seamlessly and instantaneously within web spaces and to distribute writing to large and widely dispersed audiences. We think ICTs are dramatic technologies.

The "revolution," if we can use that word, is not precisely a machine revolution; it is a social and cultural revolution.[5] The way that people are using the Internet and the sheer numbers of people writing on and with the web are having significant social and cultural impact. A February 2004 Pew Internet and American Life study reported that "44% of U.S. Internet users have contributed their thoughts and their files to the online world" through posting written and visual material on web sites, contributing to newsgroups, writing in blogs, conversing in chat spaces (such as instant messaging), and via other digital means (Fallows, 2004). Many of these people are our students—and, for that matter, our grandparents—and this deep penetration of digital technologies, artifacts, and networks into our day-to-day lives, including our lives as teachers and learners, has profound implications.

So what of these deeper implications? Let's spin three quickly: the rhetorical, the interactive, and the pedagogical. In terms of rhetorical theory—or how we understand the practices of composition and reception—the implications for digital writing are significant. First, a rhetoric for digital writing must fully reject the idea that writing equals style, syntax, coherence, and organization—meaning at the level of the sentence and the paragraph. It must also reject the idea that all writing is the same, whether it is produced with a pencil, a typewriter, or a networked computer. From a rhetorical viewpoint, writing concerns not only the words on the page (the product), but also concerns the means and mechanisms for production (that is, process, understood cognitively, socially, and technologically); mechanisms for distribution or delivery (for example, media); invention, exploration, research, methodology, and inquiry procedures; as well as questions of audience, persuasiveness, and impact. From this perspective, writing technologies play a significant role in meaning making—especially in terms of production (process) and distribution (delivery). Writing is immediately and completely restored as an art of communication.

Second, in terms of interactivity, ICTs allow writers to become publishers and distributors of their writing. And chances are they will get feedback, sometimes immediately, from readers both inside and outside the classroom. Therefore, audiences and writers are related to each other more interactively in time and space. Writers can easily integrate the work of others into new meanings—text, image, sound, and video—with a power and speed impossible just a few years ago. The depth and breadth of this type of collaboration—both implicit (by "borrowing" from others) and complicit (through communities of writers)—may be one of the most significant impacts of computer technologies on the contexts and practices of writing. This context presses up against larger issues of intellectual property, plagiarism, access, credibility of sources, and dissemination of information (DeVoss, 2001; DeVoss & Rosati, 2002). Indeed, fair use policies are continually tested when composing with multiple media given the ease of access to media, the ease of manipulating and reforming that media, and the ease of redistributing compositions. When we put it all together, the ability to compose documents with multiple media, to publish this writing quickly, to distribute it to mass audiences, and to allow audiences to interact with this writing (and with writers) challenges many of the traditional principles and practices of composition, which are based (implicitly) on a print view of writing, produced for only a teacher to read. The changing nature and contexts of composing impacts meaning-making at every turn.

Finally, all of this impacts pedagogy, of course. Writing instruction must equip students with the tools, skills, and strategies not just to produce traditional texts using computer technology, but also to produce documents appropriate to the global and dispersed reach of the web. This change requires a large-scale shift in the rhetorical situations that we ask students to write within, the audiences we ask them to write for, the products that they produce, and the purposes of their writing. Consider this typical scenario from our classrooms:

> When we ask students to write in a classroom with computers, markers, crayons, and the paper and pens that they bring to class, they choose different technologies for different purposes. Some students like to scribble, some to draw, some to jot notes on paper, and others turn immediately to the computer. Those who turn to the computer sometimes write with an e-mail application, sometimes with word processing software, sometimes with a graphics program that allows them to make images.

There are a number of issues embedded in this example, but the basic pedagogical imperative is to teach writing in places that afford students the tech-

nological choices that they need. Those choices certainly entail computers because eventually students need to make their writing into something persistent. As the writer advances her project, the artifact she has created will need to be moved, shared, and revised, all practices that need ICTs.

Thus, the point is not to teach writing *with* computers. It is to teach writing in new social spaces that allow students to write through ICTs into a broader rhetorical situation. Why? (1) Because students need a full set of technology choices—including computers and networks—to support how they write, share, socialize, play, and organize their lives. A significant number of their meaning-making activities are *already* networked activities, including the writing they do for us. (2) Because if teachers of writing expect to intervene usefully to help students with their writing processes, they have to engage in students' production and encourage them to engage with others, all of which is now mostly computer-mediated and networked. In other words, if we want to teach writing or help students learn how to write more effectively, then we have to see writing in the same ways that they do and be with them where they write. Networks are classrooms. Digital writing is socially situated in a collaborative, recursive and responsive space in which teachers *must* participate with their students.

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Where We Might Go From Here

To reimagine the "technology-writing" relationship as a new type of situated literacy practice means, in part, that English teachers (and teacher educators) should no longer have a conversation about literacy without considering technology. We have attempted to argue that ICTs are at a point where the changes are so significant in how we consume and produce "writing" that they simply can no longer be ignored, and we have attempted to show these changes to be most strikingly social and cultural, not technological.

And here is where we might follow our students instead of lead them. As Dawn Hogue (2004) writes, for her students, writing for the web is more purposeful. Students know that computer networks are alive, that they are truly interactive, that people engage each other through them and that what goes out across a network matters. It has impact. New social spaces are created, new (and multiple) literacies supported.

