The Importance of Innovation: Diffusion Theory and Technological Progress in Writing Centers

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A new technology does not add or subtract something. It changes everything. (18)

—Neil Postman, Technopoly: The Surrender of Culture to Technology

Among writing teachers, writing center personnel often have been at the vanguard of the move to online instructional applications, developing a range of variations on tutorial and consulting services that translate to the unique conditions of electronic/computer-mediated communication. (ix-x)

—Eric Hobson, Introduction, Wiring the Writing Center

In writing centers, technological progress requires collaboration among stakeholders who have varying degrees of expertise with pedagogical applications of instructional technologies. In “Cyberspace and Sofas: Dialogic Spaces and the Making of an Online Writing Lab,” Eric Miraglia and Joel Norris share an impressive list of individuals who collaborated to create and implement Washington State University’s OWL: Bill Condon, Writing Programs Director; Gary Brown, Associate Director of the Center for Teaching and Learning; Lisa Johnson-Shull, Director of the Writing Lab; Norris, Assistant Director of the Writing Lab; Miraglia, Learning Technologies Specialist for the Student Advising and Learning Center; Toby Taylor, an undergraduate student with expertise in graphic design; and Pete Cihak, an undergraduate who focused on

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programming code the OWL required (89-90). At Washington State, these stakeholders were able to collaborate successfully in creating a progressive and pedagogically sound OWL; however, in technology-based writing center practice, in general, such collaboration proves to be an exception, rather than the rule. That is, too many writing center professionals are left to wade into the rapid and rocky stream of technological progress alone, with a sound grounding in pedagogical principles and strong writing center values, but with the uncomfortable and often uncertain influence of technology in motion all around.

Even when collaborative possibilities are available, communication among stakeholders is often strained by different operating vocabularies and interests. When a Writing Center director mentions a desire to have an email tutoring program, for instance, he or she may be interested in discussing Center values and electronic pedagogy, but a technologist taking on the project may instead want to focus on email client decisions and on server functions and permissions. In some respects, the two individuals are both encountering the same sort of discomfort, as they work to communicate their positions and interests to each other; but too often, it seems, the writing center professional who is uncomfortable with technology ends up feeling frustrated and insecure, failing to see that the technologist may feel equally uncomfortable. On college and university campuses, one of the most visible sites of this sort of discomfort is a computer help desk, and this site has bearing for writing centers because professionals there often imagine themselves as helping computer users, not computers, just as writing center professionals help writers, instead of writing. In only a few minutes of watching help desk activity, any observer will encounter what I would term a “culture of inadequacy.” That is, few computer users come to the desk to ask for help without one of the following phrasings: “I’m not very computer literate, so . . . ,” “I’m bad with computers, so . . . ,” or “I don’t know what I’m doing, so . . . .” Already, after just that brief exchange, roles and relationships for the individuals’ conversation have been established: the technologist is the expert, and the faculty member or student is the novice. Collaboration, in this way, often does not work as ideally as occurred at Washington State, for hierarchical relationships have strong effects on working with technology. Writing center professionals, who too often take on the “novice” role by default, must learn what they can contribute to technological progress and what they can teach technologists. Mutual teaching and learning serves as the best foundation for collaboration.

