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Programmatic Perspectives

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Issue Preview

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Welcome to the inaugural issue of *Programmatic Perspectives*. We're excited to present this new journal to our colleagues in the CPTSC and larger technical communication community. We see this journal as a place to share our scholarship and engage in the conversations that have resonated at CPTSC's annual meetings for more than 30 years.

Leading this first issue, James Zappen and Cheryl Geisler explain an exciting interdisciplinary initiative undertaken at Rensselaer to explore how what they call *deep collaboration* both shapes and is shaped by engaged humans, novel social processes, and digital communication technologies.

Following that discussion, Bruce Maylath and Jeffrey T. Grabill, the 13th and 14th presidents respectively, provide a retrospective of the CPTSC organization. Following the lead of Tom Pearsall and Tom Warren in their 1994 *Journal of Technical Writing and Communication* article, Grabill and Maylath write a sequel in which they measure recent accomplishments of the organization against the purpose statements from Article 1 of the CPTSC constitution.

Switching modes somewhat, Robert Johnson reflects on his experiences in the field, framing his work as a meditation. Drawing on Heidegger's distinction between meditative and calculative thinking, Johnson poses questions designed to help technical communication programs fit both with local departmental and institutional contexts as well as to the larger global academic landscapes.

The first issue of each volume will include the annual meeting's keynote from the previous year. In this first issue, we publish Dale Sullivan's keynote from the 2007 meeting in Greenville, North Carolina. Issue 2 of this year will include Karen Schnakenberg's keynote from the 2008 meeting in Minneapolis, Minnesota.

The editors also welcome editorials that expound on a particular issue or problem. In this first editorial, Bill Williamson traces the journal's genesis.

When appropriate, the journal will include narrative pieces in memory of members who have passed away. We include in this issue memorials for Kenneth Rainey and Teresa Kynell Hunt, written by their friends and colleagues. These poignant stories about our treasured colleagues remind us how much we truly miss not only their contributions to the discipline but also their faces, their voices, their laughter.

With an online journal, we don't have to wait until the next issue comes out to read what our colleagues think about the articles published here. To this purpose, each article in the journal will include a link to a blog space where readers can continue the conversation by posting comments, beginning discussions, or linking to related content. To post comments on the *Programmatic Perspectives* blog, you will need to subscribe to the blog. When you click on the "comment" link, you'll be directed to log in or register.

We hope you enjoy this issue and invite you to take the time to engage the authors and the community.

Designing the Total User Experience

Implications for Research and Program Development

James P. Zappen

Rensselaer Polytechnic Institute

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Abstract. Information design has traditionally focused on usability as measured by functionality and efficiency in the execution of user tasks. Newer approaches to experience design and new communication technologies such as the so-called Web 2.0 platform and its Ajax engine emphasize total user engagement with the technology and richer collaborations among users. These developments complicate traditional notions of agency by highlighting the role of technology as mediator between and among users. A project in Tech-Mediated Communication at Rensselaer Polytechnic Institute, funded by the Society for Technical Communication, illustrates how these developments impact the development of novel and creative information resources, with several experiments in cross-cultural, community-oriented, and educational systems design. This work also emphasizes the need to develop research agendas and programmatic initiatives that support interdisciplinary collaborative design activities and thus help technical communicators to meet their collective responsibility to influence and shape the mediating technologies of the future by creating more engaging and more collaborative total user experiences.

Key Words. agency, Ajax, experience design, information design, interdisciplinary collaboration, tech-mediated communication, technical communication, usability, user engagement, Web 2.0

Changes in digital communication technologies continue to impact technical communication research, pedagogy, and program development as the processes of storing, retrieving, manipulating, and communicating electronically become increasingly complex and powerful (Gurak & Duin, 2004; Lanham, 2006; Manovich, 2001; Warnick, 2005,

2007). Lev Manovich (2001) describes some of the basic features of new digital media, beginning with numerical representation, the fundamental building block that distinguishes new media from old, and that permits and enables their modular structure, their susceptibility to automation, their ability to morph into potentially infinite versions of themselves, and their ability to “transcode,” that is, to effect transfers from computer code to the culture at large (pp. 27–48). These features, Barbara Warnick (2005) observes, challenge traditional thinking about communication as centered in a single text and created by a single author for a mass audience. Instead, she argues, we need to think of digital texts as distributed and destabilized, of digital authors as dispersed and at times unidentified and unknown to us, and of their audiences as diffuse and disaggregated (pp. 329–332). Furthermore, these features have far-reaching implications for research and program development in technical communication. Laura J. Gurak and Ann Hill Duin (2004) observe that digital communication technologies provide more open access to technical documents, and as a result, heighten expectations for educational services in both industry and academe, increase opportunities for research and community building, reemphasize the importance of accountability and assessment, and underscore the need for partnerships among academe, industry, and government.

In recognition of these cascading changes, in 2006, the Society for Technical Communication (STC) awarded its largest research grant ever to support the Tech-Mediated Communication (TMC) project at Rensselaer Polytechnic Institute. The TMC project was a collaborative effort of a cadre of Rensselaer faculty aimed at exploring the implications of introducing the new communication technologies into the traditional technical communication mix. The project took as its starting point recent developments in information design that have been further complicating and enriching already complex communication processes. We note, in particular, the transition from traditional usability principles to the newer concept of experience design, with its increased emphasis on the quality of the total user experience (Bolter & Gromala, 2003; Jordan, 2000; McCarthy & Wright, 2004; Norman, 2004; Shedroff, 2001). We note also recent changes in communication technology, in particular the World Wide Web platform sometimes called Web 2.0 (O’Reilly, 2005), and its underlying technologies, sometimes collectively called Ajax (Asynchronous JavaScript + XML), which support more dynamic user-to-user and system-to-user interactions, and thus enable and encourage more engaging user experiences (Anderson, 2004, 2006; Garrett, 2005; O’Reilly, 2005; Tapscott & Williams, 2006). These developments, though perhaps paradigmatic, are merely illustrative of

the fundamental shift in information design from the efficient delivery of information to users to more immersive user experiences, both with the technologies that deliver the information and with other users, who now actively participate in information exchanges as both producers and consumers. Collectively, these developments complicate traditional notions of agency by reemphasizing the role of technology as mediator in communication processes. At the same time, they offer new opportunities to shape communication technologies to meet human wants and needs, including the need for richer and more informative total user experiences.

The TMC project encompassed several experiments in the design of novel information resources for illustrating the capabilities and potentials of new information design principles and technologies. Each experiment illustrates these capabilities to varying degrees, and one of them, in particular, a youth-services information system for local government, draws directly upon both the principles of experience design and the new Web 2.0 platform. These experiments suggest how new developments in information design can impact both research and program development in technical communication. To support these experiments, we developed a variety of new academic program structures and faculty competencies that challenged our usual ways of conducting business in our research and in our classrooms. To make these experiments work, we needed to break out of the temporal, spatial, and social boundaries usually associated with our program. These *breakouts*, we realized, echoed the developments that we were observing in the online communities we were studying and designing.

In this article, we begin with some of the concepts driving recent changes in communication technologies: the role of technology as mediator in communication processes, the concept of experience design, and the Web 2.0 platform and Ajax technologies. We then turn to the TMC project and offer a brief overview, an example from the youth-services information system, and a broader discussion of how the TMC project challenged us to break out of our usual programmatic structures. We conclude with more general suggestions for research and program development in technical communication.

The Problem of Agency: The Role of Technology as Mediator in Human Communication

The concept of agency has recently received considerable attention and has evoked some controversy (Geisler, 2004, 2005; Lundberg & Gunn, 2005; Miller, 2007; Orlikowski, 2000). We will not attempt to resolve all of the is-

sues surrounding this complex and elusive concept. However, we hold to a belief in an active human agent, however complex (even fragmented) in itself and however much embedded within a complex of social relationships, as fundamental to an understanding of communication processes. We would like to explore the role of technology as mediator in these processes. Our underlying premise is that recent changes in information design concepts and technologies make more visible, more pronounced, and more complex the mediating role of computing technology, and underscore the need for research and programmatic developments responsive to these changes.¹ Cheryl Geisler (2004) situates communication technologies at a nexus among speaker or writer, audience, and the larger culture (p. 11). What kind of agency, she asks, is being exercised when a speaker or writer uses a technology such as a to-do list on a personal digital assistant to complete a task? Here writer and audience “appear to occupy a subject position strategically fragmented to get work done,” a position at the intersection of “the culture of systematic management,” “the affordances of literate technologies,” and the writer’s “strategic choice” (p. 11).

Citing a variety of examples—from computer programs that simulate humans to (imaginary) automated services for writing assessment—Carolyn R. Miller (2001, 2007) observes a fundamental discomfort with automated systems that seek to displace or to replace humans. We seem, she writes (2007), to have a fundamental human impulse “to deny agency to machines... especially if the machines threaten to substitute for our own agency” (p. 152). Nonetheless, she also offers a useful framework for thinking about the mediating role of technology in human communication. Traditional rhetoric, she observes, situates agency at a point of origin in the performing subject (pp. 145–146). Instead, she argues, agency is not so much “a property or possession of the hypostatized agent” as it is the “kinetic energy of performance,” emergent in rhetorical action at a point of

¹ Wanda J. Orlikowski (2000) offers three basic principles for the study of the mediating role of technology in communication processes. On the one hand, she argues, 1) human agents—designers—build into technologies certain interpretive schemes, facilities, and norms that shape communication processes (p. 405). On the other hand, she observes, 2) human agents can and do redefine and modify the properties and applications of the technology, and 3) they do so only in the process of active use (pp. 405–406). Clay Spinuzzi (2003) explains the fallacy behind the second and third of these principles as “the worker-as-victim” trope and argues that information designers need to embrace “the emergent innovations of workers, not by replacing those innovations with centralized solutions, but by helping to design systems that workers can modify” (pp. 1, 4–5). Similarly, but more philosophically, John McCarthy and Peter Wright (2004) urge us to think of technology as “simultaneously prosaic and aesthetic experience,” as always open and unfinished, in a world that “already half-designed, is always becoming” (pp. 196–197).

“performativity,” “addressivity,” and “interactivity” (pp. 145–152).² We view technology in its role as mediator in communication processes not as a substitute for our own agency (though it sometimes seems to play that role also), but as a component at the nexus of this kinetic energy of performance, increasingly so as it becomes less a transparent vehicle for accessing information and more a dimension of human experience, both with the technology itself and with other users.

Performance Design/Experience Design: From System Efficiency to User Engagement

Information design is currently experiencing a transformation from its traditional emphasis upon system performance and the user satisfaction that results from system functionality and efficiency to a greater emphasis upon the quality of the user’s engagement with the system. These emphases are not, of course, mutually exclusive because system performance is necessarily a significant factor affecting user engagement and satisfaction.

Performance as Functionality/Efficiency

Traditional views of information design emphasize the performance of the technology as measured by the functionality and efficiency of the human-system interaction, and thus of the simplicity and transparency of the technology that mediates the interaction (Brinck, Gergle, & Wood, 2002; Nielsen, 1993, 2000). Jakob Nielsen’s (1993) basic and longstanding principles of system performance are applicable to technology in general, but translate readily to digital communication technologies in particular, including the Web. According to these principles, a system should be functional and efficient; that is, the system should be easy to learn, efficient to use, easy to remember, should have a low error rate, and as a result, should also be pleasant and satisfying to use (pp. 26–37). Tom Brinck, Darren Gergle, and Scott D. Wood (2002) offer nearly identical principles as a basis for studies of Web usability specifically. By these principles, a system should be functionally correct (that is, it should meet users’ needs), efficient to use, easy to learn, easy to remember, error tolerant, and subjectively pleasing (pp. 2–3). In a Web environment, these principles translate as specific guidelines for system performance, including content and scope (functionality), speed (download time), navigation (clarity and effectiveness), appropriateness to task, visual design (functionality and attractiveness), compatibility (with a variety of users and systems), simplicity, consistency, effective error han-

² In a similar vein, Dorothy Winsor (2006) sees agency as emergent from a dynamic among organizational structures, textual resources, and, not least, personal disposition or intent.

ding, and respect for the user (pp. 411–415). Adherence to these principles helps to ensure that users can perform specified tasks with a minimum of difficulty and interference from the system, which, at its best, becomes invisible or transparent to the user.

Performance via Simplicity/Transparency

Transparency, in fact, as an underlying goal in information design, is both admired by its proponents and scorned by advocates of the newer concept of experience design (Bolter & Gromala, 2003; Nielsen, 2000). Nielsen (2000) advocates simplicity and transparency as overarching goals in system development. In the Web environment, on the simplicity principle, every design element is potentially expendable: “If the design works as well without a certain design element, kill it. Simplicity always wins over complexity, especially on the Web where every five bytes saved is a millisecond less download time” (p. 22). On the transparency principle, content is primary, and everything else is, at best, a necessary guide to content, and at worst, mere window dressing. On the Web, “content is number one” (p. 100). Everything else is like mere costuming in a theatrical performance: “Of course, good costume design contributes greatly to making the performance enjoyable and to bringing the author’s and director’s visions to the stage. But in the end, the play is the important thing” (p. 100).

In contrast, proponents of experience design deplore the overemphasis upon transparency as an ideal in information design. Jay David Bolter and Diane Gromala (2003) maintain that the window was deliberately selected as a metaphor for the computer screen because “the word *window* helps us to forget the interface and concentrate on the text or data inside” (p. 42). In this metaphorical representation, the user seeks data “in the machine, just beyond the window,” and “the designer’s task is to make the interface transparent to the data” (p. 42). The “myth of transparency” has a long history and many names: “In the history of writing and rhetoric, transparency was explained by the terms *simplicity* and *clarity*. In the history of painting, the ideal for many painters was to be ‘true to nature’” (pp. 48, 50). In the relatively short history of computing, “the windowed interface has defined the way we interact with computers for nearly twenty years” (p. 48). Nonetheless, experience designers seek to replace or to augment the traditional emphasis upon transparency with a new emphasis upon the quality of the total user experience.

Experience as User Engagement

This new emphasis upon the quality of the user experience highlights the user’s engagement with the technology and thus reminds us that the technolo-

gy is not just a transparent medium, but a dimension of the user's experience, and potentially at least, a mediator among users (Bolter & Gromala, 2003; Jordan, 2000; McCarthy & Wright, 2004; Norman, 2004; Shedroff, 2001). Nathan Shedroff (2001) describes experience with computing technology holistically as a rounded activity that includes an initial attraction, an engagement both unique and relevant to us, and a conclusion that provides some resolution or closure (p. 4). Bolter and Gromala (2003) offer as an alternative to the transparent window the metaphor of the reflective mirror, which invites designers to offer a "compelling experience" rather than mere "information delivery" and invites users to look "at" rather than "through" the interface (p. 67). From this perspective, the designer's role is not to make the interface disappear, but to make it a part of the user's experience: "Today, we do not operate computers; rather, we interact with them, and successful digital artifacts are designed to be experienced, not simply used" (p. 22). These digital artifacts include even the most business-like applications: "Every application must be an experience" (p. 22).

This emphasis upon the quality of the user experience embraces rather than precludes or diminishes the traditional emphasis upon system performance conceived as functionality and efficiency in the execution of specified tasks. Patrick W. Jordan (2000) deplores the overemphasis within the human-factors community upon "the effectiveness, efficiency and satisfaction with which specified users can achieve specified goals in particular environments," especially where "satisfaction" is narrowly defined as "the avoidance of physical or cognitive discomfort" (p. 7). He insists upon a broader, more holistic understanding that extends beyond mere "task completion" to "the wider role that products play in people's lives": "products are not merely tools: they can be seen as *living objects* with which *people have relationships*" (pp. 6-8). But this holistic understanding complements rather than replaces the traditional view: "After all, what is the point of providing a user with a beautiful product with a vast array of functions if the design of the product makes it difficult to use to its full advantage?" (p. 6). Reemphasizing both the functional and the experiential, McCarthy and Wright (2004) cite IBM's twofold commitment to its users: "User Experience Design fully encompasses traditional Human-Computer Interaction (HCI) design and extends it by addressing all aspects of a product or service as perceived by users" (p. 10). Donald A. Norman's (2004) concept of emotional design elegantly synthesizes these two aspects of design, the functional and the experiential, and adds a third, the reflective aspect: the visceral is concerned with appearances, the behavioral with the "pleasure and effectiveness of use," the reflective with "reflective thought," including "self-image, personal satisfaction, memories" (pp. 5-6, 22, 39).

Experience as Collaboration

If experience design heightens our awareness of the mediating technology as a dimension of human experience, does it also address the role of technology as mediator between users? Bolter and Gromala (2003) provide a hint of the potential of digital communication technologies to mediate our collaborations with others. Among many illustrations of experience design drawn from the SIGGRAPH 2000 Gallery, they describe a novel (and somewhat unsettling) experiment called Terminal Time that permits visitors/participants to view historical narratives responsive to their ideologies, as indicated by their applause in response to leading and even loaded questions. Although the narratives, they confess, are not entirely serious, they invite visitors/participants to think about how their reading of history is constrained by their cultural identities and “to see history being rewritten—for us or against us” (p. 134). We need not stretch our imaginations too far to be able to contemplate the possibility of political or advertising campaigns being conducted in this fashion, a limited (and limiting) collaboration that Warnick (2007) describes as “campaign-to-user” rather than direct “user-to-user” collaboration (pp. 75–76). We can see, however, the potential for more direct collaborations via recent developments in Web technology.

The New Web and the Promise of Collaboration

The new so-called Web 2.0 platform and its underlying Ajax technologies have potential to extend and enrich users’ experiences with the technology and also to promote collaborations between and among users (Anderson, 2004, 2006; Babin, 2007; Garrett, 2005; Negrino & Smith, 2007; O’Reilly, 2005; Tapscott & Williams, 2006). The Web 2.0 platform is frequently touted as an economic model for the next generation and is both heralded and criticized as a model for social interaction (Anderson, 2004, 2006; Keen, 2007; O’Reilly, 2005; Tapscott & Williams, 2006). We believe, however, that this model offers potential to promote collaborative activity in the interest of both individual users and their larger social communities, and that we have a collective responsibility as technical communication program administrators and faculty to design programs and curricula that help to shape the technology toward these ends.

The Economic Model

As an economic model, the new Web is based upon a fundamental principle of collaboration directed toward new and enriched services for users. Tim O’Reilly (2005) calls this new phenomenon *Web 2.0*, and explains it as a platform rather than a technology, with power to “harness collective intelligence”

through “hyperlinking,” “collective activity,” and enhanced “user engagement” (pp. 1–2). As illustrations, he cites well-known success stories such as Yahoo!’s “catalog, or directory of links, an aggregation of the best work of thousands, then millions of web users”; Google’s Page-Rank®, “a method of using the link structure of the web rather than just the characteristics of documents to provide better search results”; eBay’s ability to harness “the collective activity of all its users”; and Amazon’s “science of user engagement,” which offers, on the one hand, countless opportunities for user participation, and on the other, creative methods of harnessing this user activity to produce improved search results (p. 2). The power of the new Web derives in part from its underlying Ajax engine, which Jesse James Garrett (2005) explains as an aggregation of technologies, hence its name, Ajax, or “Asynchronous JavaScript + XML.”³ By this account, the basic building block of the Ajax engine is the HTTP request function, which performs actions asynchronously with the user’s interactions with the system. The Ajax engine thus permits more dynamic computer-user interactions, such as enabling users to load new information onto a Web page without reloading the page.

The new Web also permits and enables more dynamic interactions between users—the cornerstone of the new economic model of collaboration (Anderson, 2004, 2006; O’Reilly, 2005; Tapscott & Williams, 2006). Chris Anderson (2006) calls this new economic model “the Long Tail”—the virtually endless chain of supply and demand enabled by the virtually endless reach of the Internet and the World Wide Web: “Just as Google is finding ways to tap the Long Tail of advertising, Microsoft is extending the Tail of video games into small and cheap games that you can download on its Xbox Live network. Open-source software projects such as Linux and Firefox are the Long Tail of programming talent, while off-shoring taps the Long Tail of labor” (pp. 22, 50). Fueling the development of this long tail are three basic marketplace forces: democratizing the tools of production, democratizing distribution, and connecting supply and demand (pp. 53–57). Thus just as the personal computer has made everyone a producer, so the Internet has made everyone a distributor, and the new Web technologies connect supply and demand through more powerful “wisdom-of-crowds” search capabilities and user-to-user interactions in the form of product recommendations and reviews (p. 55). Collectively, these marketplace forces constitute an “architecture of participation” in which a “once-monolithic industry structure where professionals *produced* and amateurs *consumed* is now a two-way marketplace, where any-

³ Lee Babin (2007), Tom Negrino and Dori Smith (2007), and others explain how to build these applications and supply code that can be readily imported into existing or new applications.

one can be in any camp at any time" (pp. 83–84). Don Tapscott and Anthony Williams (2006) call this new economic model *wikinomics* and emphasize its fundamentally collaborative character: "Call them the 'weapons of mass collaboration.' New low-cost collaborative infrastructures—from free Internet telephony to open source software to global outsourcing platforms—allow thousands upon thousands of individuals and small producers to cocreate products, access markets, and delight customers"—"to collaborate, create value, and compete" (pp. 10–11).