As English educators, then, we need to engage preservice and inservice teachers in the same critical and rhetorical types of technology-rich literacy activities that we would ask them to design for their own students. One aspect to consider when we look at how technology changes writing is the way in which we talk about teacher education courses and requirements. For instance, our own institution has developed technology standards for its teacher education students. These standards are presented in two levels: "Fundamental ('simple') use" and "Professional/pedagogical ('adaptive') use" (Center for Teaching & Technology, n.d.). In the first category, candidates are asked to simply write an e-mail and, in the second, they should "write a thoughtful and innovative instructional plan that includes the use of e-mail as an essential component." Our concern with standards like this is that the bar is set far, far too low. There is little here that is creative, critical, or rhetorical. We might *begin*, therefore, with critical and self-reflective considerations of how to effectively use ICTs for communicative purposes and how to foster effective use in classrooms.

To deal with this, a heuristic might help our students sort out some of this complexity and think about what it means to be literate in the social space of ICTs. Stuart Selber (2004) offers just such a heuristic for analyzing writing pedagogy. He argues that traditional views see computer literacy as decontextualized skills and work against complex understandings of literacy. Functional literacy, as represented in the e-mail standard listed above, only concerns itself with the use of a computer without questioning biases, assumptions, limitations, or otherwise examining the use of the literacy itself. For Selber the "ideal multiliterate student" should acknowledge the functional literacy that it takes to operate a computer while also incorporating critical and rhetorical literacies as well (pp. 22-25). A literacy-technology standard that entailed functional,

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critical, and rhetorical literacies could become the new way in which we work as teacher educators and position ourselves as educational researchers. Literacy-technology standards of the sort Selber proposes might lead students to a much deeper understanding of what it means to communicate and teach in new social and cultural spaces made possible by the affordances of ICTs. Using ICTs isn't enough; critically understanding how these writing technologies enable new literacies and meaningful communication should also be a core curricular and pedagogical function of English education. To return to our example, writing an e-mail isn't enough; thinking

about how it represents your practice and pedagogy as a teacher and what implications that has for you as a professional moves closer to that ideal.

Thinking about standards as Selber proposes is just a start, of course. The literature is full of discussions of impediments to adoption and adaptation of technologies by teachers. We understand this and its importance, but perhaps one way through the difficulties of understanding and teaching literacy and technology as deeply imbricated is to understand what students already do. One obvious connection is the fact that our networked students are very soon going to be teachers themselves, and so the methods class is a site of obvious and tremendous importance. Are we preparing our preservice teachers for this? They are, after all, the same people who, right now, may very well spend much of the night writing e-mail and blogging while playing games with peers both in a dorm across campus and across the continent. Is there value in an effort to connect what they do now with ICTs to what they might do very soon with their own students? Could new media be adequately addressed in methods courses? We think so. But, adequacy will require this reconceptualization of what we believe it means to lead a multiliterate life and the implications that this has for being a teacher of English.

Our students, those we have called "digital writers," rely on a rhetorically sophisticated combination of words, motion, interactivity, and visuals to make meaning. These options require them to think carefully about production choices. These tools shift the ways in which composing takes place: They change the way we do research, the way we produce "texts," the way we deliver our writing. We think writing teachers must commit to this digital rhetorical perspective on writing, or they will miss the opportunity to help their students engage effectively in the ICT revolution taking place right now. As English educators, we need to embrace this principle and continue moving our students, and ourselves, in the right direction.

Notes

1. We will be using the convention "information communication technologies" (ICTs) throughout this article for the following reasons: (a) it better describes the articulation of computer and communications technologies like computers, networks, cell phones, and PDAs; (b) it is consistent with work outside computers and composition (e.g., social informatics) and in other contexts (e.g., Europe). That is, it is both more descriptive than "computers" and it disrupts the disciplinary focus on "technology" (undifferentiated) and "computers," neither of which is an adequate naming convention or way to understand writing technologies.

2. Though we recognize that issues of equity of and access to technology are an omnipresent discussion in education, and that the digital divide still exists, this ar-

ticle focuses largely on students in teacher education programs, most of whom are situated on college campuses that have adequate, if not exemplary, technology resources. While this does not change the fact that the schools they will teach in may have a scarcity of resources, we believe that the understanding of multiple literacy skills that ICTs require still has a core place in pre-service teacher education.

3. MOO stands for Multi-User Dungeon (or Dimension), Object Oriented. In more accessible language, a MOO is (usually) a text-based multi-user simulation environment or "virtual world." Most MOOs and MUDs allow for text-based interactions within the environment, and in most environments users can create things that stay after they leave (like rooms or brooms) and which other users can interact within their absence. Over time, this is how a "world" can be created by many people working within the MOO.

4. This section draws heavily and directly from a short piece called "Why Teach Digital Writing" written by Danielle DeVoss, Ellen Cushman, Bill Hart-Davidson, Jim Porter, and Jeff Grabill. This piece, in turn, was written in response to pressures on the writing program at Michigan State University, including that part of our program that touches on teacher education. We have lifted the ideas and a considerable amount of text, Napster like, from that prior document to create something new. Issues of authorship and the related (but not precisely identical) complexity of document origins (and originality) is one of the issues made most real by digital composing technologies and computer networks. Think here of the fit the Recording Industry of America is having about music. English teachers are dealing with these very same issues—and ethics—right now (see DeVoss and Porter, forthcoming).

5. We think English teachers *must* engage this revolution, in part because the intellectual and rhetorical complexity demands our participation—the world needs us—and in part because a failure to do so will be to further alienate English and the humanities from the day-to-day multiple literacy practices that matter.

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