One promising way for writing centers to proceed amid and with technological progress, I believe, is for all stakeholders to share a focus on “innovations,” referring here simultaneously to technologies and their social, cultural, political, and historical contexts. It is especially important that stakeholders elect not always to focus just on the technologies
themselves or the discourse associated with any technology because such approaches are too limited. Perhaps not surprisingly, the progress of any innovation begins almost always with such a technology-only focus, as scholars explore the fundamental differences between it and technologies of the past. With *Technology and Literacy in the Twenty-First Century: The Importance of Paying Attention*, for instance, Cynthia L. Selfe has emerged as one of the most outstanding and broadly-informed contemporary critics of technological progress, but earlier in her career, she too started with a focus on technology itself; her “Redefining Literacy: The Multilayered Grammars of Computers,” published in 1989, serves as one example, as her focus in that book chapter is to explore what is different about reading and writing on computer screens. What I am suggesting, then, is that stakeholders associated with technological progress in writing centers need to understand that they share more than an interest in individual technologies, a realization that will enable them to structure their collaborative work in broader ways, instead of the sort of narrow technology-only focus that too often emphasizes obvious differences in stakeholder values and interests. Shared interest in innovation is not in and of itself a cure-all for possible problems in adopting technological innovations for writing center practice, but it does suggest a means by which more substantive collaborative efforts can be begun and sustained successfully.

**Diffusion Theory and Technological Progress**

Defined by Everett Rogers as “the process by which an innovation is communicated through certain channels over time among the members of a social system,” diffusion is as much grounded in agriculture as education, as much in anthropology as psychology (5). This interdisciplinary subject proves particularly important for technological progress in writing center circles, as it well accounts for the sort of broad focus the term “innovation” has been used above to suggest. Indeed, writing center professionals will necessarily collaborate with technologists and other professionals across the disciplines in pursuing technological ideas for the future. This article section relies principally on Rogers’ *Diffusion of Innovations*, which I see as the seminal text in the diffusion theory, and outlines the major elements of diffusion as it is represented in his project, including four key terms: “innovation, communication channels, time, and the social system” (10).
Innovation

An innovation, according to Rogers, is “an idea, practice, or object that is perceived as new by an individual or unit of adoption” (11). In this definition may be located distinctions that separate this article’s use of “innovation” against “technology”: an innovation may be an idea, instead of a mechanical creation; it must be perceived and interpreted to have value; and those doing such interpretation have agency in whether the innovation proceeds in any setting. Rogers explains further that any innovations have characteristics which explain the rate of their adoption:

Relative advantage: “the degree to which an innovation is perceived as better than the idea it supersedes” (15);

Compatibility: “the degree to which an innovation is perceived as being consistent with existing values, past experiences, and needs of potential adopters” (15);

Complexity: “the degree to which an innovation is perceived as difficult to understand and use” (16);

Trialability: “the degree to which an innovation may be experimented with on a limited basis” (16); and

Observability: “the degree to which the results of an innovation are visible to others.” (16)

Each of these characteristics explicitly links an innovation with its social, cultural, political, and historical contexts, the basis for a richer collaborative relationship between individuals with different disciplinary backgrounds and experiences, as argued above. More, the terms suggest a path for innovation, which is especially important for collaborative conversations among stakeholders, as it can be the subject of conversations, not the technologies always themselves.

To demonstrate how the notion of an innovation and its associated terminology might work in writing center circles, let’s say that a university decides to design an Online Writing Lab, or OWL. Carefully considering ways electronic media can intersect with and support the Center’s mission, administrators, peer tutors, and technologists collaboratively prepare a draft version of their OWL, upon its completion asking several writing classes across the curriculum to use the online forums and documents. In this case, the innovation is not the specific OWL draft online, but instead the design decisions associated with that OWL; that is, the stakeholders’ decisions about features to include in the OWL reflect their expertise in
application. The relative advantage of the OWL, both to the students who might be among a population of users and to the collaborative team that assembled it, is immensely important: if the OWL is not seen as an improvement over the innovations already in place, then the new innovation may not be successful. Readers can imagine the large hurdle this characteristic presents, if a popular and successful writing center is already in place, as the favor of clients will be difficult to win; ironically, this situation is one in which many writing center professionals are placed, when they are tasked with making changes to coincide with their institution’s vision of technological progress. In carefully crafting their pre-release OWL in accordance with their campus’ and Writing Center’s mission, the collaborative team works toward compatibility, and in asking students to utilize and critique the draft version, these stakeholders informally study complexity. For high tech innovations, the notion of compatibility may seem skewed, as the whole premise behind the innovation may be to challenge what has existed previously; in this way, an innovation’s complexity may have an inverse relationship with its compatibility. Trialability involves the study itself, where the classes attempt to use the OWL, and the observability of benefits informs decisions about revision and release. In the academy, this sort of research study occurs most prominently in two forms: usability testing, generally associated with technical communication, and human-computer interaction (HCI), an emerging field that focuses on interface and other technical design issues.