The Social Model

These more dynamic interactions extend, however, well beyond the economic realm to encompass virtually every aspect of social life. Tapscott and Williams (2006) welcome us to the new Web and "the new world of *wikinomics* where collaboration on a mass scale is set to change every institution in society" (p. 10). This new Web, Web 2.0, the living Web, they argue, is fundamentally social and communal:

Call it what you like—the sentiment is the same. We're all participating in the rise of a global, ubiquitous platform for computation and collaboration that is reshaping nearly every aspect of human affairs. While the old Web was about Web sites, clicks, and "eyeballs," the new Web is about...communities, participation, and peering. (p. 19)

Not everyone, however, is so optimistic about the potential for collaboration and community building offered by this new technology. Tapscott and Williams (2006) claim that the "blogging phenomenon" is indicative of the profound changes in our social life, and call it "the biggest coffeehouse on earth," "a running conversation" in which everyone can participate (pp. 39–40). Andrew Keen (2007), however, regards the democratization of the Internet and the Web as a potentially destructive force:

The cult of the amateur has made it increasingly difficult to determine the difference between reader and writer, between artist and spin doctor, between art and advertisement, between amateur and expert. The result? The decline of the quality and reliability of the information we receive, thereby distorting, if not outrightly corrupting, our national civic conversation (p. 27).

From this perspective, the new Web offers not a promise of collaboration but a cultural revolution that "threatens to turn our intellectual traditions and institutions upside down"—a "digitalized version of Rousseau's noble savage, representing the triumph of innocence over experience, of romanticism over the commonsense wisdom of the Enlightenment" (p. 36). Similarly, the blogging phenomenon is not the world's biggest coffeehouse, but a filter-free world of "rumors and lies concocted by anonymous (and no doubt amateur)

reporters,” user-generated content is merely “user-generated corruption,” and the wisdom of crowds is not collective intelligence but “an illusion . . . no more to be trusted than the anonymous amateur editors at Wikipedia or the anonymous amateur filmmakers on YouTube” (pp. 81, 94–95).

We take these observations (insofar as we take them seriously) as a challenge and an opportunity to shape the new and emerging communication technologies toward productive collaborations for the purpose of building stronger social relationships and stronger organizational and social communities. The “architecture of participation”—the “global, ubiquitous platform for computation and collaboration” effected by Amazon, eBay, Google, and other commercial enterprises (Anderson, 2006, p. 83; Tapscott & Williams, 2006, p. 19)—seems to enable a beehive-like responsiveness to others, a minute co-ordination that can become nearly invisible—as Google’s search results, for example, enable a co-ordination of interests between ourselves and many unnamed others. But this same architecture of participation can also become dramatically visible—as Terminal Time, for example, dramatically visualizes the responses of real, immediate, and readily identifiable audiences. In either case, the mediating technology is not merely a transparent vehicle for transmitting information but a nexus of activity that helps to shape the activity and becomes a component of the user’s experience. This mediating technology is not mere noise in the system, but a facilitator and an enabler—not the coughing in an audience that interrupts and disrupts a speaker, but rather a microphone that permits the speaker to speak over the noise, or a microphone passed among members of the audience, or to fully extend the metaphor, millions of microphones of a kind that permit everyone to speak at once, but to listen only to those they choose to hear. If, as we suggest, the role of technology as mediator in human communication processes is becoming increasingly more visible, more pronounced, and more complex, then the collective responsibility of program administrators and faculty to help shape the technology of the future only increases accordingly. Rensselaer’s TMC project is a small contribution to this collective effort.

The TMC Project

The core concept behind the TMC project is that technical communication has been fundamentally altered with the introduction of the kinds of mediating technologies we have been describing (Geisler 2006). In other words, TC (Technical Communication) *becomes* TMC (Tech-Mediated Communication) with the insertion of the M (for Mediation). The TMC project began in the fall of 2005 with a one-year planning grant and grew in the fall of 2006 with the award of a three-year research grant. We conceived this project from the start

as a collaborative effort among several faculty members who had ongoing research projects and interests in the design of communication technologies for the community and the classroom: graphic design for health education and information exchanges across cultural boundaries, the development of information resources for local governments, the implementation and testing of a variety of communication tools and resources for distance education, and the use of wikis and other collaborative software in the classroom. We felt that we had a better chance of success if we based our experiments in ongoing efforts and interests rather than in new initiatives with no history or experience. We also felt, intuitively, that a coalescence and convergence of these interests might add up to a whole that transcended the limitations of the individual parts.

As a collective and collaborative effort, the TMC project attempted to move beyond concepts of efficiency and transparency to answer a fundamental question: What makes tech-mediated communication usable in the broadest sense? In particular, we sought to develop a set of design heuristics to guide the development of tech-mediated communication and a set of metrics by which to evaluate their effectiveness. We also designed new test protocols more appropriate for testing user experiences. In the process, we had to revisit and reshape the fundamental components of usability toolkits.

Because our question was a broad and elusive one, we looked for answers by exploring specific instances of tech-mediated communication through interactions among five faculty-led teams pursuing distinct, but complementary ongoing projects:

- *Cross-Cultural Graphics* led by Audrey Bennett, which looked at how to create HIV-awareness in Kenya through tech-mediated graphic design;
- *Wikis for Collaboration* led by Jan Fernheimer, which explored the ways in which wikis can be used to facilitate team collaboration;
- *Distance Education* led by Robert Krull, which examined how distance technologies can facilitate the development of a classroom community;
- *Cultural Websites* led by Patricia Search, which investigated how websites can function as cross-cultural communication between indigenous tribes and the mainstream culture; and
- *Web Galleries* led by Jim Zappen (and discussed further later), which explored how online galleries can serve to inform and engage

children, teens, and adults in the programs and activities of local community organizations.

To encourage interaction and involve students from both undergraduate and graduate programs, we organized ourselves through an annual spring seminar that punctuated the ongoing work of these five teams with seminar meetings of the whole. To make the process more complex and more interesting, we invited participation by students in both our on-campus programs and our distance MS program—all of whom have made invaluable contributions to our ongoing efforts.⁴

For participating faculty, this complex organizational structure created an unprecedented mechanism for close and continued interactions among ourselves and students over substantive issues in tech-mediated communication. For our students, the structure provided hard-to-find, but much-coveted interaction with faculty research and also exposure to our integrative discussions. At the team level, each team's work alternated between design and testing with the test results providing input for the next phase of design. At the level of the seminar, the design and testing were highly coordinated affairs, as both design and testing were driven by the developing heuristics and metrics.

Illustration: The Connected Kids Galleries

The Connected Kids Information System and Gallery offer special design challenges and opportunities due to the varying abilities and interests of children, teens, and adults with a range of different backgrounds and experiences. The Information System and Gallery⁵ were initially funded by the National Science Foundation as an experiment in digital government for the purpose of delivering information about youth programs, services, and activities to youth-services organizations, parents, teens, and children in Rensselaer County and Troy, New York.⁶ The system has an easy-to-use interface for data entry and retrieval accessible via the World Wide Web. The Gallery offers artwork and photos depicting some of the programs and activities represented in the system. For the TMC project, we developed a model for information-design theory and practice that incorporates both traditional measures of user performance, measured by functionality and efficiency in the execution of

⁴ These programs include the PhD in Communication and Rhetoric, the MS in Human-Computer Interaction, and the BS in Electronic Media, Arts, and Communication.

⁵ See <http://www.connectedkids.info/>.

⁶ This material is based upon research supported by the National Science Foundation under Grant No. 0091505. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

user tasks, and user engagement, guided and motivated by the new concept of experience design and the capabilities of the new Web 2.0 technologies described previously.

Designing Information Resources for Children and Teens

In the Connected Kids project, we envisioned the design challenge from the outset as a need to design information resources for a diversity of users. We did not fully anticipate the emergence of experience-design concepts and the Web 2.0 technologies and their implications for practice. We believe that the original Gallery, as illustrated in Figure 1, nonetheless incorporates some elements from experience design described in the literature, and certainly intends for users to look *at* rather than *through* it. In the early stages of the TMC project, we developed colorful photo collages and slideshow photo displays with two of our partner organizations, the Knickerbacker Park and Ice Arena and the Troy Family YMCA, in an attempt to create a sense of engagement and immediacy for users, especially children in the lower and middle grades. We then conducted user tests, initially with college students, and received less-than-enthusiastic responses, due largely to the Gallery's limited functionality and efficiency. At this point, given limited testing, we cannot be certain whether these less-than-enthusiastic responses reflect dissatisfaction with the Gallery itself or merely differences among users, but intuitively we suspect that children, teens, college students, and older adults likely have different backgrounds and levels of experience, and therefore different perceptions of what an online gallery can and ought to be. We will require further testing to sort out these issues such as the appropriate balance between functionality and efficiency, on the one hand, and total user satisfaction, on the other, for each of several different groups of users. But we suspect that one possible outcome might be that we need different galleries with different functionalities and offering different experiences for users of different ages. This conclusion would not be surprising, if this is indeed the outcome, given our initial premise about designing information resources for a diversity of users.

The issue of functionality and efficiency versus total user satisfaction is relevant to adults as well as children and teens. Tapscott and Williams (2006) observe the explosive growth of social-networking applications such as Facebook and MySpace, for example, and the relatively young age of their users (now thirteen for Facebook and fourteen for MySpace). These users—the so-called *Net Generation*—“are increasingly free to manage their interactions, form networks, and shape their own identities” (pp. 48–49), and they are slowly transforming every aspect of social and organizational life, from education to commerce to work and employment practices. As students, they

are responding enthusiastically to new tools and curricular initiatives that permit “real participatory, active learning” (p. 51). As consumers, they are not passive purchasers, but “prosumers” who “satisfy their desire for choice, convenience, customization, and control by designing, producing, and distributing products themselves” (p. 52). As workers, they will introduce new norms of workplace practice, including “speed, freedom, openness, innovation, mobility, authenticity, and playfulness” (p. 54). If Tapscott and Williams (2006) are even partially correct, then the information design challenges of today will only increase as this generation enters into—and in the process—transforms, social and organizational life as we now know it.

Designing for User Performance: Functionality and Efficiency

Based upon our initial round of user testing, we created a new Gallery with enhanced functionality and efficiency consistent with the expectations of our initial test group and consistent also with the portrait of the new generation of teens and adults captured in Tapscott and Williams’ (2006) account. Initial testing of the original Gallery with college students revealed numerous functionality/efficiency problems, possibly reflecting these users’ experience with more sophisticated gallery software. For these users, according to the test report, the original Gallery seemed “very casual and not task oriented,” more like “slide shows rather than true ‘galleries,’”

Figure 1. Original Connected Kids Gallery designed for children



“very linear” with “no hierarchy of information, no search functions, no category scheme or navigation system to assist users in finding images,” no “library of types of images and thumbnail images,” and “no help functions or contact information.” Based upon this initial testing, we created the new gallery, shown in Figure 2, using the readily accessible, sophisticated open-source Gallery software.⁷ We then tested the new Gallery with a wider range of users, including three under age twelve, three between the ages of twelve and seventeen, and three at or over the age of eighteen. Based on responses from these users, the test team reported that the new Gallery seemed to be “a significant improvement over the original exemplar.” Not surprisingly, however, the test team also observed that the new Gallery seemed to be designed for “adults, not children,” and suggested that it include “more interactive audio and video features,” “more rich contrasting colors,” and “more visual draw” to hold the attention of children. In addition, the test team also identified a number of functionality/efficiency issues, including a need for larger text and images, less white space, elimination of extraneous information such as photo properties, a search button, and elimination of the text within the search box, more prominent links and breadcrumbs, and adjustment of some default settings. Consistent with Tapscott and Williams’ description of the new generation of users, the test team also made recommendations for more dynamic content and more opportunities for collaboration in the form of user-generated content, including audio and video content, interactive components such as games, links to more information, mechanisms for sharing Gallery content and other information resources, and opportunities for users to upload content.

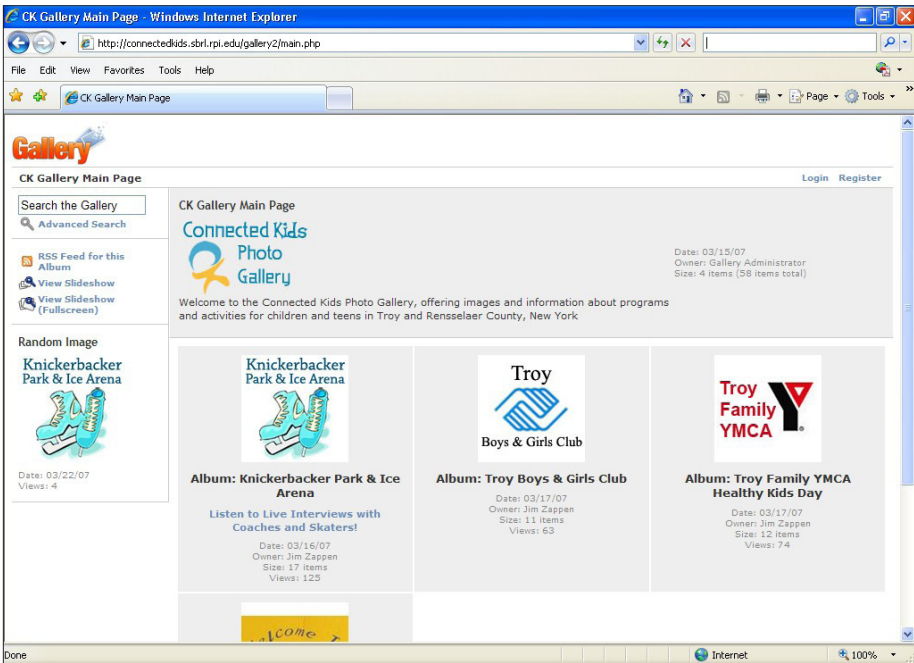
Designing the Total User Experience: Experiments in User Engagement and Collaboration

Given these findings, and motivated by the literature on experience design and the new Web 2.0 technology, we are working on a revised Gallery, which we now call an Information Gallery,⁸ to emphasize our effort to develop an information resource rich with visual, textual, and audio content, including content generated by our users. In this effort, we are targeting teens and adults, not children, and we are retaining the original Gallery, for the moment, for use by children. We are constrained, of course, both as co-creators of the Gallery and as stakeholders in our community, from opening this resource to teens with nothing more than an email account and a

⁷ See <http://gallery.menalto.com/>.

⁸ See <http://connectedkids.sbrl.rpi.edu/gallery2/main.php>.

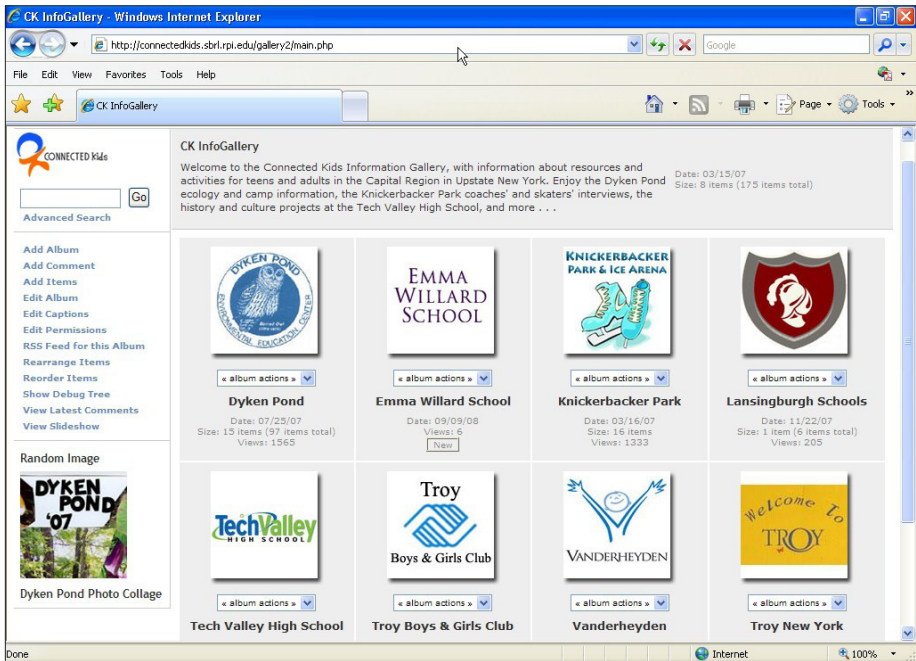
Figure 2. New Connected Kids Gallery designed for teens and adults



willingness to assent to a terms-of-service agreement. Legally, and ethically, we are obligated to make every effort to protect our young people. Nonetheless, we are working to address the functionality/efficiency issues and to introduce richer and more varied content. To address the functionality issues, the revised Gallery (shown in Figure 3) eliminates white space and thereby includes more albums per screen, eliminates extraneous textual information from the main page, adds a Go button and eliminates the text in the search box, removes broken links, adds a large audio image for each of the audio files, and resets defaults, among other fixes.

In addition, to address the content issue, the revised Gallery includes a variety of ongoing experiments designed both to enrich the quality of the user's experience and to build a sense of ownership and community. One such experiment is the new Dyken Pond ecology resource, which offers images from a local summer camp, including photos of natural settings and campers' learning activities; captions by a former camper and camp counselor; plus additional information such as a campers' photo collage, visitors' guide, and trail map. This experiment also offers direct access to the camp director for the purpose of adding or editing captions to ensure the thoroughness and accuracy of the information, and to ensure as well actual ownership of the resource. Another such experiment, in early stages of development, is an

Figure 3. Revised Connected Kids Information Gallery



opportunity for students at our area's new Tech Valley High School to develop and post content, including their explorations of serious issues such as conflicts in Africa and more personal and expressive materials such as graphic narratives, artwork, and poetry. In addition, we are developing a new moderator function to permit users to post comments directly with the oversight that we require for teens. We anticipate that these developments are merely the beginning of a long but exciting process, in which our area's young people will likely teach us as much as we teach them about the rapidly changing communication technologies of the present and future. We believe that these developments also offer countless challenges and opportunities for research and program development in technical communication—opportunities not only to respond to rapidly changing communication practices but also to lead and shape the mediating technologies of the future.

Implications for Research and Program Development

We see the TMC project—including the Connected Kids Gallery as just one of many possible illustrations—as emblematic of the next wave of research and program development in technical communication. Technical communicators have always been advocates for the human, with strong commitments to the social. In a technical communication world focused upon functionality and efficiency, the technical communicator's role was to make the user expe-

rience as transparent as possible. But in a tech-mediated world, advocating for the human requires a broader scope. It requires changes in how research projects are organized and how programs work. It requires an interdisciplinary collaborative design orientation embedded in new program commitments and structures.

Interdisciplinary Mix

Given the increasingly complex mediations of the kinds of communications that we have been describing, we may be sure that no single researcher or academic discipline can bring together all the knowledge and skills needed to sustain a research project such as ours. In this project, we needed to bring together faculty and students whose disciplinary bases have often been siloed from one another. We needed to engage rhetoricians, graphic designers, and specialists in human-computer interaction, all under the TMC umbrella, all committed to the human and the social, but who bring together distinct sets of precepts and concepts. In the process, we came to recognize—and value—that we did not see the same things or think in the same ways about the communication artifacts that are the objects of our inquiries. We did not see the results of this mixing as a blending process; we did not expect a new overarching discipline to emerge. Instead, we expected to see—and we did see—a continuing need to transform our individual disciplines into a complex interdisciplinary mix.

Programmatically, this interdisciplinary mix has required a commitment to recruitment and program development that draws upon the strength of our individual disciplinary bases while we continue to mix it up in the hallways and classrooms. For such a process to work, we have had to make two strategic moves. The first has been a focus in our recruitment—of both faculty and students—on those who see the need, and the joy, in crossing disciplinary boundaries. We have found that they need to have this commitment from the beginning. The second has been a decision to focus our individual disciplinary visions through the common lens of technological mediation. It would be somewhat misleading to say—although we often do say—that we tend to take a narrow slice out of a variety of disciplines rather than attempt a broad overview. It would be more accurate to say that we pull the whole cloth of those broad disciplinary bases through the ring of technological mediation. The result is a transformation—a remix—that fundamentally changes disciplinary thinking itself. An example of this transformation is the way the concept of rhetorical agency, with which this article began, gets refigured when brought into contexts mediated by technologies such as the personal digital assistant and the (imaginary) automated writing assessments.

