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Extending the Conversation: New Technologies, New Literacies, and English Education

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Preface

In early spring 2005, using the very technologies and composing strategies they were asked to study, the eleven CEE members1 to participate on the Multimodal Literacies and Digital Technologies Thematic Strand Group during the Conference on English Education (CEE) Leadership and Policy Summit in Atlanta, GA, in May 2005, began to share with one another on a listserv and blog their perceptions of the issues and opportunities associated with the introduction of newer technologies and literacies into their professional and personal lives. The authors of this article attended the CEE Summit and developed an initial essay that they published on the CEE website (*Beliefs about Technology and the Preparation of English Teachers, 2005*) and, in an effort to further demonstrate the capacity of newer technologies to support dialogic, multi-authored, and organic texts, they also published the essay (Swenson, Rozema, Young, McGrail, & Whitin, 2005) in *Contemporary Issues in Technology and Teacher Education* (*CITE*). This current revised essay is informed by commentaries written in response to the essay published in *CITE*; the full texts by several respondents are published in the English language arts section of the March 2006 edition of the *CITE* journal (see Drucker; 2006; Hicks, 2006; Kajder, 2006; and Myers, 2006). For those who would like to contribute to our unfolding understanding of multimodal literacies and digital technologies and their influence on English educa-

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[1]Original members of the multi-modal literacies and digital technologies thematic strand group for the CEE Summit included Richard Beach, Suzanne Borowicz, Troy Hicks, Sara Kajder, Ewa McGrail, Jamie Myers, Carol Pope, Robert Rozema, Janet Swenson, Phyllis Whitin, and Carl Young.

tion, please join us in an extended conversation by registering on the CEE New Technologies and Literacies Q-folio at the following URL: https://e-folio.web.virginia.edu/E-folio/2/CEE/cs/login.cfm.

Developing a Context for (Re)Considerations of Our Work

A document of this length cannot address the multitude of ways in which newer or repurposed technologies and literacies are changing our daily lives, including our conceptions of ourselves, those around us, and the world we co-inhabit. Some readers of this essay may feel that these innovations have had little effect on their lives—they don't own and don't plan to own a computer or cell phone, a personal digital assistant or digital camera. Other readers, however, are likely shaking their heads in agreement, realizing that they are among those who are now *life caching*, or "collecting, storing and displaying one's entire life, for private use, or for friends, family, even the entire world to peruse" in an internet environment (http://www.trend watching.com/trends/LIFE_CACHING.htm). Most of us are likely to fall somewhere in between.

As colleagues attempt to sufficiently distance themselves from these newer technologies and literacies to analyze their impact on us and ours on them, they refer to such consequences in fairly global terms. Walter Ong (1982), for instance, suggests that these technologies aren't just changing our lived conditions, they are changing the way that we *think*. Jim Porter (2002) reminds us that the ways in which we use these technologies contribute to the shaping of our ideologies—including our perceptions of the values and limitations of newer technologies. And Pat Sullivan (1991) casts the net even more broadly when she encourages us to think of these new technologies simply as "change agents."

If these colleagues are correct and newer technologies (and the literacies they engender) are change agents whose effects are so pervasive they influence our thinking and ideologies, it is easy to understand the trepidation many of us feel when thinking about why, when, and how we will introduce their study in our English education courses. We are joined in those thought-filled pauses by Feenberg (2002) and Yagelski (2005), among others, who have warned educators not to conflate the adoption of newer technologies with progress. In other words, both caution us not to view the integration of newer technologies into English language arts and literacy teaching as innately and universally desirable outcomes. As Postman (1992) explained, it is "a mistake to suppose that any technological innovation has a one-sided effect" (p. 4).

The integration of newer technologies and the opportunity for ourselves and our students (and their students) to engage with newer literacies is neither a foregone conclusion nor following a predetermined trajectory. English educators, individually and collectively, have the right and the responsibility to influence the development, modification, and adoption of the newer technologies they will integrate into their teaching and their students' learning, and they have the right to reject others. In order to adopt such a critical and proactive stance, however, teachers and teacher educators will need opportunities to develop nuanced and critical understandings of these technologies and the literacies with which they are associated.

> **English educators, individually and collectively, have the right and the responsibility to influence the development, modification, and adoption of the newer technologies they will integrate into their teaching and their students' learning, and they have the right to reject others.**

Evolving Conceptions of English Education

. . . [W]e are struggling with a discipline in metamorphosis.
—Barrell, Hammett, Mayher, & Pradl, 2004, p. 2)

We argue that newer technologies are reshaping our lives and our communities in complex ways. Thus, an examination of literacy practices involving technologies deserves special attention, not because they are separate, but because they are central to effective English education in a rapidly changing world. As Leu (2005) noted, the Internet as well as other kinds of newer technologies and new literacies afforded by the Internet are literacy issues, not technology issues, for English and literacy educators.