Communication Channels

Communication channels, Rogers’ second characteristic, also proves important for a consideration of technological progress in writing centers, but his language needs some adapting to be most valuable. Rogers suggests, “The nature of the information-exchange relationship between a pair of individuals determines the conditions under which a source will or will not transmit the innovation to the receiver, and the effect of the transfer” (18). Of course, the idea of information exchange is not new as a model in education; more often than not now, it is considered oversimplified and critically problematic. With distance education, for instance, the information exchange metaphor has resulted in models like the disturbing videotape-by-mail pedagogy, in which teachers and learners rarely interact, instead only seeing each other performing. Educational reformists, like Paulo Freire, have demonstrated that information exchange has critical implications for the disenfranchised, as they cannot find empowerment through an educational system that does not enable them to develop their own voices and, more generally, their own agency. For the notion of communication channels to be most important for this
The article’s discussion of technological progress in writing centers, it needs to be redefined as communicative encounters among stakeholders and between stakeholders and possible clients and/or contributors. If communication is imagined only as information exchange, then it cannot serve as an adequate model; it must be seen, for the purposes of this article, as the substantive engagement of critical issues around the development and possible adoption of any innovation.

In his discussion of communication channels, Rogers uses two terms that seem useful for characterizing the participants in any interaction: “homophilous” or “heterophilous” (19). For Rogers, homophilous interactions occur between individuals with similar interests or who interact in similar contexts such that their perspectives are often agreeable. Heterophilous interactions, on the other hand, occur between individuals who have different backgrounds and do not share many common ideas or approaches to issues. In collaborative writing center work with technology, one of the first approaches stakeholders might pursue is characterizing their interactions with each other as homophilous or heterophilous, as such an analysis might open possibilities for shared teaching and learning by indicating specific commonalities and differences. Again, the most critical aspect of any such collaboration is that each stakeholder believes he or she possesses valuable knowledge and expertise to contribute to the group’s effort; collaborators who do not imagine themselves as contributors to the intellectual project at hand cannot see themselves as agents in technological change, instead believing that they are subjects of what Neil Postman calls the Technology-God, in his The End of Education, that great mythic creature always a step ahead of everyone else in technological innovation and an advocate of technology’s sake. Postman’s critique, of course, is about how to engage the Technology-God, not how to revere it, and writing center professionals face the same tough decisions in scenarios where heterophilous interactions with technologists seem to be the norm. Stated more simply, the progress of any innovation holds no hope when stakeholders feel that they have no agency in determining its path: an OWL cannot fly if no one has the vision to set it free, and, more to the point perhaps, an OWL may fly in the wrong direction, if it is not released and guided carefully. In particular, the right direction for any OWL is the one collaboratively defined by all stakeholders, especially including writing center professionals, whose expertise in pedagogy is critical.