Deep Collaboration

The TMC project has taught us that the effectiveness of this interdisciplinary mix depends on a *deep collaboration* that was, quite frankly, new to us. Much of the ordinary collaboration in which we engage depends on an often unspoken compartmentalization of tasks: You do this; I'll do that; we'll get this done. In deep collaboration, on the other hand, collaborators engage in continual interaction. Each participant still brings expertise to bear on the tasks at hand, but through continual interaction we become aware of what each brings to and takes from our work. Out of this awareness, over time, emerges the mutual influence that is deep collaboration. In the TMC project in particular, deep collaboration allowed us to make progress on five different design projects while we reflected in general on what makes communication usable in a tech-mediated world.

Programmatically, deep collaboration requires a rethinking of the temporal, social, and spatial structures that ordinarily keep disciplines isolated from one another. In the temporal dimension, our program was organized as a series of courses embedded in a repeating curriculum that constituted students' plans of study. The need for an iterative design-and-test cycle that would stretch over the course of several years challenged us to find a way to break out of these curricular time structures. Our solution for the TMC project was to schedule the TMC seminar in three iterations over as many years. Not only did each seminar instructor agree not to duplicate the material of the previous seminars, but, in some cases, the same students also moved from one seminar to the next over multiple years, building on the concepts and work of previous seminars. As a consequence, we encountered new needs, opportunities, and challenges throughout the course of the three seminars: the need to recruit and orient new members, the opportunity to draw upon the developing knowledge and experience of the oldtimers, and the challenge of keeping a multiyear project headed in the same direction.

The TMC project also challenged us to break out of the usual social boundaries that center the curricular action in a single classroom. The seminar became the social center, the structure that brought us together, but orbiting around this center were constellations of activity with equal, if not greater, significance in the work of the five faculty-led teams. The work of these teams differed from the usual student teams that we have used in other courses in two ways. First, they were faculty-led, which gave them the direction and credibility that student teams usually lack. When students reported their work, for example, the faculty listened to learn rather than to evaluate. Second, and most germane to deep collaboration, we quickly recognized that

the teams could not work in isolation from one another if we were to achieve our goal of generalizing our findings across projects. To meet this challenge, we developed over time a matrix structure in which members of our testing team had joint assignments, serving both as members of an evaluation team and as members of the five separate design teams. The move from project-specific knowledge to generalization—so central to technical communication programs—thus became literally inscribed in the movements of these matrix members across the social structures of the course.

Finally, and not surprisingly, these changes in social structures led us inevitably to seek new ways of using space. The climax of each TMC seminar was a five-hour design *charette* in which team members had the opportunity to interact with the design projects produced by other teams and also to come together to address larger issues. Because the charettes required rotating students through projects, we literally exploded beyond the spatial confines of our usual seminar room to encompass faculty offices and labs scattered through our building as demo rooms. Because our seminars included both on-campus and distance students, each of these spaces needed to be equipped with suitable technology to mediate both voice and application sharing with distance members. Each set of arrangements, both the physical and the virtual, had to change every fifteen minutes! The level of technological coordination was, for us, unprecedented.

Design Orientation

Implicit in the concept of deep collaboration, but worthy of articulation, is the importance of taking a design orientation in our common work. Too often, interdisciplinary interactions focus on analyzing the interdiscipline itself—How are you and I similar? How are we different? What are our histories of convergence or divergence? What are the key issues for adjudication? Although we do not doubt the value of such questions, our discussions have largely been structured quite differently—around the design of something new. Design—the way the imagining of something new structures the creation of something new—has never been totally at home in an academy centered upon analysis. Yet the opportunity afforded by fast-paced technological change invites us to become prosumers ourselves as we imagine, construct, and—yes—analyze new tech-mediated interactions.

Programmatically, the disciplines from which we draw all have individual design mandates. HCI concerns itself with the design of human-computer interactions. Graphic design concerns itself with the design of two- and three-dimensional visual communications. Rhetoric concerns itself at least in part with the design of effective communication. It is not surprising, then, that this

interdisciplinary mix, brought together for the purpose of deep collaboration, can coalesce around common design projects. In the TMC seminar, in particular, the design orientation became salient not because we asked students to design—we all do this in our classes, don't we?—but because we asked them to design *with* us. Such open-ended and collaborative design projects are not common in our coursework, but, again, one of the important lessons of the TMC project is that we need to take steps to ensure that interdisciplinary collaborative design lies at the heart of technical communication programs and curricula.

Programmatic Impacts of Interdisciplinary Collaborative Design

Not by chance does interdisciplinary collaborative design become important in the context of tech-mediated communication. As we outlined in the first half of this article, the shift from supporting individual users as consumers to structuring a beehive of coordinated communication among *prosumers* is the essence of recent technological change. Of course, the programmatic impact of this deep interdisciplinary collaborative design has yet to be played out. But as we bring the TMC project to a close, we have begun to wonder about its legacy. In three to five years, will it all seem like a dream? Or will we invent new curricular structures that enable deep collaboration to continue? One of the TMC challenges, it seems to us, is to find a way to institutionalize these changes, both at our institution and elsewhere.

Of course, not all research and program development in technical communication can or should follow the TMC model. Not every program has the same institutional environment, faculty, resources, or interests. Nonetheless, we believe that the same forces and influences will operate in every case. The basic concept of experience design and the rapid emergence of new collaborative communication technologies are effecting fundamental changes in communication practices and in the culture at large. One way or another, we will need to be responsive to these changes. We will all need to become more technologically sophisticated, more interdisciplinary, and more collaborative. As we consider how to develop programs that respond to technological changes, we should ask ourselves the following questions:

- Can we, as we *mix it up* in terms of disciplinary backgrounds and interests, ensure that programs bring a variety of disciplines to the programmatic table? If we have small programs, can we build alliances across our institutions or even collaborate with other institutions in joint projects?

- Can we provide students with opportunities to engage in deep collaboration? Can we find ways to break out of the usual temporal, social, and spatial arrangements of programs to allow for cross-generational learning? To facilitate faculty-faculty interaction (beyond committee work)? To link team and class work in ways that give authenticity and credibility to both?
- Can we fully embrace a design mandate? Can we see ourselves as part of the effort to design new technologies, not just as users of those technologies or producers of documents to aid those users?

At Rensselaer, it is too early to be certain about our answers to these questions. But it is clear that such project-driven mixes can be more easily implemented in programs and institutions that explicitly invite faculty to experiment and collaborate. Rather than building solely around a set of stable offerings repeated year after year, programs need to offer more open-ended slots. At Rensselaer, for example, during the three years in which they were offered, the TMC seminars filled open slots in core program requirements in both our MS and PhD programs. In the MS in HCI, for instance, students could take the seminar as one of the two or more required courses in advanced HCI topics. In the PhD in Communication and Rhetoric, students could take it as part of the required sequence of at least three 6000-level seminars. Because neither requirement specifies courses by name, the open ended-slots invited faculty to offer—and students to take—timely and pertinent courses tied to specific projects.

But more than a passive invitation is needed to make such initiatives work. Indeed, in emerging areas of strength such as games research and new media, we are looking for ways in which multiyear seminars might be created. We acknowledge that our institution has rich technological resources, but low-cost technologies such as Skype and Yugma are beginning to duplicate the audio, video, and application-sharing environments that can facilitate deep collaboration (Poe, 2008). Technologies such as these will permit many more of us to devise new curricular and programmatic structures outside the single instructor/single discipline model—structures that support interdisciplinary collaborative design.

Consistent with our commitment to the human and the social, however, we also remind ourselves that we pursue these interdisciplinary collaborative design activities not only, or even primarily, to advance our intellectual agendas but also to influence and shape the digital communication technologies of the future and, in the process, to help to create more functional technolo-

gies and more engaging experiences for users, both with the mediating technology and with other users who collectively represent the range of corporate, governmental, and public interests that we profess to serve. This, we think, is the challenge of tech-mediated communication.

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The Council for Programs in Technical and Scientific Communication at 35 Years

A Sequel and Perspective

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Abstract. Building on the 1996 retrospective by Pearsall and Warren, the authors examine the decade that followed for the Council for Programs in Technical and Scientific Communication (CPTSC). As the world became more closely knitted together through trade agreements and advancements in communication technology, CPTSC took up its mission in response as it helped promote program growth internationally. During this period, the organization added many more members beyond the United States, as it hosted a series of roundtables in Europe and Canada, working to diversify the ethnic make-up of its membership through scholarships. As the global economy fostered development of high technology, CPTSC assisted in academic program growth and assessment and promoted research focused on programmatic issues by starting a research grant program and launching the scholarly journal *Programmatic Perspectives*.

Keywords. diversity, exchange, grant, international, journal, program, research, review, roundtable, summit

Twenty-two years after the founding of the Council for Programs in Scientific and Technical Communication (CPTSC), its first two presidents, Thomas E. Pearsall and Thomas L. Warren (1996), published a retrospective of the organization's history and accomplishments to date. In 2008, as CPTSC approached its 35th year and annual meeting, the editors of *Programmatic Perspectives* asked us, CPTSC'S 13th and 14th presidents, to write a sequel for the journal's inaugural issue, to provide a retrospective on the 13 years that followed.

To do so, we return to the lens that Pearsall and Warren used, namely focusing on CPTSC's purposes, as spelled out in Article I of the organization's constitution:

1. To promote programs in technical and scientific communication;
2. To promote research in technical and scientific communication;
3. To develop opportunities for the exchange of ideas and information concerning programs, research, and career opportunities;
4. To assist in the development and evaluation of new programs in technical and scientific communication, if requested; and
5. To promote exchange of information between this organization and interested parties.

Just as in the Pearsall and Warren article, these five purposes serve as headings for the sections that follow.

CPTSC: A Retrospect

In 1973, Pearsall wrote a letter to directors of 20 academic technical communication programs that he identified to see if there was interest in meeting and organizing. He asked, "What elements make up a successful TC program? What balance do we need between specialized and generalized training? How much science and technology does a technical communicator need and what kind? How well do our graduates measure up to the standards of working professionals?" (Pearsall & Warren, 1996, p. 140). By examining the proceedings of the annual meetings, Pearsall and Warren reveal that these questions continued to be at the heart of discussions for the next 22 years. Indeed, an examination of the proceedings for the 13 years since, now posted at the organization's official website, reveals a similar interest in answering these questions.¹

However, by 1996, new questions had arisen: How can programs prepare graduates for an integrated global economy, workforce, and technical documentation flow? How can programs become more ethnically and racially diverse in their student populations and faculty composition, given the increasing diversity of the countries in which such programs find themselves? The growth of programs in technical and scientific communication has been significant, and with that growth come questions about preparing faculty to administer these programs, develop curricula, and promote research to understand these significant changes. These questions, and attempts to answer

¹ Each year's proceedings are available at <http://www.cptsc.org/proceedings.html>.

them in the sessions of annual meetings, distinguished the last 13 years from the 22 years that preceded them. Thus we turn to the ways CPTSC responded to these questions, in light of its five-point mission.

To Promote Programs in Technical and Scientific Communication

Recent years have seen significant growth in programs and therefore in initiatives to promote them. In addition to program growth, these years have seen change driven by internationalization, the need for diversity, new information technologies, and new ways to teach and learn given those technologies. We report in some detail in this article on internationalization and diversity issues, but CPTSC presidents have also pushed initiatives to establish a stronger Web presence, to provide more support for public school teachers, to strengthen program review practices, to recognize members through the Distinguished Service Award, and to question the role online education plays in the profession (Bernhardt, personal communication, July 12, 2008).

Growth and change have been significant. From the 20 programs Pearsall located in 1973, Pearsall and Warren (1996) reported that the number had grown to 190 by 1994. In 2008, our tally of programs posted on the Society for Technical Communication (STC) website² counted a nearly identical number, 187, in nine countries. This number includes all types, from bachelor's, master's, and doctoral programs to certificate, diploma, and minor programs. Because the list depends entirely on voluntary submissions and updates, the true number of programs is conceivably much larger than what appears on the STC site. Indeed, the growth in faculty positions reinforces the notion that program numbers have grown, but have not been reported to STC. Michigan State University's degree programs are not in this database, for instance. In addition, STC lists the bachelor of science program begun in 2000 at the University of Wisconsin–Stout (UW–Stout), but it does not list UW–Stout's technical writing minor or professional writing concentration, both of which have existed for over 25 years. Perhaps most notable for this sequel has been the growth in PhD programs. Now numbering 18 on the STC site, in 1996, PhD programs could be counted on one hand.

Likewise, in 1996, the number of nonwhite students and faculty members in technical and scientific communication was astonishingly low—indeed, nonexistent in most programs. At the 2003 annual business

² See <<http://www.stc.org/academic/index.aspx>>.

meeting at Clarkson University, a proposal from the floor recommended that CPTSC take a lead in addressing this dearth in diversity. In response, then-President Bruce Maylath appointed a 17-member committee to study the problem and draw up a plan of action. With Cynthia Selfe as chair, the committee included Tommy Barker, Linda Driskill, Dwedor Morais Ford, Tyanna Herrington, Margaret Hundleby, Amy Kimme Hea, Meg Morgan, Dan Riordan, Carolyn Rude, David Sapp, Gerald J. Savage, Heather Sehmel, Stuart Selber, Denise Tillery, Janice Tovey, and MaryRose Velasquez. In his charge to the committee, Maylath noted that their task would not be easy: CPTSC's membership was concentrated at the upper end of career paths, the majority of members being faculty members—often veterans—in administrative roles, directing programs or chairing departments.

Taking a year to complete its work, the committee submitted its report at the 2004 annual business meeting at Purdue University. The report opened with the following goals:

We want to promote attendance by as broad a range of faculty and graduate students as possible at CPTSC's annual meeting.

We want to promote diversity within CPTSC as an organization, our undergraduate and graduate programs in technical communication and within tech communication faculty.

We need to gather information on the current demographics of race within the profession of technical communication: in the workplace and in the academy. (Selfe et al., 2004)

The report's recommendations for action were many, including steps to encourage programs to recruit students. The report suggested several actions that CPTSC could take immediately, and the committee forwarded these suggestions to the 2004 meeting's program chair and the local arrangements chair early enough so that they could be considered at the same annual meeting where the report would be submitted. These suggestions included selecting a keynote speaker³ to address diversity issues in technical and scientific communication and inviting session topics on issues of diversity. In the call for proposals, the official conference theme for that year was "Pathways to Diversity." Presentations responded to the need to address diversity in many ways (e.g., in varieties of curricula and internships, recruitment strategies, and relationships). The session most directly focused on diversity in recruiting was "Programmatic Recognition of Diverse Cultures." At the end of the day's presentations, a forum on diversity was also held for the first time. As one out-

³ Purdue's Samantha Blackmon filled this role at the 2004 conference.

come of the forum, CPTSC established a scholarship for a graduate student from an underrepresented group to attend the annual meeting. By 2008, the annual scholarship of US \$350 was being sponsored by Bedford/St. Martin's Press. The committee also engaged in renewed and reinvigorated discussions in that year to realize the rest of its goals and recommendations.

These efforts to recognize diversity as a goal and concern reflect growth in the field and in the organization. Yet the challenge remains a significant one. If technical and scientific communication is to remain vibrant and relevant in an increasing number of organizational, technological, and cultural contexts, then these efforts to expand the field are mission critical. They are also more likely to succeed if understood as a long-term project that requires commitment, persistence, and resources. The identity and position of CPTSC is significant in this regard. As an organization of institutions, CPTSC is positioned well to support long-term efforts.

To Promote Research in Technical and Scientific Communication

The Proceedings from 1996 to 2007 reveal that conference-goers used the annual meeting to present research in technical and scientific communication, much of which could guide programs, particularly in such areas as curriculum development and establishing and conducting internship programs. For program administrators, the findings from research can be critical in understanding job market trends and the efficacy of curricular innovations and programmatic models.

The conference became particularly attractive to increasing numbers of graduate students, who could see advantages in presenting findings from their dissertations to prospective employers within an audience of program administrators. (Graduate students, like many long-term members, quickly grew to value the intimacy of CPTSC meetings and the relationship-building they afforded. However, the growing presence of graduate students eventually became a point of contention, which we examine later in this article.)

To Promote Research Specifically Connected to the Development and Improvement of Academic Programs

CPTSC implemented a research grant program (with resulting journal articles) and a new journal, *Programmatic Perspectives*. The grants program is a significant development in this regard because it represents a change in the way CPTSC implements its mission to promote research. The grants program unfolded over several years as the product of the organization's long-standing

interest in programmatic research and culminated with the first awards presented in 2003. The grants program, it should be noted, was also possible due to the effective fiscal management of the organization, which allowed CPTSC the resources to invest in its membership. To be sure, even \$500 provided necessary supplies and services for research, but the initial resources provided by the grants program—\$500—had as much symbolic value as material value. In 2008, the value of the grant was increased to \$1,500 in an effort to support programmatic research more effectively.

The grants program was productive. The list of grant winners (see Table 1) demonstrates the breadth of programmatic research and speaks to the relevance of research for programs and program administration, covering issues related to the job market, certificate programs, and a range of issues related to diversity and internationalization. This research is now part of the annual meeting, providing space on the program to those who receive funding from CPTSC. It is important to note that this program has been productive as a scholarly enterprise as well; a number of these projects have produced manuscripts published in the field's journals.

Table 1: CPTSC Research Grant Winners

2008	<p>Susan Popham, <i>African-American Women in a Technical Writing Program</i></p> <p>Karl Stolley, Freddrick Logan, and Mathew Ephraim, <i>Free and Open Source Software (FOSS) in Distance Education</i></p>
2007	<p>Ann Brady and Laurence José, <i>Linguistic and Cultural Diversity in Scientific and Technical Communication</i></p> <p>Ed Malone, <i>The Role of Historical Studies in Technical Communication Curricula</i></p> <p>Elizabeth Avery Gomez, <i>Towards a Lexicon for Diversity in Technical and Scientific Communication Programs: Strengthening the Message in Academic Programs and Professional Organizations</i></p>
2006	<p>Carolyn Rude and Kelli Cargile Cook, <i>The Academic Job Market in Technical Communication, 2005–2006</i></p> <p>Jim Nugent, <i>Technical Communication Certificate Program Instructors: Their Situation and Professional Status</i></p> <p>Nancy Coppola and Norbert Elliot, <i>A Community Research Model for Assessment of Programs in Technical and Scientific Communication</i></p>

2005	<p>Kirk St. Amant, <i>Expanding CPTSC Program Review Activities: Creating a Reviewer Network</i></p> <p>Stevens Amidon and Stuart Blythe, <i>Economics, Technology, and the Management of Technical Communication</i></p>
2004	<p>Kenneth T. Rainey and Roy K. Turner, <i>STC Management Interviews</i></p> <p>Doreen Stärke-Meyerring and Ann Hill Duin, <i>Global Program Partnerships in Technical Communication</i></p> <p>Sandra Harner, <i>Trends in Undergraduate Curricula in Technical and Scientific Communication Programs</i></p>
2003	<p>Charlotte Thralls, Mark Zachry, and Kelli Cargile Cook, <i>A Profile of Doctoral Graduates in Professional, Technical, and Scientific Communication, 1995–2000</i></p>

The most recent development for promotion of research is approval for a new journal of CPTSC, *Programmatic Perspectives*. Conceived by Tracy Bridgeford (University of Nebraska at Omaha), Karla Saari Kitalong (Michigan Technological University), and Bill Williamson (Saginaw Valley State University), the journal seeks to provide a venue for publishing research relevant to programmatic and administrative issues associated with academic programs. In their proposal, Bridgeford, Kitalong, and Williamson (2007) note the significant gap in the field's scholarly literature devoted to programmatic and administrative issues. Although often present in edited collections, spaces devoted to programmatic issues are relatively small, despite a rapid growth in programs and need for scholarship of programmatic and administrative issues with respect to technical and scientific programs. Indeed, they note that rhetoric and composition's program administration journal, *WPA: Writing Program Administration, Journal of the Council of Writing Program Administrators*, does not account for programmatic and administrative issues in technical and scientific communication. Most important, Bridgeford, Kitalong, and Williamson's proposal for *Programmatic Perspectives* links its mission with CPTSC's mission, arguing that a scholarly journal is a necessary next step in the organization's growth and ability to meet its mission to promote research, programs, and the exchange of information. Indeed, it could be argued that although promoting research has always been part of CPTSC's mission, it has only been during the last eight years that membership has made significant moves to promote programmatic research. Thus its value has increased significantly, as investigations of job market trends, curricular innovations, and programmatic models all serve to make programmatic work scholarly, visible, and actionable in many ways—from promotion and tenure to the evidence necessary to drive local decisions. Therefore the active steps CPTSC has taken

to promote research are notable improvements to the organization's efforts to implement its mission and make research and its value more visible.