Furthermore, we advocate bridging the binaries and divides that position literacy and English language arts (ELA) content here and technology over there; similarly, old literacies and their social practices here, and new literacies with newer technologies and their social practices over there. Myers' (in press) definition of new literacies erases these divisions, by describing them as "evolving social practices that coalesce new digital tools along with the old symbolic tools to achieve key motivating purposes for engagement in the literacy practices" (Myers, in press).

Based on these theoretical assumptions, the preparation of English language arts teachers must reflect these considerations. To this end, Mishra and Koehler (2006) suggest that we expand upon Shulman's (1987) notion of fostering our students' pedagogical content knowledge (PCK) to the no-

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tion of *technological* pedagogical content knowledge (TPCK). They describe TPCK in this way:

> TPCK is the basis of good teaching with technology, and requires an understanding of the representation of concepts using technologies; pedagogical techniques that utilize technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems students face; knowledge of students' prior knowledge and theories of epistemology; and how technologies can be utilized to build on existing knowledge and to develop new or strengthen old epistemologies. (Mishra & Koehler, 2006, p. 14)

Pope and Golub (2000), Young and Bush (2004), and Jonassen, Howland, Moore, and Marra (2003) provide important insights into developing technological pedagogical content knowledge. As Table 1 demonstrates, these scholars encourage English educators to reflect on new technologies and integrate them for specific purposes into coursework.

Evolving Definitions of Texts

Technological pedagogical content knowledge (Mishra & Koehler, 2005) involves understanding the relationship between traditional and digital texts, and capitalizing upon their unique potentials in informed, flexible, and critical ways. We know that digital texts both imitate and expand existing print forms. Some digital texts share common forms and common purposes: the online newspaper, for example, is similar in many ways to its print-based counterpart. At the same time, digital texts possess characteristics that are unique to the digital medium, challenging our ideas about what texts are and how they work. More specifically, digital texts are often hypertextual, linking through a labyrinth of semiotic and semantic pathways to a multitude of other texts. Many digital texts are dynamic, their content updated and revised continuously. Such content is typically multimodal, incorporating visual, auditory, and other non-verbal elements. New digital genres, such as Web pages, Web logs (blogs), multi-user virtual environments (MOOs and MUDs), and collaborative writing platforms (wikis and threaded discussions) are evolving and new digital grammars emerge with each new form.

Translating print texts into digital format also alters the ways they transmit meaning and the ways in which they are accessed. As publicly accessible online archives make more and more texts available—from fiction to non-fiction, from classic to contemporary, from the academic to the mainstream—our study of texts will continue to change. Online archives have the potential to resituate print works within rich multimedia contexts; to ex-

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Table 1. *Developing Technological Pedagogical Content Knowledge*

Pope and Golub (2000)	Young and Bush (2004)	Jonassen, Howland, Moore, & Marra (2003)
• Introduce and infuse technology in context • Focus on the importance of technology as a literacy tool • Model English language arts teaching and learning while infusing technology, • Evaluate critically when and how to use technology, • Provide a wide range of opportunities for using technology within the content, • Find means of assessing technology-based English language arts projects, and emphasize issues of equity and diversity in technology	• Recognize the complexity of effective technology integration • Understand the evolving and continuous effect computer, information, and Internet technology have on literacy • Recognize the importance of context in effective technology integration • Create relevant contexts for technology integration a) developing a pedagogical framework, b) asking the important questions, c) establishing working guidelines, d) implementing these strategies with technology integration, e) and reflecting on the process and revisiting these strategies regularly.	**Consider technology tools to support knowledge construction:** • For representing learners' ideas, understandings, and beliefs • For producing organized, multimedia knowledge bases by learners • For exploring knowledge to support learning by constructing: • For accessing needed information • For comparing perspectives, beliefs, and worldviews **Consider technology context to support learning by doing:** • For representing and simulating meaningful real world-problems, situations, and contexts • For representing beliefs, perspectives, arguments, and stories of others • For defining a safe, controllable problem space for student thinking **Consider technology as a social medium to support learning by conversing:** • For collaborating with others • For discussing, arguing, building consensus among members of a community • For supporting discourse among knowledge-building communities **Consider technology as an intellectual partner to support learning by reflecting:** • For helping learners to articulate and represent what they know • For reflecting what they have learned and how they came to know it • For constructing personal representations of meaning • For supporting mindful thinking

pand the boundaries of texts through links to biographical, historical, and other connective texts; to widen the canon to include previously marginalized writers and genres formerly underrepresented in the print medium; and to redefine the concept of the library as traditional copyright laws must accommodate digitally scanned texts.

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Evolving Conceptions of Reading

Like the reader of print texts, the reader of digital texts takes an active role in the creation of meaning. Digital texts can expand this role by allowing the reader to follow nonlinear reading pathways, by encouraging the reader to intervene in and expand the text, and by presenting the reader with rich opportunities for meaning making through multimodal content, such as video, audio, and other modes. Through these interactive processes, readers of digital texts become more "writerly" readers, collaborating with the author to co-create the text.