Rogers complicates his discussion of communication channels by mentioning the impact of what he calls “mass media channels” on the communication process (18). In essence, he believes that the media, including television and newspapers, alters the communications dynamic by influencing stakeholders in significant and not always promising ways. While Rogers’ point that the media has tremendous influence is valid, the
spirit of his remark seems much more about outside influences, in general, and their possible impact on communication channels. Here, the interactions are not homophilous or heterophilous because they are not among individuals invested in a collaborative endeavor; instead, the interactions are between stakeholders and media portrayals of related subjects or events. If some stakeholders view The Net, for instance, a movie implicitly about electronic networking and personal privacy, then would it be surprising if they raised related issues in following meetings? Of course not. And, it might even be argued that such interaction with popular media is key to any innovation process, as clearly any possible clients of writing centers interact with popular culture and the mass media many times each day; that is, since possible clients do not live in a vacuum, it makes sense that the development process should not be housed in one. At the same time, however, Rogers' point is well-taken: the mass media can have a problematic influence on innovation. In "Making Up Tomorrow's Agenda and Shopping List Today," Muriel Harris connects the mass media to writing center work directly in describing how the excess of information available via mass media channels may prohibit stakeholders from locating the information that they need to find. Readers who routinely browse the World Wide Web know that searching it can be an arduous process, one that seems sometimes to generate five moments of frustration for every moment of excitement. No matter the actual influence, finally, Rogers' sense that the mass media must be considered an element of innovation is right on, and it is a reality of which collaborative teams for technological progress should be aware.

**Time**

Time, the third general area Rogers suggests, plays a critical role in any technological progress because it defines both the pace at which progress occurs and the positions individuals occupy amid the evolution of such progress. For Rogers, it is the second of the two definitions that is most interesting; he suggests, in fact, five categories by which innovation adopters can be named: "innovators, ... early adopters, ... early majority, ... late majority, and ... laggards" (22). Readers may note that the categories themselves are not difficult to decipher; clearly, an innovator is one who creates an innovation, beginning the adoption process, and a laggard is someone who adapts the innovation much later than others. In writing center circles, Purdue University, the University of Missouri, Roane State Community College, and the University of Michigan are among the OWL innovators, as their early efforts with technologies in writing centers demonstrated how such progress can be pedagogically sound. Other colleges and universities have followed these leaders and
may be considered in the early adopter, early majority, or late majority stage; my view is that laggards cannot yet be identified, as technological progress is still reaching out to the community as an option, not firmly in place across diverse sites of writing center activity.

The categories Rogers defined may be represented graphically. In particular, the graph would resemble an s-curve, like the following:

On this graph, readers should notice first how the number of adopters increases from left to right, demonstrating holistically the entire adoption process, which would span from Rogers’ innovators category to his laggards. Beginning on the left side of the graph, the number of adopters is small, and it does not initially climb rapidly, as only a few individuals are using the innovation. Then, the number of adopters climbs rapidly; readers may consider the early majority and late majority stages as the context for this substantive increase in adoptions. And, finally, the adoption slows again, as fewer and fewer people who have not adopted the innovation remain and are represented. This graph plots a course for innovation that can be useful for both writing center professionals and other stakeholders in the collaborative development of technological innovations. Knowing, for instance, that the early stages of an innovation’s life will be a struggle in terms of convincing people to adopt it enables the collaborators to be patient, understanding that the fate of the innovation will be determined over time, instead of right away.

In thinking about time and technological progress, it is important that stakeholders imagine the classification of their work as more complex than a basic no-technology-to-technology-adoption timeline. Matters are not so simple. Instead, the writing center community, and indeed the entire academy, continues to see the development of new innovations, after sound ones are already in place. Washington State’s OWL, for example, cited at the outset of this chapter, clearly has influenced OWL develop-
ment across the academy, and if scholars classify it as a late majority adaptation of Purdue’s or Michigan’s earlier OWLs, then they have not given the Washington State collaborative team enough credit. Among the particular innovations of the Washington State OWL are advanced interface design and interdisciplinary support of writing, both aspects of earlier OWL practice, but both also more evolved now. Colleges and universities taking on OWL authoring and implementation should take notice of the continuing opportunities for innovation in the writing center community and should understand that they may possibly develop a project that can serve as an important innovation for the community at large.