To Develop Opportunities for the Exchange of Ideas and Information Concerning Programs, Research, and Career Opportunities

Another significant new exchange of ideas and information for CPTSC came with its efforts to include voices from programs beyond the USA. As Pearsall and Warren (1996) pointed out, CPTSC had long included a few members from English-speaking nations besides the USA, namely Australia, Canada, and the United Kingdom. However, with the massive growth in technical communication fueled by the passage of two international trade treaties, the North American Free Trade Association (NAFTA) and the World Trade Organization (WTO), academics in the field began producing a spate of research and publications addressing international issues (e.g., Andrews, 1996; Hoft, 1995; Seguinot, 1994; Tippens, 1993; Weiss, 1995).

A watershed moment for CPTSC occurred at the 1996 annual business meeting at Miami University of Ohio, when Deborah Andrews proposed that a future annual meeting be held outside of North America.⁴ Andrews offered to host such a meeting at the University of Delaware's London Centre. Much debate followed, with about half in attendance expressing enthusiasm for the proposal and half voicing reservations, mainly out of fear that attendance and membership would falter if North American participants were forced to find funds to travel overseas. As an alternative, Andrews proposed hosting a CPTSC-sponsored educators' roundtable in conjunction with the next INTECOM FORUM, scheduled for London in July 2000. Having attended the previous FORUM the year before in Dortmund, Germany, Andrews noted that CPTSC was a member of INTECOM, an umbrella organization for various technical communication organizations, including STC, and that many technical communication educators from around the world attend FORUMs. CPTSC could sponsor a one-day roundtable just prior to the FORUM and attract participants already coming to London. In many ways, the one-day roundtable model at international meetings was a return to CPTSC's roots, when the meetings were small and could be structured by roundtable discussions among program directors.

⁴ Deborah Andrews (personal communication, July 7, 2008) reports that the membership greeted the London-annual-meeting idea with a bit of reluctance, yet clearly accepted this proposal. And much to her delight, they accepted her offer for the 1998 25th annual meeting to be in Lewes, Delaware.

The London2000 Roundtable, with CPTSC and the Association of Teachers of Technical Writing (ATTW) International Committee as co-sponsors, drew 24 participants from seven nations: China, Denmark, France, Germany, the Netherlands, the United Kingdom, and the United States. In future years, several attendees participated in CPTSC annual meetings held in the US. Most notably, Jacqui Bleetman of the United Kingdom's Coventry University was a member of the 2004 plenary panel, where she presented "3 Es in England: Education, Experience and Entrepreneurship." The Roundtable in London was such a success that it became an organizational practice: a one-day Roundtable in Milan, Italy, in 2003, alongside another FORUM; and evening Roundtables in Limerick, Ireland, in 2005 and Montréal, Canada, in 2008, both scheduled alongside IEEE's International Professional Communication Conferences. The goals of the Roundtables were to help technical communication educators on different continents exchange ideas and information common on one continent, but in short supply on another. As Bruce Maylath (2002) phrased it in the announcements and calls for papers:

Technical communication programs in Europe and North America differ in interesting but complementary ways. While programs at some North American universities have a history of several decades, programs at European universities have often been submerged in business schools and are only now emerging as clear-cut programs, with varying levels of autonomy. Conversely, while European programs have long dealt with translation issues and international communication in their instruction, most programs in North America are only now becoming aware of the importance of including such matters in their program design and teaching. The Milan meeting presents a timely opportunity for trading know-how and arranging further contacts.

The Roundtable in Milan prompted discussion about the merits of forming a CPTSC auxiliary unit or chapter in Europe, perhaps with its own meetings. The discussion continued at the CPTSC annual business meeting, later that year. As president, Maylath appointed a committee to examine the matter and consider what would be necessary under the CPTSC constitution. The committee conducted its discussions by email over the following year. At the 2004 annual meeting, the committee reported that the European members wished to be included simply as regular CPTSC members, but with their own email list for announcements and discussions. Bleetman volunteered to be the coordinator for the email list and continues to serve in that role.

Andrews' vision of holding a regular CPTSC annual meeting outside North America will soon be realized, with the European members serving as hosts. At its 2007 annual business meeting at East Carolina University, the membership voted to slate its 36th meeting for August 2009 at Aarhus University's School of Business in Denmark, in conjunction with the larger European Symposium on Language for Specific Purposes.

The same year that Pearsall and Warren (1996) published their retrospective, CPTSC changed the way it organized and conducted its meetings. Until 1996, only one session took place at a time, with all attendees participating. CPTSC has always distinguished itself from other conferences by making papers available for participants to read before the conference, then limiting presenters to five-minute oral amplifications or addenda to their papers, followed by 40–45 minutes for the audience to discuss the papers' points. However, the popularity of CPTSC meetings kept increasing, driven by growth in both undergraduate and graduate programs with graduate students as new attendees as previously mentioned, to the point that the program chair for the Miami University of Ohio meeting decided to run two strands of concurrent sessions throughout the day. Many veterans commented on their disappointment in having to choose between two attractive sessions, but they also acknowledged the unwieldiness (not to mention space limitations) in continuing to expand the single-session format.

To this point, the meetings had kept the flavor of the first CPTSC meetings. They were essentially wide-ranging conversations, though maintaining an agenda with five-minute position papers followed by discussion, with program administrators raising whatever concerns the presentations called to mind to help them grapple with the growth and development of their programs. (The format of five-minute papers, with the bulk of session time reserved for discussion afterward, dates back to CPTSC's early innovation and remains a hallmark and attractive draw for conference-goers.) However, with the sundering of the single-session format, the meetings necessarily changed. Newcomers saw concurrent sessions as resembling other conferences with which they were already familiar and featuring extended presentations by a panel of speakers, although CPTSC has maintained its focus on very short elaborations followed by significant conversation. Thus the annual meetings have garnered still more proposals, but program chairs have had to attend to topics proposed that are sometimes less clearly focused on program matters and instead focus more on individual presenters' research and interests.

Some long-time CPTSC members began attending less frequently, saying that their concerns as program administrators were no longer specifically ad-

dressed and that the sessions now seemed more of a place for graduate students to present their dissertation research, which might have only a distant bearing on program administration. Others in the organization wanted more research-based presentations, arguing that program administration could not be done effectively absent theories of writing and evidence relevant to the work that writing programs made possible. During the early 2000s, then, CPTSC wrestled with a set of issues that spoke to the mission and identity of the organization, a task that strikes us as normal, expected, and ultimately healthy. The issue of the character of CPTSC meetings and its relationship to research-based presentations crystallized for Maylath, when, during his term as president, a veteran CPTSC member approached him at the 2003 FORUM in Milan to suggest that a new organization be created for program administrators. A department chair of a leading technical communication department, this member echoed what other members had been telling Maylath. His immediate response was, "That is what CPTSC was created for." Upon returning to the USA, he continued to emphasize CPTSC's *raison d'être* to conference program chairs and to recommend the addition of an hour-long administrators' roundtable immediately following the day's concurrent sessions at annual meetings. He organized and moderated the first such roundtable at the 2005 annual meeting and has continued to do so at all subsequent meetings, a role he hopes to hand over to immediate past presidents. Despite taking place at the end of a long day, the roundtables have drawn a majority of conference participants each time, requiring a very large table and room.

To Assist in the Development and Evaluation of New Programs in Technical and Scientific Communication, If Requested

CPTSC has long offered external program review as a service to technical and scientific communication programs, although in practice this service has not often been requested of the organization. Anecdotally and from experience with our programs, we are aware that many programs use CPTSC's self-study guidelines. Moreover, information essential to program maintenance and change has been shared in many of the ways Pearsall and Warren identified in 1996: the experience of program directors shared at the meeting, in the proceedings, and in formal and informal individual consulting.

Beginning in 2007, the organization began exploring its program review practices. Led by Kirk St. Amant from East Carolina University, a newly appointed program review committee started to research the program review process to establish a scholarly context and baseline for this form of intellec-

tual work. The goal was and continues to be to revise CPTSC's program review materials. The committee's work is currently underway with the following actions:

1. Publishing a special issue of the journal *Technical Communication* on the process of program assessment and program review;
2. Sponsoring a panel presentation on program review and program assessment at the 2008 CPTSC conference, with the panel composed of the contributors to the *Technical Communication Quarterly* special issue;
3. Compiling an annotated bibliography of sources on the topic of program review and program assessment in technical communication for the CPTSC Website, ideally in Wiki format to allow regular updating; and
4. Promoting program assessment through a portal and related software developed by Nancy Coppola⁵ and unveiled at the 2008 CPTSC annual meeting.

To Promote Exchange of Information Between This Organization and Interested Parties

A particular feature of the time period covered by CPTSC's history is the emergence (and then disappearance) of "summit" meetings, typically involving representatives from CPTSC, Association of Teachers of Technical Writing (ATTW), IEEE Professional Communication Society (PCS), Association for Computing Machinery (ACM), and the Society for Technical Communication (STC). Understanding these summit meetings is a bit difficult given the small number of attendees and their ad hoc nature. But we do have recollections from Stephen Bernhardt (personal communication, July 12, 2008) and meeting notes from Stuart Selber (personal communication, July 7, 2008) for the summits in 1997 and 1998 and the two summits in 1999.

The first summit took place at Snowbird, Utah, USA, at a joint meeting of the ACM-SIGDOC and IEEE-PCS on October 22, 1997. Bernhardt reports that it was billed as a meeting of leaders from five technical communication organizations—CPTSC, ACM-SIGDOC, IEEE-PCS, STC, and ATTW—to map current issues and shape strategy for the development of education within the profession. The summit in Snowbird opened with participants

⁵ For more information about Nancy Coppola's (with Norbert Elliot) research assessment project, go to <http://assessment-cptsc.njit.edu/index.html>.

agreeing that the “five organizations want to create a culture of mutual respect, recognized interdependence, and active collaboration among groups that shape and serve the field of technical communication.”⁶ An ethos of sharing and interdependence marks the notes from each summit, as does the work on shared projects.⁷

In terms of shared work, participants at the 1998 meeting identified (a) the need to develop a comprehensive citation database, (b) the need to survey conference demographics, (c) the need for a comprehensive review of research in the field, and (d) the idea of supporting a project focused on “the right to clear information.”⁸ Over the course of the summits in 1998 and 1999, the project to create a comprehensive review of research and the right to clear information initiative are the only persistent items discussed.

In his July 12, 2008, communication to us, Bernhardt wrote, “I think the major outcomes had to do with clarifying the identities and purposes of the individual organizations, including establishing why it made sense to maintain separate conferences to serve members with differing purposes.” From notes and reports, it seems clear that although the shared projects may not have matured as shared organizational work, the goal of communicating clearly across organizational boundaries was achieved.

Since 1996, the use of Web-based technologies for exchanging information has changed significantly. The organization has had to add an officer charged with paying attention to its Web presence, and in 2004–2005, the organization began using a content management system (CMS) to run its website and organize the organization’s digital content. CPTSC was early to this transition to content management systems environments. The promise of the writing environment was that it could distribute writing tasks across the organization. This promise has been difficult to achieve, but the new system has given the organization more tools for creating and exchanging information, both within and outside the organization.

Like the summits between organizations, the last few years have seen new ways to maintain organizational memory within CPTSC. One annual exchange of information has been established on an institutional, face-to-face basis: Starting with the 2004 Conference on College Composition and Communication (CCCC) in San Antonio, Texas, the presidents of CPTSC and ATTW have held presidential summits. This practice, initiated by CPTSC’s Maylath

⁶ Notes for summit meetings were provided to us by Stuart Selber and Stephen Bernhardt.

⁷ At the 1998 summit, participants established a two-part purpose for meeting: to share information and to identify worthy shared projects.

⁸ It is not clear from the meeting notes what the “right to clear information” project was or what happened to it.

and ATTW's Jo Allen, was continued by Jeffrey Grabill and Bill Karis. Then, with Maylath's predecessor, Stuart Selber, taking on the role of ATTW president in 2007 and Grabill's successor, Kelli Cargile Cook, simultaneously serving as ATTW vice president, the exchange expanded beyond yearly summits. We hope that the information exchange between the two organizations will continue to be commonplace in the future because their missions are so clearly intertwined.

An Expanded Role for CPTSC

The activities of CPTSC have expanded significantly during the past decade; however, they have done so in full keeping with the organization's five-prong mission, as recorded in its constitution. As Pearsall and Warren did in 1996, we hearken back to then-President Virginia Book's admonition in the 1982 Proceedings: "It is important that we keep in mind the reasons for which the council was organized, that we not stray too far afield and duplicate information available through other organizations" (p. vii). CPTSC is well poised in its 35th year to keep growing and evolving as it helps cultivate academic programs in technical and scientific communication. We foresee our successors steering the organization toward further internationalization, research, and program growth as the global economy develops with future leaps in high technology innovations.

We end with an update of Pearsall and Warren's table displaying CPTSC presidents and host schools/annual meeting locations (see Table 2).

Table 2: CPTSC Presidents and Host Schools

Year	President	Host school
1997	Stephen A. Bernhardt	Austin (TX)*
1998	Stephen A. Bernhardt	University of Delaware‡
1999	Deborah C. Andrews	Santa Fe (NM)†
2000	Deborah C. Andrews	University of Wisconsin—Stout
2001	Stuart A. Selber	Carnegie Mellon University**
2002	Stuart A. Selber	Utah State University
2003	Bruce Maylath	Clarkson University
2004	Bruce Maylath	Purdue University
2005	Jeff Grabill	Texas Tech University
2006	Jeff Grabill	San Francisco State University

2007	Kelli Cargile Cook	East Carolina University
2008	Kelli Cargile Cook	University of Minnesota

- * The conference in Austin was held at a downtown hotel and hosted jointly by Austin Community College, Dell Computer Corporation, Texas A&M University, Texas Tech University, the University of Houston—Downtown, and the University of North Texas
- ‡ The conference was held at the College of Marine and Earth Studies' Hugh R. Sharp campus and research station in Lewes, Delaware, next to Delaware Bay.
- † The conference was held at the Plaza Resolana Conference Center in Santa Fe, New Mexico, with New Mexico Institute of Mining and Technology and New Mexico State University serving as co-hosts.
- ** The conference was held at the University Club of Pittsburgh across from the University of Pittsburgh campus.

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Jeffrey Grabill is a professor of Rhetoric and Professional Writing and Co-director of the Writing in Digital Environments (WIDE) Research Center at Michigan State University. His research focuses how to communicate with diverse audiences with respect to technical and scientific issues. He works at the intersection of professional and technical writing, rhetorical theory, and literacy theory and is interested in the knowledge work of citizens, users, workers, and students within organizational contexts.

Trajectories, Kairos, and Tulips

A Personal Reflection and Meditation on Programs in Rhetoric, Technical, Professional, and Scientific Communication

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Abstract. The purpose of this article is to reflect upon the emergence of programs in rhetoric, technical, professional, and scientific communication (RTPSC) during the past twenty years through a personal narrative of experiences from graduate study to the present. Using a method of inquiry based in rhetorical meditation, the article presents a story of these experiences at Purdue University, Miami University of Ohio, and Michigan Tech University and then moves outward toward national concerns and, finally, suggests a selected inventory of challenges the RTPSC field faces in the coming years.

Keywords. naming, *techné*, arts, meditation, academic programs, making, rhetoric, branding

My exigency for writing this article is threefold. First is the gracious invitation by the three editors of this inaugural journal to say something about programs in the field of rhetoric, technical, scientific, and professional communication (RTPSC). Second is my personal desire to write a reflective narrative of my experiences in this emerging, burgeoning field. Third is a related desire to use this opportunity to meditate upon my experiences and those of the many people I have had the opportunity to work with, to identify some of the greater questions we might confront as the programs in this broad-ranging field continue to emerge and develop their identities.

Before I begin this narrative journey, I say a few things about my approach, the “method” of meditation. As a consequence of its wide-ranging nature, meditation has many “whys,” “whats,” and “hows.” My intent is not to overview all of these methods—that would be a multivolume work in its own

right. Rather, my purpose is to mark a particular way of meditating grounded in the histories and theories of rhetoric, particularly rhetoric as a productive craft, as an art of invention and making. Specifically I use this method to craft some questions about RTPSC programs as a way to think through the trajectory of the field and how it might continue to trace its arc into the future.

A fruitful distinction between two types of thinking—meditative vs. calculative—is expressed by the German philosopher Martin Heidegger (1966) in “Memorial Address.” Heidegger distresses over what he calls the “flight from thinking,” which refers to “growing thoughtlessness [that] gnaws at the very marrow of man” (p. 45). He goes on to say that modern humans have become almost totally relegated to a way of thinking that he calls *calculative*. In short, calculative thinking for Heidegger is thinking that “serves specific purposes,” “counts on definite results,” “races from one prospect to the next,” and “never stops, never collects itself.” Most bluntly, he says that “calculative thinking is not meditative thinking, not thinking which contemplates the meaning which reigns in everything that is” (p. 46).

Meditative thinking, then, is quite distinct from calculative thinking, but he does not suggest that it is without a sense of its own powers and processes: “Meditative thinking does not just happen by itself anymore than does calculative thinking. At times it requires a greater effort. It demands more practice. It is in need of even more delicate care than any other genuine craft” (pp. 46–47). Even more pointedly, “Meditative thinking demands of us not to cling one-sidedly to a single idea, not to run down a one-track course of ideas. Meditative thinking demands of us that we engage ourselves with what at first sight does not go together at all” (p. 55).

As you can see, Heidegger (1966) provides some good starting points for thinking about thinking (and, indeed, much of his later scholarship fleshes out this concept in great detail). Nevertheless, this short introduction to these two types of thinking—calculative and meditative—can engage us in contemplating how we move from thought to thought in ways not only progressive (in the sense of forward movement) but also reflective and iterative. Yet his explanation leaves me somewhat wanting because it does not provide enough explanation of what the *action* of such thinking is. If we are to enact a meditative way of thinking, how do we actually practice what Heidegger himself calls a *craft*? For some assistance with this, I now turn to the monastics of the medieval period.

In *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 40–1200*, Mary Carruthers (1998), a professor of Rhetoric and English at NYU, provides a most substantial answer to this problem of turning meditation from an internal thinking process to a rhetorical craft (art) of thinking that

has tangible and useful outcomes. Again, a thorough rendering of her work is beyond my purposes here, but I want to summarize some of her key points to explain more concretely my reasons for using meditation as both a method and as a genre.

At the outset of her book, Carruthers (1998) most plainly states that “I have chosen to deal with meditation as a rhetorical process and product” (p. 2). She goes on to say that this choice is unusual in our present day as most (at least Western) approaches to studying meditative practices have been through the vein of psychological analysis and thus have relegated such investigations to an “over-concentration on the individual and personal” (p. 2). The approaches of the monastics, on the other hand, were based in a sense of rhetorical craft knowledge that placed the individual always within a “larger community, within which a single life was ‘perfected,’ ‘made complete,’ by acquiring a civic being and identity” (p. 2).

Further, she demonstrates that “Monastic rhetoric emphasized ‘invention,’ the cognitive procedures of traditional rhetoric. Rhetoric was thus practiced as primarily a craft of composition rather than one primarily of persuading others” (p. 3). She elaborates on this concept of invention through meditative craft in several ways, but most interesting for this discussion is that invention had two distinct meanings. First was what we usually think of as invention—as the art of creative thinking that allows us to make things anew. Second, and quite interestingly, she points out that another contemporary word derived from the Latin *inventio* is “inventory” (p. 11).

Centering her discussion on the rhetorical concepts of memory, as well as invention, Carruthers makes the point that inventory did not just mean a collection of thoughts or objects, but it also meant an ordered collection:

Inventories must have an order. Inventoried materials are counted and placed in locations within an overall structure which allows any item to be retrieved easily and at once. This last requirement also excludes collections that are too cumbersome or too unparticular to be useful. (p. 11)

In addition, this meditative craft was a “memory *architecture* [used] to make things, such as interpretations, as well as buildings and prayers” (p. 4). Thus the medieval craft of meditation was directly aimed at being useful.

Finally, meditative craft, as I alluded earlier, was integrally linked with a sense of civic activity, communal knowledge, and ethics. In ancient Greek culture, the making of things was not separated from the culture within which they were made. Mass production and making things merely for consumption was not a concept the ancients would understand or practice. The same

is true of the monastics. The things made through meditation were part of their civic fabric, whether as “citizens of the City of God” (p. 18) or as artisans creating artifacts (discursive or material) that benefited the life of a community through offerings that combined both “beauty and benefit. . . in which *usefulness* is merged with *delight* in the service of an enriched social order” (p. 20).