In reading digital texts, readers use a wide range of new literacy strategies to create meaning. Increasingly, information is taking on new forms that incorporate images, video, sound, and other non-textual elements. To effectively transact with multimodal texts readers must develop strategies that allow them to recognize, evaluate, and make meaning within these variant modes of representation. As digital information resources grow incomprehensibly vast, readers must know how to locate, evaluate, synthesize, cite, and use information with discernment and integrity. Reading a single entry on blogs, for example, may involve manipulating icons, viewing related streaming video, listening to audio, participating in an instant poll, and identifying and following links to related information. Readers must also recognize the cultural subtexts embedded within these computer-mediated texts (Myers, 2006). They must develop strategies to assess the quality of information and writing on the Web by identifying rudimentary indicators (e.g., the authority and expertise of the author, date of publication, or citations for major claims or facts).

In reading digital texts, readers use a wide range of new literacy strategies to create meaning.

At the same time, reading digital and multimodal texts requires conventional literacy strategies necessary to all reading acts. Such strategies are based on the belief that that reading is a personal, meaning-driven process, and that readers actively create meaning as they read. While technology applications have the potential to reinforce reductive literacy strategies, as in skill-and-drill phonics software, they also have potential to support richer and more holistic views of reading by helping readers to envision and partake in the world of the text; by encouraging students to make intertextual, intratextual, and extratextual connections; and by offering sophisticated means of textual analysis and critique. For example, nondigital, multimodal literary response (Wilhelm, 1997; Smagorinsky, 2001) can be explored and expanded in digital spaces (Myers & Beach, 2004). And, like the print media,

new media most often reinforce the values and ideologies that are embedded within our language and society at large. Readers must recognize and respond to these cultural subtexts, not only in computer-mediated texts, but in film, television, music, and other popular media as well.

A deep and broad understanding of rhetoric and ethics in conjunction with new media and literacies help readers of both digital and traditional texts to learn methods of critically analyzing the ways in which others are using multiple semiotic systems to convince them to participate, to buy, to believe, and to resist a wide range of appeals. Ancient methods of persuasion have been enhanced through artful use of music, color, animation, voice over, and tempo. Since students with limited incomes are often on ad-supported "free" Internet sites, these might become wonderful sites in which to explore and analyze persuasive appeals.

It is clear, then, that new digital technologies require both old and new sets of literacies and social practices, including both-print-based and multimodal literacies and their accompanying social practices.

It is clear, then, that new digital technologies require both old and new sets of literacies and social practices, including both-print-based and multimodal literacies and their accompanying social practices. Thus, it is not a matter of readers developing either print or digital reading skills; new literacies are in a synergistic, reciprocal, and constantly evolving relationship with older literacies, and the interplay of these processes in support of communication and knowledge construction must be perceived as social acts that build upon prior knowledge, literacy skills, and social literacy practices.

Technology integration in any content area is most effective when the instructor, an expert in his or her discipline, makes important connections between the objectives and pedagogy of his or her content area and the available technology tools. This process involves asking how technology can support and expand effective teaching and learning within the discipline, while simultaneously adjusting to the changes in content and pedagogy that technology by its very nature brings about.

This means that English educators should integrate relevant digital texts into the curriculum, drawing on a wide range of databases, archives, Web sites, blogs , and other online resources. Ideally, these digital texts should represent the wide range available online, including print-based genres (e.g., poetry), new digital genres (e.g., the blog or wiki), hybrid forms (e.g., hypertext editions of print works), and multimodal texts (e.g., video blogs). English educators must also prepare future teachers to read these texts us-

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ing a range of new literacy skills, including information literacy strategies, multimodal literacy strategies, critical literacy strategies, and media literacy strategies.

English educators must recognize, analyze, and evaluate connections between print and digital texts, as well as recognize what readers of print and digital texts need. At the same time, they must expand print-based models of text and reader to incorporate new digital genres. Exploring the connections between print and digital texts also means understanding how digital and print texts complement each other, as their conjunction and juxtaposition offer new meanings and enriched experiences for readers.

English educators, teachers, and students must also discuss issues of equity and diversity, helping students not only to understand their origin in the larger social, political, or economic contexts, but also encouraging them to consider these issues in their own interactions with technology and other technology users within and beyond the classroom. Through such conversations students can begin to develop a stronger sense of social acceptance for all participants in technology-supported physical and virtual environments, irrespective of gender, race, class, or political persuasion. Creating the terms for such an environment can provide a democratic forum, to which everyone has an equal opportunity to contribute.

Evolving Conceptions of Writers and Writing

Although we believe there is more variation in writing pedagogies and student texts than Heilker (1996) suggests, for decades academic essays and research papers have remained a primary form for school-based student writing. (We use the term "writing" here in its broadest sense; to suggest the composition of an attempt at meaning-making, whether that composition is a print text, a digital slideshow, a film, or a multi-media flash poem.)

In an era of growing concern about student writing scores on standardized tests, we are also seeing large numbers of teachers and schools revert from more progressive pedagogies to reductionistic approaches that suggest that students need to master only a few steps to become successful writers.