The Social System

The final general characteristic suggested by Rogers, a social system, is defined as “a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal” (23). The language Rogers uses suggests, of course, collaboration, which is one of this article’s emphases, so his definition has particular resonance here. However, the term “units” proves problematic because it seemingly dehumanizes the individuals at work; instead of being seen as stakeholders and contributors, they are only part of the collective “unit,” with all of their individuality hidden. The other aspect of Rogers’ characteristic that needs to be interrogated is his suggestion that social systems evolve around “problem-solving.” Readers will recognize this rhetoric as prominent in professional dialogues about educational studies, which is Rogers’ disciplinary profession. It is important here that problem-solving is not rejected as a possible apparatus for stakeholder collaboration; instead, it should be considered one option of many, others including reflection and expression. Rogers is right, generally, in pointing to the social scenes in which innovations are crafted, as they make a considerable difference in the path that technological progress travels.

In any social system, according to Rogers, two roles are particularly important in innovation introduction and adoption. First is what he terms the “opinion leader,” which he imagines generally as anyone who can exert influence over others. In writing centers, opinion leaders could be any number of individuals: from respected tutors, to engaged administrators, and to reflective clients. The second role Rogers suggests is the “change agent,” which he defines as “an individual who influences clients’ innovation-decisions in a direction deemed desirable by a change agency” (27). In theory, the idea of a change agent that always advocates the “desirable” majority view is provocative and fraught with hegemony;
however, the context for Rogers’ explanation suggests that he means to say that anyone who would assume the role of change agent needs necessarily an awareness of majority influence. The idea of agency is better articulated by social theorists like Ernesto Laclau and Chantal Mouffe, who suggest, especially in their Hegemony and Socialist Strategy: Towards a Radical Democratic Politics, that agency is about individuals’ perception of their ability to enact change in social systems and their actual ability to pursue such influence. Adapting Rogers’ idea somewhat, then, it might be said that individuals associated with any innovation’s adoption decisions are agents (either as “opinion leaders” or “change agents”) when they imagine themselves as contributors to the innovation and when they locate ways that their influence has shaped outcomes associated with that innovation. All stakeholders in collaboration for technological progress in writing centers must both imagine themselves as valuable contributors to the process and see the results of their influence in order to be agents for change, instead of subjects of technology.

Further considering social systems, Rogers describes three potential descriptors for consequences of innovation decisions:

Desirable versus undesirable: “depending on whether the effects of an innovation in a social system are functional or dysfunctional” (30);

Direct versus indirect: “depending on whether the changes to an individual or to a social system occur in immediate response to an innovation or as a second-order result of the direct consequences of an innovation” (30-1); and

Anticipated versus unanticipated: “depending on whether the changes are recognized and intended by members of a social system or not.” (31)

Each of these descriptors serves as a promising means of evaluating and understanding the impact of individual innovations in writing centers. To demonstrate, let’s imagine that a Writing Center has been considering adopting a software program, which is a computer-based, interactive dictionary. Let’s further assume that an innovation-decision has been reached and that the software program is newly installed on all Writing Center computers. Clearly, administrators of the Writing Center believe that the software program will be useful for clients who need spelling or word meaning help: these uses are the anticipated and desirable result. However, let’s say that students, in fact, find other uses for the electronic dictionary, perhaps like the translation of foreign words or the studying of word origins. These benefits are unanticipated and indirect, but seemingly still desirable. What the language suggested by diffusion theory offers
stakeholders in their collaborative engagement with technological progress in writing centers is a substantive articulation of the relationship between intention and actuality. That is, writing centers cannot simply pursue innovations without considerable planning and hope that they prove useful for clients; instead, they must think carefully about decisions for their centers, especially in how technological options interface as innovations with the center mission and the institutional position. At the same time, writing centers should be mindful to study how their plans were or were not successful, as the path that the idea pursued is a highly valuable account of how innovation proceeds in the center and larger institutional context.