I hope this excursion into a reflection of personal experiences in RTPSC through meditative method will prove to be, literally, useful. To the end of usefulness, in what follows I use two particular aspects of the method of mediation. The primary aspect is the concept of contemplative thought as a way to work against the calculative grain. Thus what I present is more essay than report or analysis. Put more concretely, I want to explore some alternative ways of thinking through issues that result in questions; with hope, such questions ultimately bring forth better questions and can focus attention on key matters in RTPSC through different lenses. In addition, I draw upon the concept of “invention as inventory” to compile these questions into some semblance of order that can be further contemplated and, potentially, stored in collective memory for further creative use by RTPSC professionals, especially those who serve as stewards of the academic realm of the profession. Now, on to the main point of this article: meditating upon the linked trajectories of one person with the trajectories of RTPSC.

I often characterize my journey into RTPSC in two ways: as “accidental” and as “fortunate.” The beginning point was both relatively unplanned and, at the same time, *kairotic* (something that reflects the parallel trajectories of RTPSC—something I will refer to throughout this article). I came to graduate study in my thirties as someone who had left college during the turbulent Vietnam Era when many young college students felt as though the academy was not providing us with a realistic way “into life.” That is, there was little apparent connection between what we were learning in college and what we thought we might actually do with all of this new-found knowledge. At least that was my excuse. I remember saying at one point, “I want to learn to work with my hands. I feel that I don’t know how to make anything.” This simple statement has stayed with me in ways that I could never have imagined then. The arts of making have now become a center of my thinking and scholarship.

So I journeyed into what RTPSC often refers to as the “nonacademic world” where I was a fledgling carpenter, a roofer, a laborer, a gas station attendant and manager, an organic dairy farmer, and other jobs that I can hardly remember. Ten years, and several children later, I had been laid off

so many times due to the economic roller coaster of those postwar years that I decided to return to finish my undergraduate degree. I did so at the University of Houston—Victoria where I received a BA in Humanities in 1985. By accident, I had a wonderful advisor who knew I wanted to pursue further study in the humanistic arena, but he also knew that the traditional entrance into the field through literature was problematic, especially for someone who had a family. It was no secret then, and it has become even more painfully evident over the intervening years, that advanced degrees in literary study hold tenuous promise for future employment. In fact, he had also been through the bleak prospects for tenure-track literature jobs at that time. Thus he imparted his wisdom about this situation to me by telling me of a new field called Rhetoric and Composition and explaining that his alma mater, Purdue, had started a graduate program in this new area of study. He knew I was interested not only in studying “texts” but also in studying writing. This all made sense to me so, I applied to Purdue and went there on a graduate assistantship the following fall.

At Purdue I matriculated into the master’s program in Rhetoric and Composition and my journey began to turn from accidental to fortunate. During the fall of 1985, I knew little about the field, but through the rigorous and well-designed structure of the program, I quickly began to understand that we were all about the teaching and scholarly study of *writing*, broadly construed. Then, in my second year, I was given the opportunity to teach a course that looked interesting to me due to my workplace experiences: technical writing. Suddenly (or it seems in retrospect to have been sudden), I saw how I could teach about and even make things myself that were useful. Audience, user, context, purpose, social application, problem-solving, and a variety of other descriptors associated with technical writing (especially via rhetorical history and theory) made perfect sense. So much so that by 1990, I was ready to venture into the academic arena as a job candidate.

In August of 1990, I began a position as assistant professor at Miami–Ohio. I couldn’t have been more pleased with Miami’s stellar master’s program in Technical and Scientific Communication that had, in many ways, helped set the stage for such programs nationwide. The program began in 1983 when only five other similar programs existed in the country. There was also a bachelor’s program, but it was undergoing revision and had been suspended pending an evaluation and redesign. Thus I was immediately launched into the work of preparing graduate students and designing undergraduate curricula somewhat similar to my Purdue experience, but quite different as well.

The Miami–Ohio Technical and Scientific Communication (MTSC) master’s degree program, for instance, focused almost solely on preparation for en-

trance into the nonacademic workplace. The courses taught everything from genres and project management to document design, rhetoric theory, and electronic discourse appropriate for use in the nonacademic sphere, among many other things. The revised undergraduate program took its reflection from the master's program and also set a course for students to pursue workplace positions. The graduate program, however, grew out of composition studies with a specific interest in expressive discourse. This focus changed to some degree with the hiring of faculty more based in rhetorical studies and RTPSC and, eventually, a professional communication concentration in the PhD program evolved (through the commitment in large part of some dedicated graduate students) that prepared students for academic work in the profession.

In 1999, another kairotic moment arrived as I was invited to apply for the chair of Humanities at Michigan Technological University (MTU). After a long search process, followed by much personal introspection, I moved to Michigan Tech and entered yet another realm of RTPSC. In brief, the MTU programs were a hybrid of my experiences at Purdue and Miami–Ohio in that the RTPSC elements of this interdisciplinary department prepares undergraduate students for the nonacademic workplace, and the graduate program prepares students for both the academic and nonacademic roles.

This hybrid model had worked well for several years, and at first, I saw few problems with just continuing in this same vein of student preparation. Suddenly, however, along with many other state-assisted institutions, MTU experienced significant budget reductions during the first half of the present decade. The result was that there were losses of some faculty lines across the university (mostly due to attrition through retirements) accompanied by a reduced ability to hire new faculty as the lines were “eaten” to some extent through the cuts. We were fortunate regarding RTPSC endeavors at MTU, however, because a significant number of faculty associated in one way or another with RTPSC. We were less affected by such budgetary turmoil as some other programs across the country that had even fewer faculty in RTPSC.

Nevertheless, we, too, had to regroup, and one outcome of this process was to refocus our goals for students. The undergraduate program retained the same focus of preparing students primarily for nonacademic work. At the master's level, however, the program's attention focused more fully on preparation for the academic world, preparing students to become community college faculty or to go on to doctoral study. One lesson learned during this period was what I refer to as the “fragility” of RTPSC programs (something I will return to later). In my experience at all three institutions, the “fragility factor” is always lurking in the doorway.

Interlude: Inventing an Inventory of RTPSC Program Challenges and Opportunities

I have presented a summary of my lived experience in the RTPSC profession to provide a context and background for what is to come in this article—the beginning of an inventory (albeit quite incomplete) of what many of us confront when designing, implementing, and maintaining academic programs. Thus the goal of this excursion to this point has been to move toward possible *ends* for RTPSC programs, or what we often refer to in rhetoric as the *telos* of a given problem. In one sense, the *telos* of program development is to create a product: the tangible outcome of our making. However, the *telos* of any making is more than the product: it also must attend to the *use(s)* of that product. Some of these uses are apparent from the beginning. For instance, we might create a curriculum that produces majors in RTPSC for an undergraduate or graduate program. A conundrum of any human making, however, is that uses are often not apparent, not planned. They could be subtle and ultimately surprising; sometimes outcomes are serendipitous, sometimes not so. In what follows, I pose several questions that have grown out of my experience and experiences of others in the field. This product, this preliminary inventory of questions, considers the products of our making, but also places a critical eye on the uses to which these products will be put in the future.

What are Some Challenges of Creating Coherent, Well-designed Programs?

We face interesting and unique problems in RTPSC program design in comparison with the more traditional disciplines that make up the academy. Chief among these problems is that the students who enter programs in RTPSC, either as undergraduate or graduate students, likely have not acquired a thorough background in the field. That is, it is rare for students at the undergraduate level to know what they will be expected to do in this profession. At the graduate level, it is still the case that their undergraduate backgrounds come from a wide variety of disciplines (literature, creative writing, business, the sciences, engineering) that demonstrate their abilities to be strong students in content areas relevant to RTPSC; yet, they will not have had a thorough grounding in the specifics of RTPSC. In most other disciplines, students come to graduate study with a bachelor's degree in that specific discipline. Thus the question for RTPSC programs is, How do we bring students up to speed so that they can pursue a graduate degree in a reasonable period of time?

One answer to this question is that we must provide fundamental knowledge of the theories and practices of the profession of RTPSC. At

the undergraduate level this problem is probably less pressing because we are expected to prepare students for a profession with the assumption that they will have little background in RTPSC. Thus most undergraduate programs are of the professional school ilk. Put simply, the expectation is that we will prepare students for the practicalities of becoming RTPSC practitioners, usually in the nonacademic world. Even here, though, we have significant challenges to address. Some programs prepare students for a variety of professional options, while others are more specialized. For example, concentration areas in science, technology, or business enable students to target their professional goals. However, not all programs can be so specialized due to economic, demographic, institutional, or geographical limitations.

Further, we have another dilemma at the undergraduate level: What about students who want to pursue a graduate degree that is not of the professional, nonacademic type? Clearly these students must be grounded in particulars of the professional type of program because this grounding is part and parcel of what RTPSC programs are required to provide. Yet there is only so much time and money in both institutional and student pockets to provide the more theoretical and historical background that future graduate students might be expected to possess if they are inclined to seek an academic career.

Thus the problem of preparing nonacademic practitioners or academic professional sets up an interesting binary. As with any binary, this dual problem can provide opportunities that can define more succinctly what we are as a profession. Maybe we don't need to prepare students for one "world" or another. Possibly we can prepare students for the potential to go in either direction (or both), thus giving them choices that might not be possible in more traditional disciplines. As such, maybe RTPSC can be defined as an example of a profession that crosses not only disciplinary boundaries but also professional career boundaries. However, at least one more challenge arises. If we are going to prepare students for the academic career path, how can we conjoin our professionally oriented programs that prepare students for the workplace with the theoretical, methodological, and historical knowledge-base that an academic career demands? Are there time and resources to accomplish this?

Has RTPSC Become Governed by Digital Technology?

Historically, RTPSC has been intimately associated with technology, broadly construed. Such a linkage makes the field able to locate its scholarship in many varied places—the study of handbooks, instructional documents,

business memos, proposals and reports, and virtually any text that links making and doing with human existence. Technology offers a soil rich with things to investigate and learn from that many fields could envy. During the past couple of decades, however, the impetus of programs in RTPSC has been to collapse technology to one type of technology that we dub *digital*. Digital now appears on program mastheads, in concentration areas of student degree plans, and in other various places of the educational apparatus. This technological specificity is a good thing in some ways because it does accurately describe some of what we do: work with and through digital technologies.

At the same time, I ask, are we thinking through the implications for students and programs? Are we, as one scholar of media and culture suggests, trading in tulips (Sconce, 2003)? In an illuminating chapter, Jeffrey Sconce makes a telling analogy between the current digital phenomenon and the tulip mania that occurred in seventeenth century northern Europe. He tells the story of how the Dutch and Germans became so enamored of the Turkish floral import that it took on value far beyond its original. People traded even single tulips for acres of land, eventually making tulips a major commodity on the Dutch stock market. In the end, the demand for tulips finally fell and the price of tulips never rose again.

This analogy is a good one, but tulips are not exactly analogous to “the digital.” I imagine that digital technology will continue to rise in demand and currency across the globe. However, in terms of RTPSC programs, the analogy does take on a revealing hue. That is, it is not so much a concern to me that we invest in the digital, but rather how large that investment becomes, and more importantly whether that investment might erase the larger context of all technology, all human making, as the focus of scholarship, practice, and teaching in the RTPSC profession. Thus it is not the digital tulips we might lose; rather, it is the larger questions concerning technology that might vanish. RTPSC has much to offer in the debates about technology, writ large. Such would be a great loss to RTPSC and other disciplines. To address this potential problem, I wish to think meditatively on the issues involved, as Heidegger (1966) suggests, and not fall prey to mere calculative thinking that seeks answers before the good questions are even formed.

How/Why are RTPSC Programs Fragile?

There are many avenues through which to pursue this question, but I will constrain myself to two of those: a) the problem of managing scarce resources and b) the struggle to develop intellectual identities for the

field and its academic programs. In terms of the problem of dwindling resources, especially at public institutions, if a program has the support of its institution at high levels of administration, then there is a good chance of preparing a given program for strong growth and ongoing assistance. If, however, a RTPSC program is situated within a department or college where traditional disciplines have significant numbers of tenured faculty lines and the resources are locked up in these lines, then it can be quite difficult to procure the necessary permanent faculty support to sustain those programs. For example, many RTPSC programs are located in English departments where it can be difficult to influence the numbers in terms of hiring priorities and program offerings. Some RTPSC programs have even moved out of these large departments and blazed their own trail. This is a dicey situation, however, as the support for new departments may take a turn for the worse if more budget reductions come along or if priorities change due to new deans, provosts, or presidents. Further, there are many RTPSC programs that, whether they remain as part of a larger department or split off, are managed by small numbers of dedicated faculty. The demand to grow these programs becomes intense; without adequate support, these RTPSC faculty assume heavy teaching and administrative loads, thus leading to the second issue to ponder: the intellectual work of the RTPSC profession.

In addition to material and human resources, we also have the “non-material” problem of making our intellectual identities visible. RTPSC prides itself in being variously termed an *inter- trans- multi- integrative field*. This terminology is one of its strengths and, at the same time a potential weakness, especially when it comes to defining the intellectual sphere of the profession. Put more concretely, many disciplines now tout themselves as being interdisciplinary (or one of the other descriptors mentioned previously). My intent here is not to survey the whole problem of “being interdisciplinary”—that discussion warrants a much more involved interrogation at a later time. Instead, I will merely state that “being interdisciplinary” implies “being disciplinary.” That is, when disciplines come together to do integrative work, they bring with them recognition of their intellectual core—the disciplinary knowledge that signifies their identity. On a philosophical level, this coming together of disparate disciplinary identities may appear to be a small problem. After all, RTPSC works in interdisciplinary spaces by virtue of a long history of collaborating with the sciences and engineering as well as other disciplines. Despite this history, however, I am not sure that our intellectual space is visible to these traditional disciplines. Most pointedly, we still suffer from the same image that composition stud-

ies does of being a service object, of having little agency, of owning little disciplinary knowledge.

A most telling example of this invisibility is the inability of RTPSC scholars, with some rare exceptions, to qualify as Principal Investigators on National Science Foundation (NSF) or National Institutes of Health (NIH) grants. RTPSC is simply not on the list of professions allowed to steer these large grants. Yes, we do take part in them, but the primary resources for these grants are administered by the traditional science and engineering departments, resulting in most of the prestige and profits of these funding agencies going to the traditional disciplines. Putting NSF and NIH aside, it is also the case that we are officially not listed as being viable for external funding through the National Endowment for the Humanities (NEH). This lack of prestige and visibility lends to our fragility because we are rarely seen by our home institutions as significant “players” in a world where external funding is becoming more and more the object of concern in higher education.

There are no simple or immediate solutions to these problems of fragility. Nevertheless, there are pathways to explore. For instance, we can work like the Consortium of Rhetoric and Composition Programs (through the College Conference in Composition and Communication) to create a category for RTPSC in the National Research Council (NRC) taxonomy. This taxonomy makes disciplines more visible and perhaps more credible in the national scene. Such an effort might also put the various organizations that support RTPSC nationally into a working coalition (something that has been attempted in the past, but certainly needs more attention). For instance, the Council of Programs in Technical and Scientific Communication (CPTSC), the Association of Teachers of Technical Writing (ATTW) and the Society for Technical Communication (STC) had several officers meet in the early 2000s to make connections between these (and other) organizations that advocate for RTPSC. As far as I know, these efforts have bogged down and could be resurrected with the aim of making RTPSC more visible to other audiences. In addition, on the home institution level, we can work to garner endowments to support our programs. This is a difficult task, but one worth the effort if even only modest gains are made in guarding against “the fragility factor.”

Is RTPSC a Liberal Art?

In this concluding portion, I address an enigma in the RTPSC profession, one that confronts and complicates the issues of fragility and program development addressed throughout this essay. Beginning with Carolyn

R. Miller's landmark essay (1979), RTPSC has for several decades debated whether the profession is humanistic. This debate will undoubtedly continue because it does place on the table a central problem that should occupy the thinking of any profession that straddles more than one disciplinary space—the problem of identity. If we do call RTPSC humanistic, then what does that mean? Certainly in part it means that we are concerned about the classic question: What does it mean to be human? It also focuses RTPSC on issues of communication, language, ethics, and a plethora of other questions posed across the millennia about the nature of the human being.

For RTPSC programs, however, the nomen *humanistic* may be too ill-defined. As a former chair of a humanities department—one that includes not only RTPSC but also cultural studies, modern languages, philosophy, literature and composition studies, among others—I have often been asked by those outside the department, “So what do you do in a humanities department?” Although those of us in this department have ready answers to this question, there often tends to be a subtle dissatisfaction on the part of the hearers. Put another way, I believe people outside the humanities want to have a more specific sense of what we are and do (beyond teaching the service courses that support the sciences and engineering).

To this conundrum I pose one final question: Should we think through RTPSC as a liberal art? Certainly this designation might not get us on the masthead of NSF, but it might further provide at least a starting point to defining some of RTPSC's identity. First, however, is to clarify what is meant by liberal arts. In the modern era (especially since the late eighteenth century), *liberal arts* has most commonly come to mean those sites of learning where the end is in the knowledge of the reader/hearer of the object being studied. Thus the liberal arts are perceived as having little use in modern education. In this view of the liberal arts, learned subjects are made who bring to their lives a richer sense of being human. This, of course, is a keystone to the humanities and should not be abandoned.

This concept of the learned individual who has come to *how to know* but not necessarily *how to make*, however, is a problem for RTPSC because students and professionals in this profession must act and do and make. Returning to the premodern conception of the liberal arts may provide some answer to this conundrum. Western classical philosophers and rhetoricians viewed the liberal arts as two traditions. One is reflected in the modern sense described previously where the human subject comes to knowledge for the sake of knowledge. In this sense of liberal arts, the implication was that the *good man* created from such education would carry that knowledge to the

active life. However, *how to make* or *craft* based on this knowledge was left to experience, not to overt education in how to make things from knowledge.

The second sense of liberal arts, on the other hand, was founded on the arts of making, in productive knowledge, as exemplified through *techne*. *Techne* is a theory of knowledge—the knowledge of making—but *techne* also describes the processes and actions of making. Therefore, the liberal arts defined through *techne* involved the human subject in the crafting of things either material or discursive (as in rhetoric).

Clearly this second sense of liberal arts, one that involves making and using, has been abandoned in our present day educational systems, or if it does exist, then it is invisible. Further, when it does exist, then it is relegated to the level of “mere skill” or some other synonym for nonepistemic knowledge based on rote learning. It might behoove us in RTPSC to consider the possibilities for the field to be thought through as a liberal art that engenders both approaches to learning: one that engenders the pursuit of knowledge for its own sake *and* one that engenders knowledge of production and, ultimately, of use. Such a linkage might to some degree address the problems of academic and nonacademic professional goals of students and curricula that support those goals. Additionally, it could open up scholarly venues for technology writ large, thus branching RTPSC out beyond the mono-technological impetus of *the digital* phenomenon.

Certainly my presentation of RTPSC as a liberal art is but a preliminary sketch that needs to be brought through more thinking, more meditating, and more discussion. To that end, I leave this essay as an offering for anyone interested in entering the discussion. The trajectory of RTPSC is but one of many human makings that might benefit from all this conjecture.

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Growth and Community

A Few Thoughts on the Organics of Professional Communication

Dale Sullivan

North Dakota State University

This keynote was presented at the 2007 annual meeting at Eastern Carolina University in Greenville, North Carolina, on October 11, 2007. The meeting's theme for that year was "Sustainable Growth in Technical & Scientific Communication: Principles, Personal, and Programmatic."

It is a treat to be in Greenville, North Carolina, to see the beauty of the region, to hear local accents, to taste local foods. I want to thank Molly and Kathryn for inviting me to share my thoughts on scientific and technical communication program administration. This is a great honor for me, coming as it does 24 years after I first attended CPTSC in Lincoln, Nebraska (in 1983). At that time, I had had been teaching technical communication at a two-year college in Salina, Kansas, for two years and had dreams of developing an associate's degree in technical writing. That was my first encounter with the wonderfully supportive people in this organization. Down through the years, I have never found a more supporting and helpful professional organization despite my interests in a wide range of rhetorical studies represented by groups as diverse as the American Association of the Rhetoric of Science and Technology (AARST), the Rhetoric Society of America (RSA), the Society of Biblical Literature (SBL), the Conference on College Composition and Communication (CCCC), and the National Communication Association (NCA).

Let me say before I proceed that this paper is the result of many days' musings during my morning walks to school and an informal discussion at lunch one day a couple weeks ago, when Andrew Mara, Bruce Maylath, and I lingered in our department's seminar room after others had excused themselves to teach class or attend meetings. I shared an undeveloped

early outline of this talk, and they added much to the shaping of this paper. As I continued to work on the paper, I often thought of Tom Huckin's keynote address in 2002, when CPTSC met in Logan, Utah. In that talk, Tom drew our attention to rapidly expanding globalism and to our sociopolitical responsibilities. He focused on our "lack of attention to broader sociopolitical issues." He said, and I quote, "Social philosophers such as Andrew Feenberg and Langdon Winner have long argued that technology is not an autonomous force but invariably has sociopolitical underpinnings and sociopolitical consequences. Technical communication should strive to take this fact into account." My talk this evening returns to Tom's call for sociopolitical action, but I focus on the local rather than on the global. I believe what I have to say this evening has programmatic, pedagogical, and professional implications.