In an era of growing concern about student writing scores on standardized tests, we are also seeing large numbers of teachers and schools revert from more progressive pedagogies to reductionistic approaches that suggest that students need to master only a few steps to become successful writers (*6+1 Writing Traits* [2003], for instance). Heilker (1996) describes such a narrow approach to writing pedagogy in this way:

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> Thesis statement. Topic sentences. Supporting details. The unholy trinity of composition instruction. This trio of *god terms* in composition instruction has been worshiped by legions of composition teachers and has thus left its indelible stamp on the thinking and writing of generations of students. (p. 1)

Heilker worries with us that such formulaic conceptions of writing, instruction, and texts encourage students *not* to think critically, innovatively, or well, even as they reinforce the positivist impression that Truth can be known and communicated if writers only train themselves to think and write in a clear, linear, and orderly fashion.

Such an approach to writing and writing instruction also encourages students to adopt what Ursula LeGuin has referred to as the *father tongue:*

> The essential gesture of the father tongue is not reasoning, but distancing—making a gap, a space, between the subject or self and the object or other. . . .The father tongue is spoken from above. It goes one way. No answer is expected, or heard (quoted in Tompkins, 1987, p. 173).

The very forms in which we ask students to write have significance. Berlin (1988), for instance, has argued that "rhetoric can never be innocent, can never be a disinterested arbiter of the ideological claims of others because it is always already serving certain ideological claims" (p. 477). In other words, choosing or asking our students to choose a five-paragraph essay as a discursive form—instead of, for instance, a blog—embraces "one version of economic, social, and political arrangements over another" (p. 477). What presumptions about the future and our students' economic, social, and political futures does each form suggest? Beyond school settings, who writes in five paragraph essays and who writes in blogs? For what purposes? And to what audiences?

What is the relationship between race, class, culture, gender, and sexual orientation and rhetoric? The array of discourses and rhetorics that currently "count" in school settings as suggested by our description of one of the most common forms—the essay—is neither very large nor very diverse. The valued forms privilege a subset of students (and faculty and community members) and marginalize others, at great immediate as well as long-term costs to individuals and communities. Decades ago we began to acknowledge the need to think about the place of multicultural literatures in teacher preparation programs. As new technologies enable our students and their students to write for the world, the potential for culturally-based misunderstandings is increasing exponentially. The study of cultural rheto-

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rics combined with the study of digital rhetorics will be essential if we are to avoid distancing ourselves from one another even as newer technologies allow us to draw one another into closer conversation.

New Technologies, New Literacies: New Opportunities for Hegemony?

Most of us do not need to "invite" our students to compose using newer technologies. They are already doing so:

> **Young people today live media-saturated lives, spending an average of nearly 6 1/2 hours a day with media.**

> Across the seven days of the week, that amount is the equivalent of a full-time job, with a few extra hours thrown in for overtime (44 1/2 hours a week). Indeed, given that about a quarter (26%) of the time young people are using media, they're using more than one medium at a time (reading and listening to music, for example), they are actually exposed to the equivalent of 8 1/2 hours a day of media content, even though they pack that into less than 6 1/2 hours of time. (Kaiser, p. 6)

When we co-opt student "owned" literacies and bring them into the classroom, giving them academic status, we do risk contributing further to the hegemonic function of schooling. Foucault (2004), for instance, reminds us that "Any system of education is a political way of maintaining or modifying the appropriation of discourses along with the knowledges and powers they carry (p. 1469). The fluidity of these new media texts, however, and their ability to morph into quite different compositions by combining the elements in different ways is likely to mitigate against the educational establishments co-option of them.

Affordances and Constraints

Newer technologies and the literacies they engender carry costs. Not only do the hardware, software, and peripherals (and professional development) require monetary investments; the learning curves for students and faculty require what is often an even more precious commodity—time. Investing time in the authorship of new media texts raises the possibility of displacement of other literacy learning opportunities from the curriculum. We recognize that this is not always the case; some artful colleagues have found ways to use new literacy learning processes as the subject of inquiries that illustrate non-new literacy principles and purposes. Digital storytelling, for

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instance, can become at once the subject and object of I-Search projects (Macrorie, 1980).

University faculty also find themselves positioned in a new and, some would say, awkward way. Although many have already adopted a *coaching* rather than *directing* metaphor for their practice, they often find themselves not only far less knowledgeable about these new literacy practices than their students but also often lacking language to even communicate their needs for assistance (particularly as terms associated with new technologies and literacies seem to proliferate). The fact that university faculty, in particular, trail their students in their development as authors of new media isn't surprising when one considers that such texts aren't often valued during tenure and promotion decisions. If faculty are to compose e-portfolios or podcast classroom discussion, they most often will be required to engage in such composing *in addition to* more traditional forms of publication.