Windows: Diffusion Theory in Action

Understanding technological progress in writing centers via diffusion theory holds much potential, I believe, for the future, but it cannot be deemed beneficial unless it is shown to have direct practical relevance as well. In this section, “windows” from the World Wide Web are presented in order to show how diffusion theory enables, not a focus on the technology itself (either the Web itself or the browser that makes viewing it possible), but instead a discussion of the innovations associated with the windows. More, demonstrating diffusion theory in practice enables a fuller depiction of how the term “innovation” encompasses social, cultural, political, and historical contexts, a claim made earlier in this article.

One of the oldest and most widely-known OWLs in the world is that of the University of Michigan, established originally by Barbara Monroe and Rebecca Rickly, yet the authors of the original idea are no longer on campus, having moved on to positions at Washington State University and Texas Tech University respectively. After their departure, changes began to show rapidly in the OWL, and the idea of an “innovation” affords an opportunity to articulate and understand the significance of the changes. In “The Near and Distant Futures of OWL and the Writing Center,” in fact, Monroe and Rickly team with former Michigan colleagues Bill Condon and Wayne Butler to explain how they focused on outreach in their efforts, imagining the idea of OWL as implying an intra-and extra-institutional responsibility. Indeed, Monroe organized two partnerships, including one with Murray-Wright High School in inner-city Detroit, specifically between her Writing Center tutors and secondary school students pursuing writing projects. The Michigan innovation, then, in its original conception, was about reaching out to existing and new clients electronically, providing new spaces for writing center interaction, and inviting collaborative opportunities in the community. On November 9, 2000, however, under the heading of “Outreach,” Michigan’s Sweetland
Writing Center website showed only an “Under Construction” sign, the original idea seemingly having no role. As the following screen capture shows, irony even plays a role, as the construction sign reads “Eternally UNDER Construction”:

A website visitor only looking at the site itself would have no idea about the larger OWL issues around the role of outreach. Thinking about the Michigan OWL as an innovation, then, affords a much more careful and informed perspective.

The importance of innovation for the Michigan OWL extends even beyond specific OWL planning and development, however, in that the concept of innovation also opens spaces for discussing institutional politics. Readers not familiar with the political milieu of Michigan’s writing programs should know that what is now the Sweetland Writing Center was formerly the English Composition Board (ECB). Initially, the ECB was an independent academic unit reporting to the School of Literature, Science, and the Arts; it was at this time when Monroe, Rickly, Condon, and Butler were there and when, not coincidentally, the ECB was doing particularly progressive and innovative things with instructional technology. While the ECB contracts were not tenure line, they were renewable, and administrators like Condon understood writing center issues and emphases. Now, the English Department supervises the ECB, and a generous gift has seen the ECB renamed and reconstituted as the Sweetland Writing Center. Sweetland faculty lines remain non-tenure-track appointments, despite the presence of writing studies scholars like
Anne Ruggles Gere and Alisse Theodore on tenure lines in English. As readers might imagine, this disjunction between English Department members may be seen as devaluing the work of the Sweetland team. While scholars like David Sheridan interested in computers and writing have joined the Sweetland Center, it would be fair to say that, since many of the original ECB faculty have left, the group as a whole is less technologically savvy, limiting the effectiveness of the OWL. Michigan OWL patrons not knowing this larger political history may possess only a limited understanding of the OWL itself, a reality that makes clear the key role the concept of innovation should play in the future as a broader way of understanding writing center practice.

Beyond the issues evident in the Michigan OWL innovation, "innovation" also enables the foregrounding of regional, cultural, and community-based issues, equally important aspects of contemporary practice. At the University of Kentucky, Gail Cummins supports several different communities for writing center professionals. These include the Kentucky Writing Center Association (KWCA), an organization which promotes shared initiatives between writing centers in Kentucky, and the Appalachian Partnership of Peer Tutors (APPT), which facilitates the exchange of information between tutors in a range of sites through the Appalachian region. A screen capture introduces the APPT:

As Cummins describes in "Centering in the Distance: Writing Centers, Inquiry, and Technology," her innovation is not the technology that makes visible the window above, but is instead the notion of collaborative relationships and alliances among regional writing center professionals. First, it is significant that many of the members of her sponsored organizations
can note cultural similarities in their clients and in their efforts with meaning-making; scholars like Shirley Brice Heath, especially in her *Ways with Words: Language, Life, and Work in Communities and Classrooms*, have demonstrated that the Appalachian region has community-based literacy skills and that these are significant over time and across geographical landscapes. Additionally, what Cummins has done is interfaced writing center history, which features collaboration in the center, of course, but which also demonstrates the value of regional writing center associations, with her vision for new collaborative possibilities, enacted by distance learning and other communication technologies that allow more substantive interactions around shared projects and that forge new and different communities for writing center professionals. Much of this vision would be invisible to OWL visitors interested only in specific website components, but conceptualizing the Kentucky OWL as an innovation enables a much richer and fuller view by broadly bringing Cummins’ work into view.

The windows introduced in this section well represent the important ways that studying technology itself is not enough. Perhaps many readers believe that they would, of course, not assume so much from looking at a single website once, but it is done day after day in and beyond writing center circles. If one of the hallmarks of writing center innovation has been attention to writers and their writing processes, then how strange it seems that the same principle does not always apply to website evaluation. The point, finally, is that thinking about innovations offers a much richer and more responsible picture of any OWL than peeking in its “windows” alone.

**Conclusion**

This article has attempted to introduce a new perspective through which writing center professionals can approach collaborative relationships with other stakeholders in the move towards technological progress. It cannot underscore enough, however, the idea that those who do not consider themselves technologically savvy should participate actively in any situation where discussions center on technology and the future. More, these individuals must find ways to value their expertise and apply it to considerations of innovations, again reflecting both technologies and their social, cultural, political, and historical contexts. Finally, writing center professionals must understand that stakeholder collaboration is the only means by which they can progress meaningfully and responsibly into the future; individual expertise still is of considerable merit, but less so, if it is not combined with that of others. Just as diffusion theory enables an understanding of the path of any innovation, so should it itself diffuse now into writing center circles, demonstrating its potential and helping connect people and ideas.
Notes

1 I should note here that some scholars do see technologies as including more than the mechanical objects themselves. Indeed, in my own dissertation, I argued that “technology” can be a metaphor for understanding ways in which humans have become hybrid with instructional technologies in the field of computers and writing. To see more about broader definitions of “technology,” readers should examine Martin Heidegger’s “The Question Concerning Technology,” as well as any Neo-Marxist critique of technology, like Herbert Marcuse’s *One-Dimensional Man*.

2 For a recent discussion of radical pedagogy in writing centers, readers may turn to Glenda Conway’s “Liberatory Tutoring in the Writing Center: It’s Not Just for Radicals,” published in the spring 1999 issue of *Southern Discourse*.

3 The use of “windows” in this sentence is intended to be a play on words, as various versions of Microsoft Windows are among the most popular file organization systems available and as windows may be used as a metaphor for looking glass or lens, especially that which makes visible new places, other worlds.

Works Cited


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Note

To view the reproduced windows (pages 60 and 61) on the World Wide Web, use the following web addresses:

http://www.lsa.umich.edu/swc/outreach/outreach.html;
http://www.uky.edu/AS/English/wc/appt.html.
James A. Inman is Director of the Center for Collaborative Learning and Communication at Furman University in Greenville, South Carolina. His publications include *Taking Flight with OWLs: Examining Electronic Writing Center Work* (Lawrence Erlbaum, 2000) and articles and reviews in *The Writing Instructor, The Writing Lab Newsletter, Technical Communication Quarterly*, and *The Journal of Technology Law and Policy*, among others. Inman is Co-Editor and Co-Publisher of *Kairos: A Journal for Teachers of Writing in Webbed Environments*. 