The first word in the conference theme this year—sustainable—has emerged as my theme. As I thought about this word, two narratives came to mind: the narrative of rhetoric programs in twentieth-century America and the narrative of the sustainable agriculture movement.

Consider rhetoric programs in the twentieth-century. In the early twentieth-century, shortly after speech teachers walked out of the MLA conference in 1914, several rhetoric scholars—Hoyt Hudson among them—joined the faculty at Cornell. As Edward P. J. Corbett (1985) has documented, the Cornell School of Rhetoric became the major center for rhetorical studies in the United States, drawing students from all over the country and sending them back out. The students were dispersed like seeds to many places. As that generation of scholars retired, a new center for rhetorical studies emerged at the University of Wisconsin in Madison, when people like Edwin Black joined the faculty. Students from Madison and other programs later formed a new leading program in rhetoric at Northwestern as the program at Wisconsin withered; and now many leading rhetoricians (John Angus Campbell, Michael Leff) are being drawn to the rhetoric program at Memphis. Rhetoric, it seems, sustains itself by moving. It survives today as an annual sprung up from seeds spread by the wind.

Is scientific and technical communication a parallel case or not? Is our field an annual or a perennial? Can we expect scientific and technical communication programs to survive longer than a single generation in a particular location?

The answer to these questions should influence our planning as program administrators. If scientific and technical communication programs are annuals, destined to grow rapidly, disperse seeds, and die; then we

should design our local programs so that they can draw as much nourishment from their local and temporal situations as possible without being overly concerned about what the next generation at our institutions will look like. Our commitment is to the seeds, not to our rootedness in the soil that supports us temporarily. On the other hand, if our programs are perennials, then we should design programs with the health of the local soil in mind.

Wes Jackson, founder of the Land Institute outside Salina, Kansas, has spent many years searching for ways to combine the robustness of an annual with the stability of a perennial. Annuals draw nutrients from the soil, investing their energy in seed production; perennials draw nutrients from the soil, but invest their energy in building root structures that protect and enrich the soil. The last time I heard an update on his project, which admittedly was several years ago, he was optimistic about buffalo grass—a short, hearty, and matted grass, almost sage in color—that covered much of the high plains before the sodbusters came in. It was no small task to break the sod where buffalo grass had created dense and deep root systems. This grass produces a seed head that rises only a few inches above the matted grass, but that seed head (or burr as it is called) is unusually full for a perennial. Somehow, buffalo grass combines the characteristics of perennials and annuals, investing energy in its root system and in its seed production.

Although my talk this evening focuses on root systems of perennials, I believe scientific and technical communication programs are perennials, or at least have the potential to be perennials, that not only build strong root systems, but also, like buffalo grass, produce abundant seeds. So, please, do not think I am against seed production or the strategies that have in the past been effective in producing abundant seed growth.

One way to assure that our genes are passed on is to adopt the annual model, concentrating on seed production, taking for granted that programs in scientific and technical communication will follow the pattern of rhetoric. If programs are destined to rise and fall in a generation or two, then we should concentrate on building conditions that will allow our faculty to publish profusely and concentrate on replicating themselves in graduate students who, by their growing numbers, will guarantee that our specialization will continue. It seems to me that, if STC programs are annuals, they would be well served to concentrate on building global connections, cultivating specializations in emerging technologies, and developing instrumental knowledge. The global is infinitely transferable, specialization guarantees a niche in the ecology of academic disciplines, and instrumental knowledge is adaptable to a myriad of work sites in the world of prac-

titioners. All of these efforts are only marginally concerned with the local environment: they draw what they need from it, but they concentrate on the transferable and specialized.

Under the perennial model, conversely, we should build conditions that encourage our faculty to become involved locally. In contrast to the annual paradigm that emphasizes globalization, specialization, and instrumentalism, the perennial paradigm emphasizes the local, the diverse, and the political.

In the remainder of this paper, I will explore what tactical scientific and technical communication might look like if we were to concentrate on the local, the diverse, and the political. I will do this by drawing an analogy between our field and sustainable agriculture.

When I left Michigan Tech nearly six years ago to go to the University of Minnesota, I decided that I needed to study something local, to turn my research toward topics relevant to my new position as head of the rhetoric department in the College of Agriculture, Food, and Environmental Studies. I was naïve. Little did I know that agriculture and food policy has become one of the most hotly contested battlefields in national and international politics. During the last five years—I left the University of Minnesota and moved to North Dakota State University four years ago—my focus on food and agriculture issues as they are played out in the upper Midwest has led me to become much more deeply informed about the struggles of the sustainable agriculture movement as local, usually small, farmers struggle to keep their crops free from genetic and chemical contamination, as they seek ways to build local food networks, as they hand on ancient practices of seed saving and diversity on the farm. From this local community of activists, who fight to survive against seemingly insurmountable obstacles thrown up by multinational companies who have taken control of distribution networks and research in our land grant universities, I have learned to appreciate the importance of the local, of the diverse, of the political.

Let us consider what it means to focus on the local. I first became sensitized to a focus on the local while at Michigan Tech. There I watched Craig Waddell get involved in local issues associated with water quality in the Great Lakes. There I watched Elizabeth Flynn's late husband, John, engage in pitched rhetorical battle with the public relations spokesperson for James River Paper Corporation, a corporation that wanted to build a paper mill on the shores of Lake Superior. There I began to see books like Jackson's *Becoming Native to This Place*, assigned by Jennifer Slack, in the bookstore and in students' hands.

Watching these people become engaged in the local, and beginning to read some of the books they assigned, I gradually came to understand

the importance of being committed to the local. Consider some of what critics of global industrialization have said. In *Becoming Native to This Place*, Jackson (1996) claims that the global village has turned out to be more of a playground than a village. He laments the decline of the oral tradition, the face-to-face engagement that comes from people being committed to one another in local settings. Because the global village/playground has displaced local engagement, we hardly notice that communities are being destroyed (p. 88). Stephen Doheny-Farina (1996) makes a similar argument about virtual communities in *The Wired Neighborhood*. He ends the book with these words: "The net... is a seductive electronic specter. Take part in it not to connect to the world but to connect to your city, your town, your neighborhood" (p. 188). And Gary Snyder (2004) says, "A place on earth is a mosaic within larger mosaics—the land is all small places" (p. 30).

These calls to return to the local have their roots in reaction against the industrial revolution. As Langdon Winner (1986) points out, Thomas Carlyle's "Signs of the Times" expressed alarm at the disruptions caused by industrialization to traditional life as early as 1829 (p. 67). William Morris and others in the arts and crafts movement continued the call for people to return to the local, to find alternative means of production outside the industrialized world. These calls for a return to the local, similar to the back-to-land movement of the early 1970s and reflected in the *Whole Earth Catalogue*, seem to become more abundant as spaces for alternative livelihoods are destroyed by the expanding global economy. Gustavo A. Terán (2005) says that single, universal solutions [here I read in "industrialized globalization"] foreclose "the possibility of finding alternative paths to the good life." All such universal solutions, he says, cannot avoid becoming "colonizing events" (p. 71). As an alternative to education designed to prepare students to enter the global economy, Terán advocates "vernacular education," which consists of passing on intergenerational knowledge through storytelling, permitting local communities to construct their own grassroots narrative and to determine what knowledge and practice they want to assimilate into their culture.

Although these calls to resist the dominant economic and industrial structure may seem idealistic, there is still opportunity to act. As the distributivist, G. K. Chesterton (2007) once put it, "I have finally decided to approach the social solution in this fashion: to point out first that the monopolist momentum is not irresistible; that even here and now much could be done to modify it, much by anybody, almost everything by everybody."

Just what that "much by anybody" or that "everything by everybody" might turn out to be depends on our localities. I can speak only of what I

see going on in my community. Fargo–Moorhead is a community with a rapidly growing population of approximately 180,000 people. This region was originally settled largely by Scandinavians, especially Norwegians. As we all know from Garrison Keilor's *Prairie Home Companion*, these people are part of an agrarian culture, mostly Lutheran and Catholic. Fargo–Moorhead is home to the two largest Lutheran churches in the world and dozens of smaller ones. Contrary to stereotypes, these Lutherans are not entirely self-absorbed, hot-dish enthusiasts. Lutheran Social Services has a regional headquarters in the city, and they sponsor refugees regularly, so that the metropolitan area has become home to people from around the world. Together with North Dakota State University's growing international student population, these displaced people are in need of literacy education and social services as they make Fargo–Moorhead their home. Several literacy initiatives have sprung up in the area to help in the work, but these groups are not yet integrated into a coalition. Two of our faculty members in English, Amy Rupiper Taggart and Andrew Mara, are working with these literacy groups, hosting summits and initiating cooperative educational programs that connect NDSU students with local elementary schools and service agencies in an attempt to promote literacy and to build a coalition of literacy projects. These projects and the interaction that come about because of them are part of what it means to be local in Fargo, North Dakota, and Moorhead, Minnesota. These people may be transplants in our garden, but they are rapidly becoming native to this place.

Next, let us consider what it means to be diverse. Diversity is, of course, one of the god terms in contemporary society, usually associated with issues of race, culture, and gender. I would like to think about the word in other contexts for a moment. Consider our lawn in south Fargo. Our front yard has somehow flourished as a monoculture. Although we have never applied chemicals to it, the grass holds sway—there is no room for an alien culture to invade. There are no dandelions, no crabgrass, no pigweed. The backyard, on the other hand, is a riot of diversity. Once again we have resisted the temptation to use chemicals to eradicate difference. As a result, in this environment, dandelions rejoice in their display of color and profusion of seed heads, snow on the mountain invades unoccupied territory, clovers of various kinds show up in colonies of their own, and other unidentified plants shoulder their way in. The backyard's ragged appearance is a source of embarrassment to my wife and me as we sit in the Adirondack chairs sipping our evening refreshment until we remember to view it through the appropriate terministic screen. When we adopt the terms of monoculture and diversity, the contrast between the profusion

and difference in the backyard and the monoculture in the front yard is no longer a problem.

The problem of monoculture versus diversity manifests itself on a much larger and more serious scale in the world of agriculture. In *Dinner at the New Gene Cafe*, Bill Lambrecht (2001) documents the disastrous effects of the popularly touted *green revolution* in India, where high-input farming techniques typical of the United States were introduced in the 1960s, markedly increasing production but also eradicating volunteer plants (we call them weeds) that were a source of vitamin A. These plants once flourished in and around the fields and were part of the daily diet. The new system, although it produced more food, encumbered farmers with unmanageable debt. The results of the green revolution are a mixed bag: an abundance of food, increased vitamin-A-deficiency-induced blindness, rapidly increasing suicide rates among farmers.

In the United States, where the effects of scientific agriculture have been less noticeable, there have been nonetheless dramatic changes in crops, food, and local agrarian culture. The wide adoption of Roundup™-ready crops has led to the eradication of plant diversity. Between 70 and 85% of cropland supporting soybeans, corn, and cotton is sprayed with Roundup™, a herbicide that kills plants not engineered to resist it, thus reducing genetic diversity and destroying habitat-friendly plants like milkweed that are the mainstay of monarch butterflies. The drive toward monoculture, toward highly specialized plant varieties, has led to large profits for companies like Monsanto and to large corporate farms, but it also threatens to eradicate family and organic farms. These are only a few of the stories that demonstrate the dangers of monoculture. Time does not permit me to recount Michael Pollan's (2002) history of the apple as humans tamed its wildness at the cost of its genetic diversity, nor to remember the disaster of monoculture that produced the potato famine in Ireland, reducing its population by half in the mid-1800s.

What might it mean if we think of resisting the drive toward monoculture and of cultivating diversity in the context of program and professional development? First, I think it is necessary for us to recognize that our diversity is being weeded out as we attempt to market ourselves as specialists who can fit niches in the technological society. Our desire to guarantee that we and students will not be irrelevant, or worse yet, unemployable, has produced a preoccupation with adding value to the corporate world's bottom line, and we increasingly do that by fashioning ourselves as specialists in emerging technology and user experience of emerging technology. Recognizing these developments as both useful and threatening, we

can begin to put limits on just how far we go in that direction and cultivate other areas integral to scientific and technical communication as a discipline in the humanities. Corporate culture does not pay our graduates because they know the history of technical and scientific discourses, or because they understand philosophical dimensions of science and technology, or because they have a commitment to ethical and political action related to technical and scientific issues. This kind of knowledge seldom contributes to the bottom line, but as Winner (1986) argues, we should not constrict our arguments to the *topoi* employed by the employers: there is more to science and technology than mere efficiency and profit.

A second factor that erodes diversity is our desire to reproduce ourselves, both in the hires we make and in the students we teach. As a rhetorical critic, I find myself wanting to hire more rhetorical critics. We want to gather about us like-minded people instead of learning to appreciate methods and perspectives that differ from our own, but that enrich our students. How many times have we quickly dismissed the work of others simply because we do not understand it? The temptation is to call their work shallow or uninformed. In matters of hiring and in educating graduate students, it would seem that diversity is achieved through cultivating generalists and by respecting our colleagues' interests even when they seem strange or perhaps insubstantial to us.

A couple months ago, I found myself in a conversation with a winemaker. I asked whether or not the soil and climate of North Dakota permits the growing of quality grapes. She explained that they do as long as you start with a local plant for root stock. Local wild grapes are adapted to the soils and the climate, but they do not produce the kinds of grapes we make wine from. Instead, she said, we graft in branches from the grapes that produce wine. It seems to me that there are lessons about hiring in the story.

Placing emphasis on the local and on diversity will lead us to political and ethical engagement. It is impossible to concentrate on the local, to make a difference in our home polis, unless we are willing to engage in political activism. Likewise, it is impossible to engage in ethical political activism, if we retreat from oral culture and from face-to-face involvement. Abandoning the oral and the face of others by retreating to written discourse and computer-mediated communication produces alienation, suspicion, desensitization. Indeed, it is impossible to recognize the ethical path unless we engage in face-to-face encounters. Philosophers and theologians of ethics in the first half of the twentieth century—Martin Buber, Immanuel Levinas, Dietrich Bonhoeffer—taught us the need for this kind of encounter. As Dietrich Bonhoeffer (1996) put it, the ethical agent referred

to as “I” springs into being only in the presence of the face of the other (p. 51). Only by fully coming to recognize the humanity of others through face-to-face encounters are we able to respond to the situation ethically, to take political action responsibly. Only in the face of the other is responsibility, the ability to respond, possible.

Science and technology are perhaps the two strongest influences on our culture in the present world. The family, the church, the school, even the government are engaged in little more than interpreting changes brought about by science and technology and learning to adapt to these changes. As Winner (1986) demonstrates, the changes in these fields shape our culture, and yet, we do not engage in political deliberation about them. Decisions about science and technology are seldom public or political decisions. Most often decisions that change our culture indirectly through technical and scientific advancement are made in sequestered and private places: the laboratory, the research and development lab, the boardroom. We pride ourselves in being the people who shape the programs that teach scientific and technical communication. I would like to challenge us to widen our vision, to broaden our scope.

Michele de Certeau (1984) discusses the difference between strategic action of those who occupy territory and tactics of those subjected to that control. Through strategic action, the colonizers attempt to secure territory, protect boundaries, and establish order within the boundaries. Tactics are attempts used by those subjected to such authority to exploit opportunities diverting the system’s authority to their own ends.

We may occupy positions legitimized by strategic planning; that is, as teachers of technical communication, we occupy legitimized niches in the technological world. An important question remains unanswered for me: Do we occupy a position from which we can leverage tactical action? De Certeau (1984) describes the reaction of American indigenous people who accepted their subjection to Spanish colonization. Although they accepted colonization, these Indians, he says, “metamorphized the dominant order: they made it function in another register. They remained other within the system which they assimilated and which assimilated them externally. They diverted it without leaving it” (p. 32). These indigenous peoples represent tactical action of the colonized resisting strategic planning of the colonizers.

What might it mean for us to be tactical rather than strategic? In Fargo, we live atop 120 feet of the world’s richest soil, the lakebed of prehistoric Lake Agassiz. Large scale agriculture is a dominant economic force in the region, dividing the territory into privatized land, gradually driving small farmers out

of business and eradicating diversified, small farms. In their place, large commodity farmers plant mile after mile of monoculture crops, modified genetically to kill their own pests and to withstand applications of Roundup™. There remains no commons, no commonly shared land, except for a few urban spaces set aside by the municipality for community garden projects and a few state parks set aside for recreational activities. There, in such rich agricultural land, it is extremely difficult to buy food that has not been contracted, processed, and transported through the commodities market. Some people informally share an abundance of private gardens; a few months of the year a couple farmers' markets are open a few days a week, a couple CSAs (community supported agriculture) exist, but most people do not know about them and never stumble onto invitations to join one. Simultaneously, a community garden program exists, again on the margins of mainline consumer culture, and a few specialized small grocers exist—a small green market, a Vietnamese market, and an African market. A few organic producers within 30 miles of the city market their food products through websites or a newly formed local food buying group named "My Sister's Farm." The local chapter of the Dakota Resource Council is participating in a local foods initiative, seeking ways to politicize food issues. As an interested observer and somewhat active participant in these efforts, I have come to recognize that the grass roots efforts have great promise, but they need to become more fully aware of each other. They need to join forces, forming a coalition, so that they can more readily take advantages of opportunities for tactical action within the colonized space of food production and distribution. What role might a technical communicator play if he or she were to define technical communication as political action? What opportunities are there for articulating tactical efforts of these diverse groups?

I hope you agree with me that what is called for is face-to-face engagement in local issues rather than retreat to theory. In our field, we have long lived by a governing metaphor: We bridge the gap between levels of knowledge by translating and simplifying technical language. Jennifer Daryl Slack and her co-authors (2004) revised that metaphor, suggesting that the technical communicator's task is not to translate, but to articulate. To articulate is to seek new relationships among existing forces, to participate in negotiating meaning rather than in transferring meaning. Articulation, in short, is a species of political action.

In a globalized economy consisting of discrete territories controlled by monocultures, where diversity is rapidly being eradicated, we believe in the survival of the fittest. This twist on the Darwinian perspective seems to demand that we fill a niche in the global economy by becoming specialists

who add value to products, specialists who suppress their natural inclination toward the political so that they can be good citizens of corporate culture in the technological society. This appears to be an expedient course of action, especially when we consider that those in positions of authority, the “Guard-eners,” consider wildness a threat. Weeds, defined as anything not conforming to the monoculture, need to be eradicated.

In my introduction, I said that I believed my comments today about the local, the diverse, and the political have programmatic, pedagogical, and professional implications. I hope you will be willing to play the believing game with me, exploring in your conversations what tactical scientific and technical communication might mean as we integrate our programs with local cultures. Let me describe a heuristic, or perhaps an invitation, to explore these implications in your own localities. Create a table consisting of four rows and four columns. Down the left column, list the words local, diverse, and political/ethical in the second, third, and fourth fields. Across the top row, list program planning, pedagogy, and professional development in the second, third and fourth fields. You will then have nine blank fields, waiting for your input.

	Program Planning	Pedagogy	Professional Development
How might an emphasis on the local affect...			
How might an emphasis on diversity affect...			
How might an emphasis on the political/ethical affect...			

The task of integrating our programs with local cultures and thereby growing strong root systems that will sustain our programs beyond a single generation is not a single-season project. I am not foolish enough to believe that this table can be filled out in one evening, one weekend, or even in one or two years, but we can make a start.

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Profile of Professional Writing at Michigan State University

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Abstract. This article provides an institutional context and a program history for the Professional Writing undergraduate major at Michigan State University. A program profile, disciplinary strengths, faculty overview, and assessment issues are described.

Key Words. communication modalities; computer labs and facilities; critical, rhetorical, and technological literacies; professional writing; digital and technical writing; writing in communities and cultures; writing, editing, and publishing

The most important thing the PW curriculum has given me, beyond the technical and rhetorical lessons, is the vocabulary I developed that allows me to discuss my reasoning behind design choices in a clear and logical way.

Tyler Smeltekop, 2008 Professional Writing graduate

Professional writers can efficiently communicate both on-screen and in print through writing, design, and style, and have the ability to thoughtfully support their decisions and methods through clear and concise interpretations and explanations.

Marissa Hayes, 2008 Professional Writing graduate

The understanding that every audience has unique concerns and requires different methods to be efficiently communicated with are immensely important in today's postmodern global culture.

Ben Rubinstein, 2008 Professional Writing graduate

Michigan State University has a long history of an institutional commitment to writing with both first-year writing requirements and upper-level, in-the-disciplines writing requirements. Rather than survey MSU's long commitment to writing here, however, we focus on two institutional initiatives that, in part, set the stage for MSU's undergraduate program in Professional Writing.