Some of the many affordances of new textual forms are obvious. The Internet has connected those within classrooms, almost effortlessly, to those in near and distant communities beyond the classroom. Britton, Burgess, Martin, McLeod, and Rosen (1975) encouraged us to ask students to write for an audience other than the teacher, even if such invitations were more fiction than fact. Today, students have very real, very diverse, and very distant audiences for their compositions, and their compositions have more opportunities to address needs that existed prior to and were not manufactured to drive the writing. As mentioned previously, the broadness and diversity of that potential audience is not without its problems.

Audience is clearly one affordance of new media composition, but others spring just as readily to mind—new technologies allow faculty to acknowledge the range of talents students bring with them to the classroom, talents often associated with Gardner's (1983) "multiple intelligences." Research has become far more nuanced (and complex); collaboration far easier, and revision (thankfully) far less cumbersome. Document design, because so many design options are now available, has become a greater focus (e.g., we now ask, how does "white space" *mean*?). And rhetorical analyses of mode are now far more grounded in possibility—what best serves this message, this audience, this purpose: A movie? pamphlet? slideshow accompanied by a talk? podcast? website? blog? The choices available to writers (or, as we will discuss in a later section, available to that subset of *privileged* [and we recognize the complexity of using that word here]) may seem overwhelming, even for writers who have frequent access to newer, powerful, and diverse technologies and the professional development that supports their learning.

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Everything Old Is New Again

In *Archaeology of Knowledge and the Discourse of Language*, Foucault (2004) advocates for the excavation of subjugated knowledges that dominant or standard forms of literacy have driven underground. What might this mean for English educators who are teaching writing and the associated pedagogies? First, it means that writing today and in the foreseeable future is apt to take many forms, including traditional print texts. The newer forms, as was true in the 17th century, are likely to conform to the original definition of the *essai* . . . they will be "attempts" rather than performances of codified forms. They are likely to be exploratory, fragmented, and unfinished.

Approaches to developing scholarly essays have not always been as reductive as those we see most often today. In examining 17th-century essayists' texts, Heilker (1996) notes that in older conceptions,

> The essay is epistemologically skeptical, a manifestation of the spirit of discovery at work in an uncertain universe, an exploration of a world in flux that leaves old, inadequate orders behind in its quest for new ideas, new insights, and new visions of the truth (p. 17).

Are we currently mired in "old, inadequate orders"? To answer that question, we would be well served to ask these questions: Are all of our students served equally well if we place heavy reliance on the traditional academic essay as the privileged form of discourse? Will heavy reliance on the print essay best prepare all of our students for post-school living and learning? Are traditional forms of gathering and communicating information our best approach if our objective is the development of "new ideas, new insights, and new visions of the truth"? If our answer to those questions leads us to believe that our students will be best served by opportunities to engage in and to invite their students to engage in both traditional print and new media composing, we do need to be aware of the challenges that composing in these new forms may raise for writers.

Lest we view new media composing as a panacea for revolting against old inequities and providing a golden age of writing and rhetoric, there are risks associated with new media writing as well. Johnson-Eilola (1997), for instance, notes that these new forms can become too flat (without depth) and too fast (without reflection), encouraging students to engage in what he refers to as "surface living." He writes, "We experience things not at depth but on the surface; not a slow accretion, but an everything-all-at-once shout. We do not pass tales linearly, but experience them multiply, simultaneously, across global communication networks" (p. 185).

These new forms—which often link sound, graphics, and alphabetic texts—are often referred to as *pastiche* and are, in Ilana Snyder's (2002) words, characteristic of cyberspace, " . . . the archetypal site of postmodern textual practices, feed[ing] on fragmentation and superficiality—actively promoting the random cannibalization intrinsic to pastiche" (p. 176).

Why run the risk of encouraging preservice and inservice teachers (and thus, their students) to create texts that allow them to treat subjects of study superficially and dismissively—reading by hop-scotching through hyperlinks or "writing" by laying down the tracks to a popular song and allowing a program to add pictures and transitions without considering the effects of either?

The *essai* was developed not to *tell knowledge* but to *discover it* during a time of uncertainty; it was an *attempt* to develop new ideas, insights, and visions. It was an *attempt* to better address the questions that Aristotle originally posed for us and that have kept writers and those who prepare writing teachers busy for years: How should I live? How should we live together?

Can new media enable us to address such lofty goals in ways that traditional print texts cannot? We believe that we don't yet have the answer to that question. We are still attempting to understand the "grammars" of (the rules that govern the meaning making of) new semiotic systems such as sound and graphics, if such grammars are possible to define (Kress, 1996, for instance, questions whether this is possible). And were we able to define them, we would still need to understand better the ways they work when combined with one another.

If we take even one of the new forms of communication that is being combined with print texts and think about the ways in which we have historically and currently considered this semiotic system to "speak," we can begin to see the possibilities.

If we take even one of the new forms of communication that is being combined with print texts and think about the ways in which we have historically and currently considered this semiotic system to "speak," we can begin to see the possibilities.

We might turn our attention, for instance, to photographs and visual images and the ways in which they communicate on their own as well as with words. Sartre (1972) argued that images, unlike words, can be fully known because they are "flat" and our vision of them is certain (we can look for long periods but still see the same thing), but Barthes (1980) argued that it isn't in the translation, but in the affect that photographs or images carry such power. This power that images bring to print texts—the ability to create fissures in our understanding, cracks in a too solid perception of un-

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derstanding—just might allow seedlings of new understandings to take root and grow.

Introduction of visual images into print texts might also allow us to resurrect seldom used genres. One such genre, Living Newspapers, popular during the Depression Era dramatized newspaper accounts of human interest stories with social and political implications, punctuated by statistics related to the issue illustrated in the narrative and music used as satire. Although originally created as plays emulating today's "docudramas," the genre would work well in a Web-based environment in which students could locate the newspaper article, write the script, research the statistics, create charts and graphs to illustrate those, and sample music for song lyrics that would add an ironic twist.

A form of writing often excluded from today's classrooms, yet quite common in the 18th and 19th centuries, is the commonplace book. Jason Pontin (2005), the editor of MIT's *Technology Review*, sees similarities between commonplace books and his first experience creating a blog. Pontin begins by sharing Ellen Gruber Garvey's (2003) description of commonplace books taken from "Scissorizing and Scrapbooks: Nineteenth-Century Reading, Remaking, and Recirculating," included in *New Media 1740-1915*, a collection of essays from MIT Press:

> The first commonplace books appeared during the Renaissance and contained hand-copied excerpts from manuscripts—and, eventually, from printed books—along with personal annotations. As Garvey describes, these were succeeded by something closer to what we think of as scrapbooks. In them, people of a literary bent would paste photographs or cuttings from magazines and newspapers. Between the keepsakes, they would scribble appropriate scraps of prose or poetry, or associated thoughts that might profit from later revision. (¶ 3)

Pontin (2005) then relates this historical depiction of commonplace books to his experience as a novice blogger:

> The medium's technological properties—pasting, linking, tagging, and so on—have very quickly encouraged a common style of publishing that very few bloggers resist. Anderson [editor of *Wired* magazine] is surely right to suggest that blogs are as various as humanity—because posts can be intelligent or silly, rigorously reported or carefree, essayistic or written in a kind of telegraphese—but blogs do seem to have a secondary, critical relationship to primary forms of media and to other blogs. Garvey calls this process "gleaning," an idea she adopted from the critical theorist Michel de Certeau, who spoke of "reading as poaching" to describe the cutting and recompiling of published texts. Gleaners were indigent peasants who

collected the spare corn or fruit farmers left behind in their fields. Gleaning seems a useful metaphor for how bloggers select, comment upon, and then redistribute media. (p. 6)

Plagiarism, Intellectual and Artistic Property, Copyright, and Academic Honesty

Porter (1998) invokes Lunsford and Ede (1990) in noting the "interesting way our ethical dilemmas on electronic networks illustrate some of the theoretical challenges to authorship voiced in postmodern theory" (p. 106). Despite threats of expulsion, students continue to copy and paste from on-line texts. Despite threats of prison, students continue to pirate movies and music. In a time in which standards, practices, and beliefs about ownership of ideas and materials are being challenged, faculty will be even more challenged to model ethical practice and to hold students similarly accountable even as they encourage their critical thinking and participation in national and international debates about existing laws and policies that attempt to govern our behavior in these areas.

Evolving Places and Spaces for Teaching and Learning

The political, economic, and sociocultural influences operating upon the practice of the new literacies with the new technologies is one of the most important considerations in education. In our society, issues of gender, class, race, ethnicity, and other demographics are intricately intertwined with equitable access to technology and, therefore, discussions of social, economic, and political power (Porter, 1998; Snyder, 2002).

Full participation in our globalized world also demands extensive experience with new literacies and the innovative thinking and flexible communication that grow from technological expertise.

Full participation in our globalized world also demands extensive experience with new literacies and the innovative thinking and flexible communication that grow from technological expertise. With that in mind, when frequent access to newer technologies and to the teachers who have the knowledge, skills, and disposition to integrate these technologies into their pedagogy follows racial and/or class lines, the situation threatens to widen the gap between privileged and marginalized student populations. Such inequities result in more than a lack of computer skill. As Friedman (2005) suggests, communication will occur most often in the future in digital environments. Since it is through communication that we exercise our political, economic and social power, we risk contributing to

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the hegemonic perpetuation of rigid social/economic classes if we fail to demand equal access to newer technologies and adequately prepared teachers for all students. It is through adequate preservice preparation and ongoing professional development that teachers will expand their expertise in discussing issues of equity and diversity with their students.

Turning toward the Horizon

Everything we do, then, as teachers, has moral overtones. (Noddings, 1984, p. 179)

As Confucius would remind us, "A journey of a thousand miles begins with a single step," to which we would add, "and those walking new paths may stumble and fall before finding their footing." In this essay, we have argued that preparing students with only the same literacies that have been privileged for the past century will not prepare them for the next one. We realize such a statement, in the current era, is highly problematic.