Program History

Institutional Context

In 2004, then-Provost Lou Anna K. Simon launched a "Realizing the Vision" initiative with the goal of inviting key stakeholders to imagine the future of the liberal arts and sciences at Michigan State University. One of the task forces convened was a Writing Task Force, which produced a final report on enhancing MSU's writerly environment and fostering a writing-centered University.¹

In 2005, University President Lou Anna K. Simon launched a "Boldness by Design" initiative, and task forces were established to address key issues. In its final report, the Enhancing the Student Experience Task Force noted that advanced communication skills (both in writing and in speaking) were an absolutely crucial twenty-first century ability.

Later in the document, the task force recommended to the university community a broader and more expansive definition of literacy and offered a definition of writing as including "multimodal composing and [the] construction of messages that include (individually and in combination) all communication modalities (written, oral, visual, and temporal texts), many of which require familiarity and fluency with digital technologies."²

Program Overview

The Professional Writing undergraduate program at Michigan State University was developed during 2001–2003, launched in fall 2003, and matured in tandem with the Realizing the Vision and Boldness by Design initiatives, both of which heavily emphasized the importance of communication skills.

The Professional Writing program was initially developed to meet the then-Provost's desire to further enhance writing at the university. The English Department was invited to develop the program in initial discussions, but chose to instead continue its focus on literature, creative writing, and

¹ See https://www.msu.edu/~acadgov/documents/WTF_FinalReport2004.pdf.

² See http://boldnessbydesign.msu.edu/documents/BbDImpervative1_002.pdf.

film studies. At the time, first-year composition was offered in a long-in-existence, free-standing program (the department of American Thought and Language, primarily populated by faculty with PhDs in American Studies and History). The department serviced the university in providing courses to fulfill the its “Tier I” writing requirement—a four-credit-hour first-year composition course. American Thought and Language became the home for the imagined undergraduate writing program—an ideal, given the unit’s commitment to writing and emphasis on first-year composition. Soon the department’s name changed to Writing, Rhetoric, and American Cultures (WRAC), and a curriculum was developed and piloted, which we describe later, mapping its disciplinary articulations, and identifying program foci that lend shape to the undergraduate major.

Professional Writing is not a writing-across-the-curriculum or writing-in-the-disciplines endeavor; rather, it is a writing-*as*-curriculum degree program housed in MSU’s College of Arts & Letters, geared toward students interested in specializing in writing as an area of expertise. The major helps students develop advanced writing skills with emphasis on writing in digital environments; on writing for/in diverse disciplines, communities, and cultures; and on editing and publishing. The major prepares students for careers in technical writing, information development, Web authoring, grant and proposal writing, publications management, and editing and publishing.

Within the degree program, in their internship experiences, and through co-curricular experiences, Professional Writing students develop skills and sophistication in the following areas:

- Understanding how different contexts—related, for instance, to delivery mode, document type and genre, audience, and purpose—shape a writing-related task;
- Writing to and for various audiences—cultural, professional, organizational—in effective and persuasive ways;
- Writing creatively, with panache and flair; informatively, with clarity, conciseness, and comprehensibility; persuasively, with detail, description, and supporting evidence;
- Conveying complex information in informative, understandable ways with both words and images;
- Editing across project types and levels of edit (e.g., peer review, content editing, copyediting);
- Mapping, coordinating, and managing large-scale projects; and

- Exploring and mastering software to produce a range of documents.

The Professional Writing program engages students in exploring, experimenting with, and enjoying forms of communication, different types of technologies, and the ability to interact and work with other students, faculty, and business and community mentors in internships and collaborative projects. The program is designed to be flexible to accommodate changes in approaches to professional and digital writing and changes in technology in the coming years. The program includes the following career-related and educational objectives:

- Preparing students for successful careers in technical/professional writing;
- Providing students with theoretical and practical (application of knowledge and production-related) experience in professional writing;
- Encouraging students to understand the cultural and rhetorical dimensions of all communicative acts; and
- Supporting students in making significant contributions to the college, university, and community prior to their formal entry into the workforce.

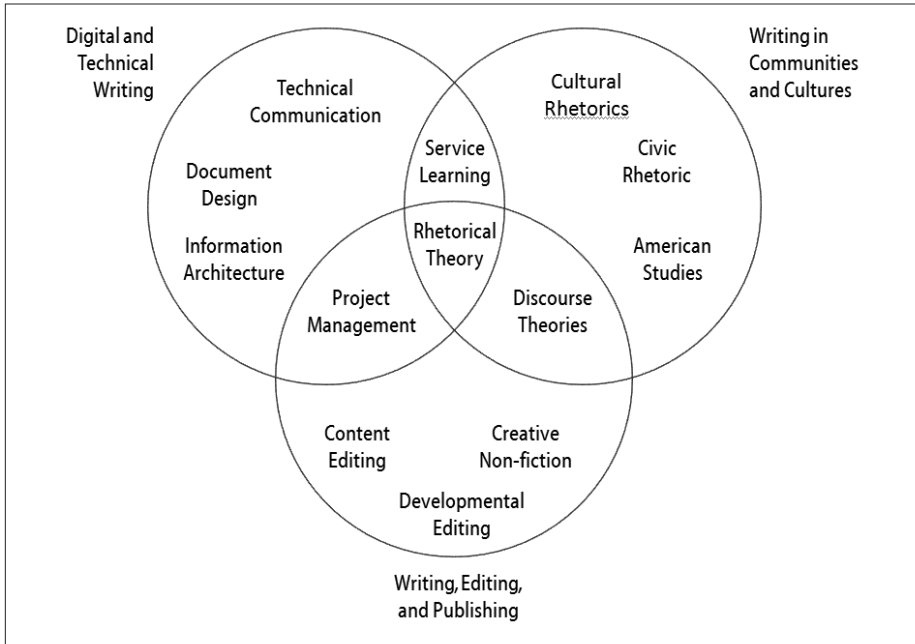
Disciplinary Articulations and Program Foci

The Professional Writing program awards bachelor's of arts degrees to students who focus on one of three emphasis areas (or "tracks") in the undergraduate major:

- Digital and Technical Writing
- Writing in Communities and Cultures
- Writing, Editing, and Publishing

Figure 1 graphically represents the core fields of study, disciplines, and major themes drawn upon within the tracks in the major. Figure 1, however, should be imagined as a movable, fluid representation. Depending on how students focus their study, what classes they take, and where they intern or volunteer, the rings can be adjusted (for instance, students interested in doing writing and public relations work for a nonprofit might be in the Writing in Communities and Cultures track, and their rings might be rotated to encompass document design).

Figure 1: Map of Professional Writing



Spanning and encompassing the disciplinary foci mapped in Figure 1 are three emphases that shape our entire curriculum: critical, rhetorical, and technological (see Table 1; see also, Selber, 2007; Selfe, 2005).

Curricular Design

Professional Writing students solve problems. The tools they use are, perhaps, not often considered problem-solving tools—words, images, texts, and interfaces—but in the hands of Professional Writing students, these become building blocks for addressing real-world problems.

Bill Hart-Davidson, Professional Writing professor

To establish a common background, all Professional Writing majors take four core courses:

- WRA 202: Introduction to Professional Writing
- WRA 210: Introduction to Web Authoring
- WRA 260: Rhetoric, Persuasion, and Culture
- WRA 360: Visual Rhetoric for Professional Writers

As previously mentioned and mapped in Figure 1, the three tracks in the undergraduate major, each have a required set of courses:

Table 1: Three Key Emphases

Critical	Rhetorical	Technological
<p>We engage students not only in the technical (how-to) aspects of writerly work but also with the critical aspects of that work.</p> <p>We promote the understanding of writing as a complex, socially situated, and political act through which humans make meaning.</p> <p>We encourage students to recognize that composing takes place within, is shaped by, and serves to shape social, educational, and political contexts.</p>	<p>We address the rhetorical complications and implications of all texts to enhance the critical dimensions of students' thinking and writing.</p> <p>We recognize that the rhetorical dimensions of the spaces in which students write complicate the rhetorical purposes for which students write.</p> <p>We emphasize a culturally situated, culturally aware approach informed by cultural rhetorics so that students navigate all texts and writing situations as "happening" through cultural lenses.</p>	<p>We encourage students to explore different computer and communication technologies so that they may choose the best technology to facilitate their writing and the rhetorical situation to which they are responding.</p> <p>We invite students to practice composing, revising, and editing (through and with text, graphics, sound, still, and moving images) using computers and communication technologies to improve their skills as writers.</p> <p>We emphasize a learning-to-learn approach, preparing students with skills that can be applied to different tools, but that transcend any one specific tool.</p>

Digital and Technical Writing

- WRA 320: Technical Writing
- WRA 410: Advanced Web Authoring or
- WRA 417: Multimedia Writing
- WRA 415: Digital Rhetoric

Writing in Communities and Cultures

- WRA 331: Writing in the Public Interest
- WRA 444: Rhetorics of American Cultures
- WRA 453: Grant and Proposal Writing

Writing, Editing, and Publishing

- WRA 370: Grammar and Style for Professional Writers
- WRA 380: Managing Publication Projects
- WRA 470: Editing and Publishing

Students also take several elective courses from the Professional Writing curriculum such as invention in writing, information and interaction design, writing nature/nature writing, writing for publication, and writing center theory and practice. All students are required to complete a senior capstone—either a senior portfolio seminar or an internship.

Distinctive Features of the Program

I did my internship with CrazyMedia, a web-development company in Spain. With the hands-on experience I had, I learned how to perfect my writing skills and really develop my web-authoring and web-design abilities. I also learned how businesses operate differently in other countries and cultures.

Andres Galarza, 2006 Professional Writing alum

One of the distinctive features of the program relates to its institutional status—that is, being housed in a free-standing writing department that had a decades-long history.

Another distinctive feature of the program is its faculty. Of the 32 tenure-system faculty in the department, 12 are core to the Professional Writing program. Fixed-term faculty and advanced graduate students sometimes also teach courses in the major. The scholarly interests of the core faculty include cultural rhetorics, new media studies, documentary writing and production, technical communication, information and interaction design, professional writing, document design, computers and writing, literary nonfiction, poetry, and more. In 2007–2008, Professional Writing faculty demonstrated the following selection of accomplishments:

- Produced a range of publications, including single-authored texts, edited collections, peer-reviewed articles, reviews, and texts published in conference proceedings (Dànielle Nicole DeVoss' co-edited *Digital Writing Research: Technologies, Methodologies, and Ethical Issues* won the 2007 *Computers and Composition* Distinguished Book Award);
- Coordinated the 2007 Popular Culture Association/American Culture Association National Conference, the Native American Literature Symposium at the Modern Language Association, and the Wordcraft Circle of Native Writers & Storytellers, among others;
- Served on or chaired the Coalition of Women Scholars in the History of Rhetoric and Composition, the Diversity Committee of the Conference on College Composition and Communication, the Michigan Humanities Council, the CCCC American Indian Caucus, the NCTE/CCCC Language Policy Committee, the CCCC Tribal College Fellowship Committee, the Consortium of Doctoral Programs in Rhetoric & Composition Studies, the CCCC Executive Committee, and the Intellectual Property Committee of the CCCC; and
- Served as principal or co-principal investigators on grant projects that include two MSU Outreach and Engagement Initiative grants, a Public Arts and Humanities Faculty Fellowship, a City of Lansing Human Relations and Community Service Grant, an Institute for Museum and Library Sciences Grant, and a Michigan Humanities Council Grant.

A third distinctive feature of the program is the commitment of the faculty and the curriculum to community collaboration. Several faculty members have produced scholarship on service learning or community literacies; faculty are involved in a wide range of service- and community-engagement projects. Most classes in the Professional Writing Program engage students in work that reaches out of the classroom and into various sites of literacy work and text production. Course-based projects have included writing for local nature centers and nonprofits, local community centers, university units such as the library and art museum; research for and design of the Cherokee Nation website, local public schools arts engagement projects, and writing for Michigan United Conservation Clubs, among others. Community involvement in the program is ensured by an active Community and Industry Advisory Board (CIAB).

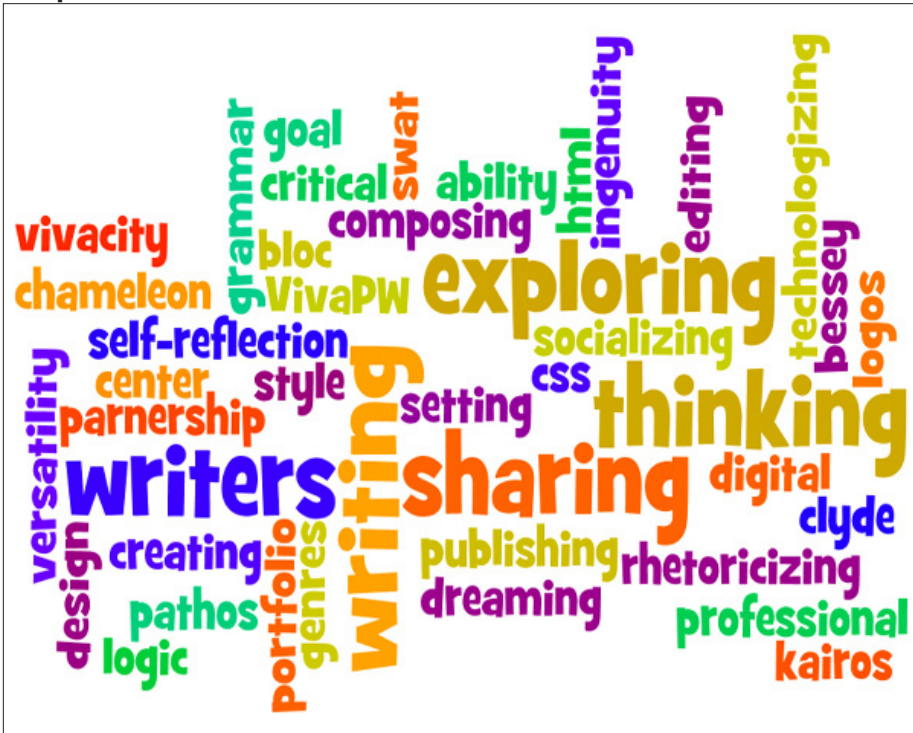
Another distinctive feature of the program is that majors are involved in a regular complement of professional development opportunities every semester on topics including explaining professional writing (geared toward prepping students to do a handshake introduction at job fairs and informational interviews), writing resumes, preparing cover letters, securing internships, searching for jobs, and prepping for interviews. In addition, we host two student-led organizations: Writers' Bloc and the Spartan Web Authoring Team.

A fifth distinctive feature is the portfolio review component of the undergraduate major. The Professional Writing program engages students in opportunities to interact and work with other students, faculty, and business and community mentors in internships and collaborative projects. All students in the Professional Writing program are expected to prepare and maintain a working professional portfolio during their time in the program and to present a professional portfolio prior to graduation. Professional Writing courses support students in recognizing the goals of portfolios, designing their portfolios, and creating pieces to eventually add to their portfolios. Each student's professional portfolio is expected to demonstrate educational growth, development of a professional identity, ability to reflect upon and illustrate skills gained, and readiness to transition from college to the workplace and/or to graduate school.

Graduating seniors present their professional portfolios to groups of core Professional Writing faculty and members of the program's Community and Industry Advisory Board. These groups assess student portfolios based on the ways students represent how well the program has met the key program goals listed previously. (See Appendix for the portfolios assessment tool used by reviewers.)

A final distinctive feature of the program is, frankly, the community created and sustained by majors. Our undergraduates are a passionate group, fiercely devoted to their major. Student input has been instrumental as we have redesigned the major, including the development of new courses and the rethinking of track requirements. Another example of their diverse contributions to the program are the mousepads in the Professional Writing Computer Classroom—each was designed by one of the students in the major (see Figure 2 for an example). Another example is the “viva PW” website³ crafted as part of a class project during the summer 2008 semester. Students engaged in the research required to establish the site, did all the coding and production, and produced the visual and textual content for the site. In addition, students adopted Clyde, a chameleon figure they decided best represents the ways in which they are able to be chameleons in the workplace with skills transferable and adaptable to a range of occupations. As they put it: “That’s what sets us apart: our ability to recognize and solve complex communication problems with a range of talent and

Figure 2: Student-designed mousepad for the Professional Writing Computer Classroom.



³ See <<http://www.vivapw.com>>.

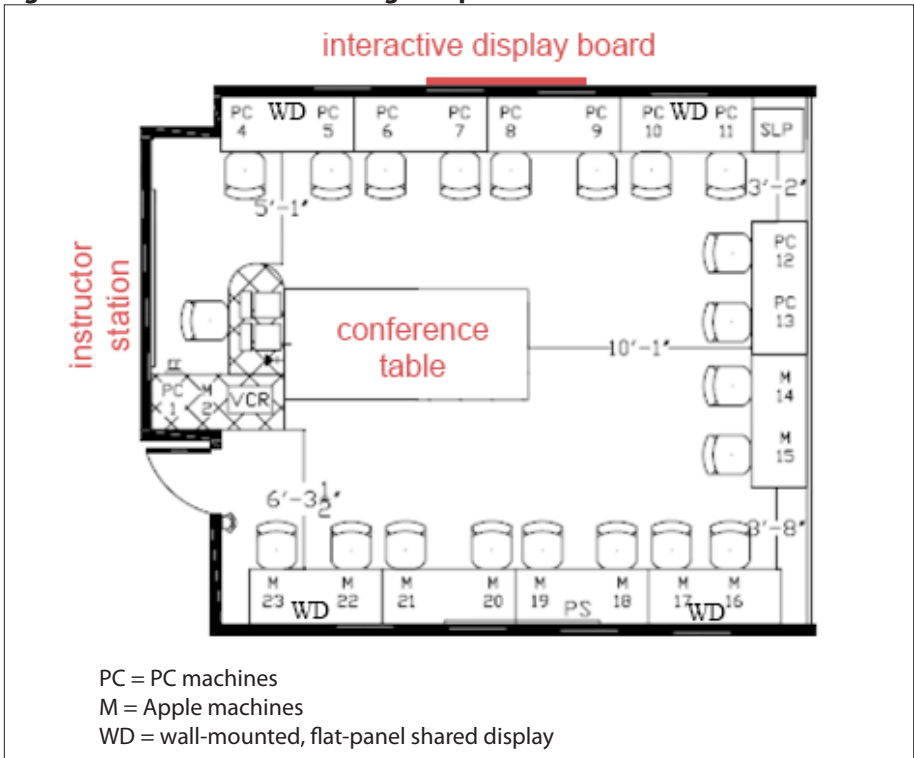
expertise that has become synonymous with the ever-expanding field of professional writing.”

Facilities

The Professional Writing Computer Classroom required two years of development, mainly because it “broke” the architecture of computer labs on the MSU campus. We felt that a flexible, studio-style space was crucial given our intellectual interests and curricular goals. The space allows for individual work, small-group work, and whole-class discussions; thus it supports lecture, lab, and workshop pedagogies. The dual-platform nature of the space supports a range of field-specific professional practices and allows students to experiment with different interfaces and operating systems (see Figure 3).

Invisible in Figure 3 is unique infrastructure of the room. Our Academic Technology Services (ATS) unit is centralized; thus, all 40 or so public computer labs on our campus are essentially the same with regard to operating system, software, bandwidth, and storage. Within the first year of our work in the Professional Writing Computer Classroom, we realized this set-

Figure 3: The Professional Writing Computer Classroom



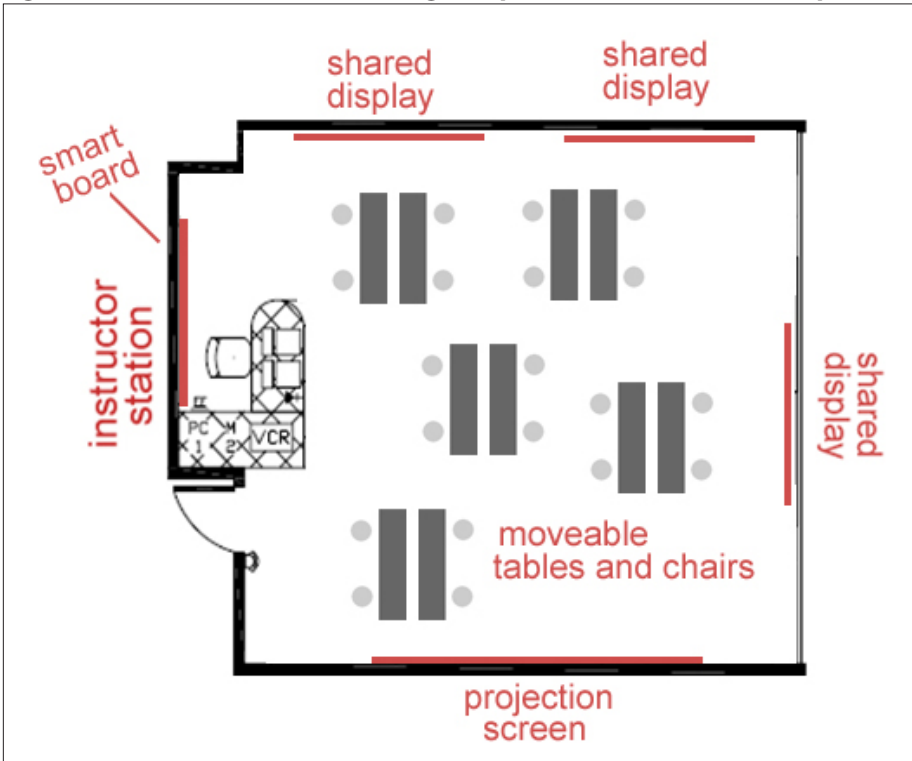
up was hindering the work we needed to do in the space (for an extended discussion (see DeVoss, Cushman, & Grabill, 2005). Some of the changes we petitioned for and implemented included locally installed software and external hard drives for additional storage.