English educators need release time, access to newer technologies and to high quality professional development in order to critically and productively evaluate the potential of these technologies and literacies for their students. Professional development also must address the social, cultural, political issues surrounding the students' and their own practices. All of these needs are dependent upon unified policies and support at the systemic level. However, in an era of declining budgets and increasingly reductive views of assessment, we have to admit we don't know how this could or would be funded. It is apt to fall to individual educators to decide the extent to which they will prioritize this work and then to finance it from their own pockets. Yes, it is unfair...and characteristic of the profession.

Preparing English educators to model effective integration of technology into their teaching, however, will be of little use if their students and their students' students don't have adequate access to those technologies in schools. We are nothing short of horrified at the ready examples we could find of suburban schools with more than one computer for each student within a few miles of urban schools with one computer for every sixty students. While we might be willing to accept the dismal conditions described in the paragraph that precedes this one, we can not and will not accept this one. With this in mind, we invite policy makers, administrators, and educators at every level to join us in these important conversations about how best to provide the very best education possible, including equitable access to newer technologies and the literacies they allow, to *all* children.

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References

Beliefs about technology and the preparation of English teachers. (2005). Retrieved March 16, 2006, from http://www.ncte.org/groups/cee/positions/122936.htm

Barrell, B., R. Hammett, J. Mayher, G. Pradl. (2004). *Teaching English today: Advocating change in the secondary curriculum.* New York: Teachers College Press.

Barthes, R. (1980). *Camera lucida: Reflections on photography.* Richard Howard (trans.). New York: Farrar, Strauss, & Giroux.

Berlin, J. (1988). Rhetoric and ideology in the writing class. *College English, 50,* 477-494.

Britton, J., Burgess, T., Martin, N., McLeod, A. and Rosen, H. (1975). *The development of writing abilities (11-18).* London: Macmillan.

Cartier-Bresson, H. (1998). *The mind's eye: Writings on photography and photographers.* New York: Aperture.

Cope, B., Kalantzis, M., & New London Group. (2000). *Multiliteracies: Literacy learning and the design of social futures.* London; New York: Routledge.

Culham, R. (2003). *6 + 1 Traits of Writing: The Complete Guide.* New York: Teaching Resources.

Drucker, M. J. (2006). Commentary: Crossing the digital divide: How race, class, and culture matter. *Contemporary Issues in Technology and Teacher Education* [Online serial], *6*(1). Available: http://www.citejournal.org/vol6/iss1/languagearts/article2.cfm

Feenberg, A. (2002). Transforming technology: A critical theory revisited. Oxford: Oxford University Press.

Foucault, M. (2004). From *The order of discourse.* In P. Bizzell and B. Herzberg (Eds.), *The rhetorical tradition: Readings from the classical times to the present* (pp. 1460-1470). Boston: Bedford's/St. Martin's Press.

Friedman, T. (2005). *The world is flat: A brief history of the twenty-first century.* New York: Farrow, Straus & Giroux.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Garvey, E. G. (2003). Scissorizing and scrapbooks: Nineteenth-century reading, remaking, and recirculating. In Gitelman, L. & Pingree, G. B. (Eds.), *New Media, 1740-1915* (pp. 207-228). Cambridge, MA: MIT Press.

Gee, J. P. (2003). What video games have to teach us about learning and literacy. New York: Palgrave MacMillan.

Heilker, P. (1996) *The essay: Theory and pedagogy for an active form.* Urbana, IL: NCTE.

Hicks, T. (2006). Expanding the conversation: A commentary toward revision of Swenson, Rozema, Young, McGrail, and Whitin. *Contemporary Issues in Technology and Teacher Education* [Online serial], *6*(1). Available: http://www.citejournal.org/vol6/iss1/languagearts/article3.cfm

Johnson-Eilola, J. (1997). Living on the surface: Learning in the age of global communication networks. In I. Snyder (Ed.), *Page to screen: Taking literacy into the electronic era* (p. 185). Sydney: Allen & Unwin.

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Jonassen, D. H., Howland, J.L., Moore, J.L., & Marra, R. M. (2003). *Learning to solve problems with technology: A constructivist perspective.* Upper Saddle River, NJ: Merrill Prentice Hall.

Kaiser Family Foundation Study. (2005). *Generation M: Media in the lives of 8-18 year olds.* [Need full citation.]

Kajder, S. (2006). In search of the technology-using English teacher: A response to Swenson, Rozema, Young, McGrail, and Whitin. *Contemporary Issues in Technology and Teacher Education* [Online serial], *6*(1). Available: http://www.citejournal.org/vol6/iss1/languagearts/article4.cfm

Kress, G. & Van Leeuwen, T. (2001). Multimodal: The modes and media of contemporary communication. London: Arnold.

Kress, G. (1996). Reading images: The grammar of visual design. Routledge.

Leu, D., J., Jr. (November, 2005). New literacies, reading research, and the challenges of change: A deictic perspective. Invited presidential address to the National Reading Conference. Miami, FL. Retrieved February 25, 2006, from http://www.newliteracies.uconn.edu/nrc/don_leu_2005.html

Lunsford, A. A. & Ede, L. (1990). *Singular texts/plural authors: Perspectives on collaborative writing.* Carbondale, IL: Southern Illinois University Press.

Macrorie, K. (1980). *Searching writing.* Rochelle Park, N.J.: Hayden Book Co.

Malewski, E., Phillion, J. & Lehman, J .D. (2005). A Freirian framework for technology-based virtual field experiences. Contemporary Issues in Technology and Teacher Education [Online serial], 4(4). Available: http://www.citejournal.org/vol4/iss4/general/article1.cfm

Miller, S. & Fox, D.L. (2005). Reconstructing English education for the 21st century: A report on the CEE leadership and policy summit. National Council of Teachers of English Conference on English Education. Retrieved February 26, 2006, from http://www.ncte.org/groups/cee/featuredinfo/122846.htm

Mishra, P., & Koehler, M. J. (2004). Technological pedagogical content knowledge: A new framework for teacher knowledge. Retrieved November 13, 2005, from http://punya.educ.msu.edu/PunyaWeb/publications/inpress/MishraKoehler_TPCK.pdf

Myers, J. & Beach, R. (2004). Constructing critical literacy practices through technology tools and inquiry. *Contemporary Issues in Technology and Teacher Education* [Online serial], *4*(3). Available: http://www.citejournal.org/vol4/iss3/languagearts/article1.cfm

Myers J. (2006). Literacy practices and digital literacies: A commentary on Swenson, Rozema, Young, McGrail, and Whitin. *Contemporary Issues in Technology and Teacher Education* [Online serial], *6*(1). Available: http://www.citejournal.org/vol6/iss1/languagearts/article5.cfm

Nodding, N. (1984). *Caring: A feminine approach to ethics and moral education.* Berkeley: University of California Press.

Ong, W.J. (1982). *Orality and literacy: The technologizing of the word.* London: Methuen.

Ong, W. J. (1977). *Interfaces of the word: Studies in the evolution of consciousness and culture.* Ithaca, NY: Cornell University Press.

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Pew Charitable Trust. (2005, July 27). *Teens are leading the transition to a fully wired and mobile nation*. Retrieved February 15, 2006, from http://www.pewinternet.org/pdfs/PIP_Teens_Tech_July2005web.pdf

Pontin, J. (2005, July). From the editor: Commonplace thoughts. *Technology Review: An MIT Enterprise.* Retrieved February 27, 2006, from http://www.technologyreview.com/articles/05/07/issue/editor.asp

Pope, C. & Golub, J. (2000). Preparing tomorrow's English language arts teachers today: Principles and practices for infusing technology. Contemporary Issues in Technology and Teacher Education [Online serial], 1 (1). Available: http://www.citejournal.org/voll/issl/currentissues/english/article1.htm

Porter, J. (1998). *Rhetorical ethics and internetworked writing*. Greenwich, CT: Ablex.

Porter, J. (2002). Why technology matters to writing: A cyberwriter's tale. *Computers & Composition, 20,* 4, 375-394.

Postman, N. (1992). *Technopoly.* New York: Alfred A. Knopf.

Postman, N. (1996). The end of education: Redefining the value of school. New York: Knopf.

Sartre, J.P. (1972). *The psychology of imagination.* London: Methuen,

Shulman, L. (1987). Knowledge and teaching: Foundation of the new reform, *Harvard Educational Review, 57* (1), 1-22.

Smagorinsky, P. (2001). If meaning is constructed, what is it made from? Toward a cultural theory of reading. *Review of Educational Research, 71* (1), 133-169.

Snyder, I. (2002). *Silicon literacies: Communication, innovation, and education in the electronic age*. London and New York: Routledge.

Sullivan, P. A. (1991). Taking control of the page: Electronic writing and word publishing. In Hawisher, G. & Selfe, C. (Eds.), *Evolving perspectives on computers and composition studies: Questions for the 1990s* (pp. 43-64). Urbana, IL: National Council of Teachers of English.

Swenson, J., Rozema, R., Young, C. A., McGrail, E., & Whitin, P. (2005). Beliefs about technology and the preparation of English teachers: Beginning the conversation. *Contemporary Issues in Technology and Teacher Education* [Online serial], *5*(3/4). Available: http://www.citejournal.org/vol5/iss3/languagearts/article1.cfm

Tompkins, J. (1987). Me and my shadow. *New Literary History,* [add volume and number of issue], 168-178.

Wilhelm, J. (1007). *You gotta be the book: Teaching engaged and reflective reading with adolescents.* New York: Teachers College Press.

Yagelski, R. (2005). Computers, literacy and being: Teaching with technology for a sustainable future. Available: http://www.albany.edu/faculty/rpy95/webtext/

Young, C. A. & Bush, J. (2004). Teaching the English language arts with technology: A critical approach and pedagogical framework. Contemporary Issues in Technology and Teacher Education [Online serial], 4(1). Available: http://www.citejournal.org/vol4/iss1/languagearts/article1.cfm