We are in the midst of developing a second Professional Writing Computer Classroom (see Figure 4) because our primary room is at scheduling capacity. The new room will go a step further in the studio model and be equipped with flexible, ergonomic furniture (tables and chairs), with at least one interactive display (*smart board*), and with multiple and shared wall-mounted, flat-panel displays. Although the initial lab will provide space and support for high-end multimedia production courses (e.g., those using Adobe Photoshop, Premiere, Dreamweaver, and other software, we can't assume that all students will have access to), the new space will be a laptop-friendly writing studio.

Students and Graduates

Students interested in the program like to write, and they like to read. Most of them, however, are not interested in news reporting or media

Figure 4: Second Professional Writing Computer Classroom (in development)



writing (journalism) or invested in writing analyses of literature (English). Although many students are creative writers—and produce songs, poetry, short stories, and novellas—their academic and professional interests are best linked to documentation, user experience studies, usability tests, Web content development, editing and editing reports, and slideshow presentations.

When the program was first established, we attracted majors from elsewhere in the university—that is, students transferred into our program. We continue to attract majors (mainly via word-of-mouth recommendation) from across the university, but we also recruit out of high school with approximately 25 incoming first-year students declaring an interest in Professional Writing in 2007–2008. (We have considered high school-level recruitment, but the program is currently at capacity, and we’ve thus limited our publicity efforts.)

In May 2005, the program graduated its first eight students; in May 2006, the program graduated 10 students; in May 2007, the program graduated 18 students; and in May 2008, the program graduated 20 students. The Professional Writing Program currently hosts 100 undergraduate majors. An additional 20 students have declared interest in the major and are in the process of transferring into the major. Approximately 10 interdisciplinary studies students are seeking Professional Writing as an emphasis area; approximately 15 students are pursuing Professional Writing as a cognate area (somewhat like a minor) to fulfill College of Arts & Letters graduation requirements. We have developed a plan for offering a Professional Writing minor in the College of Arts & Letters, but this plan has not yet moved forward because we are currently at the limit of our current resource and budget allocation.

Professional Writing alums work in a range of writing- and communication-focused spaces, including Google, the Michigan branch of the American Cancer Society, Teach for America, software-development companies (such as TechSmith), publishing companies (including magazine publishing giants such as Conde Nast and textbook publishing companies Macmillan and Wadsworth), and Web development companies. Other graduates have pursued graduate study or law school.

Challenges

The Professional Writing program faces challenges we think are typical of newly launched majors—arguing successfully for faculty lines, staffing courses, providing high-quality academic and professional advising for majors, and ensuring strong community and industry connections. At this

point in our development, one of our most critical challenges is continuing excellence in academic advising. The Professional Writing director currently serves as academic advisor for all majors. This advising was barely possible with 40 majors; with 100 majors, it is even more difficult. We have, however, pledged not to adopt an approach typical in our college, which is to farm out students to faculty who have little or no experience in academic advising and in negotiating the complex web of university, college, and program requirements for graduation.

A second challenge is addressing a weakness we've fairly consistently observed in student portfolios over the past three years: Although students are engaged in rich cultural and rhetorical work, they don't seem to know how to highlight this work in their portfolios, which is increasingly important in the face of changing trends in professional writing. Although students offer evidence of adapting to different rhetorical situations and understanding what a rhetorical situation is, they have less understanding of how to think about this concept in a cultural context, beyond not using sexist or racist language, for example. We are currently revising one of the four core required courses of all majors, so that it more explicitly and deliberately helps to situate students to the cultural and rhetorical work they will do in the major and beyond the major in the globalized workplace.

A third challenge relates to the Writing in Communities and Cultures track in the major, the least-populated emphasis area. Many students are passionate about working with nonprofits, within advocacy organizations, and with local and state government, but we have not done as robust a job as necessary for helping students understand the connection between their interests and this academic path, or in helping students fully conceptualize and articulate the cultural situatedness of discursive acts and design choices. We are currently revising the track's curriculum and developing program recruitment efforts to attract more students into this emphasis.

Concluding Thoughts

What we hope to have mapped here, in the way we've situated and described the Professional Writing program at MSU, are the institutional and curricular geographies in which our particular writing program resides. This mapping matters for a range of reasons—reasons that often go ignored, and that, thankfully, this journal and its focus on programmatic perspectives will help to highlight—including the fact that writing programs are intellectual arguments as well as administrative structures.

Further, we would argue that the writing major, as one type of writing program design, is a critical intellectual and institutional artifact and is per-

haps a necessary one for the future viability of writing studies. The design of a writing major must find a way to wrestle with institutional histories, intellectual and disciplinary legacies, both local and global, at the same time that it projects a clear intellectual argument for who we are and where we want to be. This emphasis points to the necessity of having a vision—one that is shared by faculty, that resonates in the curriculum, that is visible across courses, and that is understood by students.

Appendix

Professional Writing Reviewer Tool for Portfolios

PORTFOLIO COMPONENTS	1 Strong Evidence	2 Some Evidence	3 No Evidence	N/A
Preparing students for successful careers in technical/professional writing.				
The portfolios demonstrate evidence of development and growth over time and/or projects. The portfolios show ample evidence of increasing skills and abilities.				
The portfolios include a biography, philosophy, or objective statement that reflects the authors' educational and/or professional purpose.				
The portfolios include well-designed, well-written, and well-presented resumes.				
The content of the portfolios complements and illustrates the resumes.				
Providing students with theoretical and practical (application of knowledge and production-related) experience in professional writing.				
The portfolios include rich and diverse sets of example documents, written exceptionally well.				

The portfolios show evidence of the authors' abilities to work productively and collaboratively with others (in pairs, in small groups, etc.).				
The design and layout of the portfolios present a unique and professional identity.				
The navigation and structure of the portfolios and their content are easily understandable and usable.				
Encouraging students to understand the cultural and rhetorical dimensions of all communicative acts.				
The portfolios show evidence of the authors' understandings of communication as a cultural and rhetorical act.				
The portfolios appropriately address both an educational and professional audience.				
The portfolios reflect the authors' ability to understand historical and cultural context and their relevance to communicative acts in professional writing.				
Supporting students in making significant contributions to the college, university, and community prior to their formal entry into the workforce.				
The portfolios demonstrate engagement with and contributions to the Professional Writing Program.				
The portfolios demonstrate engagement with and contributions to the university.				
The portfolios demonstrate engagement with and contributions to the larger community.				

OVERALL	1 Strong Evidence	2 Some Evidence	3 No Evidence	N/A
The portfolios include a selection of example materials.				
The portfolios show attention to detail in the selection of example materials, including an appropriate set of materials and attention to arrangement.				
Reflection on learning and development is obvious at points throughout the portfolios.				
The portfolios include well-written text that has been carefully edited and polished for inclusion in the portfolios.				
The portfolios do an excellent job of presenting the authors' unique skills and professional identity.				

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Author Information

Danielle Nicole DeVoss is an associate professor and director of the Professional Writing Program at Michigan State University. Her research interests include computer/technological literacies; feminist interpretations of and interventions in computer technologies; and intellectual property issues in digital space. DeVoss' work has most recently appeared in *Computers and Composition*; *Computers and Composition Online*, and *Kairos*. DeVoss recently co-edited (with Heidi McKee) *Digital Writing Research: Technologies, Methodologies, and Ethical Issues* (2007, Hampton Press), which won the 2007 *Computers and Composition* Distinguished Book Award.

Michigan State University

Laura Julier is an associate professor and associate chair of the Department of Writing, Rhetoric, & American Cultures at Michigan State University. She has published articles on service learning pedagogies in composition studies. She teaches the courses on editing, grammar, and style in the Professional Writing Program, as well as courses on literary nonfiction. She is a Michigan Campus Compact Community Service Learning Outstanding Faculty award winner and a former Lilly Endowment Teaching Fellow.

On the Significance of *Programmatic Perspectives*

Bill Williamson

Saginaw Valley State University

With this, the first editorial offered by the Editors of *Programmatic Perspectives*, I seek fulfillment of two goals: to offer an observation on the significance of this moment and to discuss how we hope this publication will impact our professional community—that is, administrators of programs in professional, technical, and scientific communication.

The publication of the first issue of *Programmatic Perspectives* represents an important moment for our professional community. The journal's genesis is the culmination of a movement within the community, a response to a call to action. To our knowledge, Tracy Bridgeford, Karla Saari Kitalong, and I are the first to propose a journal for our professional community that specifically emphasizes the intellectual work of program administrators. But ours are merely three among the many voices during the previous decade that have called on the community to commit more energy to programmatic research.

At the 2004 annual meeting, Ann Brady, Robert R. Johnson, and Thomas Vosecky argued that theory and theory building ought to occupy important places in the design and delivery of professional, technical, and scientific communication programs. Theory implemented into curriculum content ensures intellectual rigor in programs. Theory integrated into the administrative process "positions us to ask probing questions: questions that could easily be displaced or forgotten when we get into the 'heat' of program implementation" (p. 83). During that same meeting, Steven T. Benninghoff asked participants to consider the way the professional community's power structures limit diversity and contribute to student struggles with the process of merging into professional cultures. Benninghoff suggested that colleagues need to think more and more rigorously about how

academic programs might be reconstructed to demystify and ameliorate for students the practices and power structures of professional culture. Arguments such as these signal the need to turn the critical eye our community typically reserves for other environments in academic workplaces and functions, to focus on understanding programmatic as well as pedagogical processes.

In 2005, at the next Council, theory and theorizing played a more prominent role, providing the focus for both the keynote presentation and the plenary session. Rachel Spilka's keynote address, "Technical Communication Research in Academic Programs: A Call for Action," suggested that theory's value among academics in our community has waned during the past two decades and that research, specifically, lacks the depth, engagement and rigor that characterized scholarly exchange in the 1980s. She argued that a weakened commitment to research, to theory building, would result in an erosion of authority among technical communicators. In contrast, Spilka urged listeners to commit to expanding offerings of research- and theory-driven courses at every level of academic programs, to anchoring programmatic and thus professional identity in the ability to critically seek understanding through disciplined research. Although her emphasis was on curriculum content, the impact she envisions is clearly on programs and local professional communities. Following Spilka's address, the plenary panel featured reports on "The State of Research in Technical Communication" by Ann M. Blakeslee and "Common Threads: What Programmatic Research Reveals about Technical and Scientific Communication" by Kelli Cargile Cook. Blakeslee and Cargile Cook examined research methods and foci in scholarly fora and academic programs, seeking a more concrete understanding of our community's research commitments and the impact intellectual engagements have on programmatic and professional identity. Their findings and recommendations echo Spilka's keynote. Cargile Cook specifically called for stronger commitments to research with an administrative emphasis on projects designed to help us understand what programs do, why they do it, if they are successful, and how local learning can contribute to the broader community.

At the 2006 Council, I met with Tracy Bridgeford and Karla Saari Kitalong to discuss the possibility of creating a new scholarly publication. We sensed an opportunity to bring together our aspirations for collaborating on an academic journal with our growing perception that the community ought to provide a forum such as *Programmatic Perspectives*. In presenting our case to the leadership of the CPTSC, we emphasized the gap in the community's scholarly discourse about administration and the community's lack of published examinations of programmatic workplaces:

The available literature seems disproportionately small given the significance of administration to the professional responsibilities of community members. . . . As technical communication program directors face challenges as diverse as shrinking budgets, legislative mandates to demonstrate accountability, and the effects of a changing global marketplace on student job placement rates, the current supply of helpful articles is insufficient.

We argued further that

in the technical communication discipline, most discussions about programmatic issues seem to take place on listservs, in hallways, and, of course, at the annual meeting of the CPTSC. Juxtaposing this dearth of sustained publication in technical communication program administration against the growth of CPTSC and the importance of the annual conference to the development and sustainability of the community, we clearly see that the time is right to launch a journal to help build and sustain this vibrant community and facilitate the sharing of research, ideas, and information.

We hope that *Programmatic Perspectives* is a step along a path that will invigorate and sustain scholarly discussions of program administration in our community. Such study will earn us a deeper understanding of the intricacies, complexities, and diversity of challenges bound up in administration. The community of professional, technical, and scientific communicators has dedicated sufficient attention to the study of pedagogical and professional contexts to appreciate that communication is infinitely rich in scholastic possibility. This community has risen to the challenge of probing lines of inquiry that are both established and emerging. The community's growing body of knowledge is evidence of its curiosity, creativity, and tenacity.

Engaging the community in rigorous examination of and discourse about community values and practices is on its own a legitimate endeavor. However, other ends are served as well. The editors of *Programmatic Perspectives* see rich possibilities for the journal to serve as a site of enculturation for new administrators and developing professionals seeking an administrative career path. Our community's dedicated venues for collegial exchange are either too local or of limited access and durability. That is, graduate students might benefit from professional development opportunities at their institutions of study, as I and many others have. Although valuable, such experiences are local, perhaps making it difficult to translate strategies and practices to other sites, especially given that graduates do

not necessarily end up in programs like the ones from which they graduate. Such experiences might also emphasize other disciplinary values and missions (e.g., composition, communication, literature), thus making it difficult to transport the knowledge gained to the work of administering professional, technical, and scientific communication programs.

Those same students might embrace opportunities to attend annual meetings of the CPTSC. However, this forum has not fostered sustained, deep examination of the conceptual dimensions of administrative work. The annual meeting plays an important role in this process of enculturation. The format fosters collegiality and exchange, and thus fosters shared learning. However, the meetings are also for many the scholastic equivalent of an engaging hallway conversation. The Council inspires participants, restores energy, and works as a market for fresh ideas we can bring home to local tables. But we exchange ideas like perishable goods consumed in the short term—we don't do enough to make sure the folks who join the conversation later understand and appreciate the topics and perspectives that have already been probed. We must also acknowledge that doctoral studies are defined by deep scholastic investigation. The disconnect between the broader community values of collegiality and immediacy, and the disciplinary demand for creating a deep, critical body of knowledge, is difficult to reconcile.

CPTSC participants lament from time to time that new participants come to pose last year's questions. That is, we return to some questions and challenges year after year, but not necessarily with new insight. Our institutional memory is short. This is bothersome, but logical. We have not until now pursued the development of an enduring scholarly record of our discussions of program administration, one that will capture the rigor of the discourse in ways that our annual proceedings cannot adequately accomplish. Such a scholarly record will both smooth the transition of new members to the community and remind its returning members of the journey they have shared and to which they have contributed.

The editors of *Programmatic Perspectives* hope the journal will reinforce the notion that program administration is important work, both professionally and scholastically. Composition scholars recognized that administrative work is fertile ground for investigation. However, it was not always so. Program administration has emerged as a legitimate and important area of inquiry in composition after community struggles to make it so. Although the Council's existence is testament to the community's value for this professional work, *Programmatic Perspectives* will further legitimize the scholarly dimension of administration in professional, technical, and scientific communication.

As we continue the work of providing this forum, the community will have opportunity to refine and expand the scope of what it considers administrative responsibilities and challenges. Of course we invite authors to submit articles that focus directly on administrative work. However, we also invite authors to submit articles that contribute to the community's broader understanding of administrative and programmatic issues. That is, we invite you to examine and reflect upon the richest possible range of cultural forces and intellectual engagements that might inform and impact the ways administrators conceptualize and accomplish their work. This is a forum where the community can explore issues such as those it has framed and discussed in other forums. But this journal is also a forum in which the community can expand and redefine what it means to examine its work from programmatic perspectives.

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Kelly offered advice, support and encouragement during the process of proposing *Programmatic Perspectives* to the leadership of CPTSC. And of course, Tracy and Karla are even more deeply implicated in this project.

Author Information

Bill Williamson is Associate Professor of Professional and Technical Writing (PTW) at Saginaw Valley State University where he serves as Coordinator of PTW programs. He has taught writing and design courses (primarily with a technical communication connection) at Michigan Technological University, the University of Northern Iowa, and now at SVSU. In addition, he has offered through consultation a variety of workshops focused on job seeking, grant seeking, and various elements of technical communication. Bill has held assistant or associate editor positions for scholarly publications such as *Computers and Composition*, and the Conference on College Composition and Communication (CCCC) *Bibliography of Composition and Rhetoric*. His publishing projects include book chapters on program administration and cross-curriculum pedagogical design. He is currently developing a supplemental textbook for Pearson. Bill served CPTSC from 2000–2005 as Information Officer. He now serves as co-editor for *Programmatic Perspectives*: the journal of the CPTSC.

Ken Rainey

A Legacy

Katherine Staples

Austin Community College

I approach the teaching of both undergraduates and graduates as facilitator and mentor in order to help students to develop their own research strategies and learning activities. In the 21st century—with the abundance of information made available through the Internet and World Wide Web right on students' desktops—I am no longer their chief source of information. Of course, I might be a source of wisdom, that is, one who might direct them to useful sources of information.

—Ken Rainey, *Statement of Educational Philosophy*

This award [the Ken Rainey Award for Excellence in Research] will be given each year to an STC member who has made a positive difference to practice or teaching in the field of technical communication from conducting a lifetime of quality research.

—*Society for Technical Communication*

Something there is that doesn't love a wall.

—Robert Frost, from "Mending Wall"

Ken Rainey had no use for walls, not walls of any kind. He spent his adult life and his academic career in courteous but persistent opposition to all of them: walls of racial bigotry, walls of theoretical and cultural difference, walls of the boundaries between established organizations and academic programs. Those who remember Ken from CPTSC remember him as a spokesperson for many different technical communication organizations, representing (and mediating) differences, gracefully reminding us of common goals and values. Ken Rainey's long career in education, research, and professional service reflects his untiring and generous effort to bring students, professionals, scholars, teachers, organizations, and programs together as collaborators in education... and beyond.

In this effort, Ken was always an active and voracious learner, delighting in new directions in technology, pedagogy, practice, and research.

Ken's publications reflect his many interests (including international educational liaisons and pedagogy, visual communication, document design, collaboration, internships, science, and mythology in the writings of Joseph Campbell, and American drama). Of all these interests, Ken was perhaps proudest of collaborative publications that supported others. Recognizing the need for an established and inclusive body of technical communication research, in 1998, he published a review of doctoral studies in business, scientific, and technical writing. Ken saw to it that this information to promote new research and recognize emerging scholars continues today through the efforts of the organizations Ken worked with, including the Society of Technical Communication (STC), the Association for Teachers of Technical Writing (ATTW), the Conference on College Composition and Communication (CCCC), and the National Committee for Teachers of English (NCTE).



Kenneth Rainey

Ken and I collaborated on a number of projects. Perhaps the most exciting was the special 1995 education issue of *Technical Communication* we co-edited. This issue brought together many different voices and perspectives. I vividly remember the enjoyment of working with Ken to include diverse voices on diverse issues. Ken never failed to address and recognize positions not his own. This too makes for possible conversation.

Ken's service in STC consistently promoted shared research and educational initiatives. He established and led the STC Academic/Industry Committee and served as STC Assistant to the President for Academic and Research Programs—all while serving actively in the STC Atlanta Chapter and on a huge range of university and departmental committees at Southern Polytechnic University. Ken supervised seven of the department's theses. As Chair of Humanities and Technical Communication, he established an educational exchange program with China, continued to teach in Germany (which he loved), developed multimedia presentations and materials for high school teachers, and continued his research on technical communication in Germany, on the standards needed by professional communicators, and in the viability and validity of technical communication certification. Ken was never, never discouraged in his efforts to help shape connections for the future.

Ken Rainey: A Legacy



Ken Rainey's professional rewards and accomplishments are many, but perhaps they meant less to him than his honest pleasure in connections of all kinds. Ken was a modest, tireless, and brilliant designer of the new. He had the grace and wisdom to see that the future of technical communication is for many, not few, to create. His vision made multidimensional bridges and wise and intelligent detours through walls of all sorts. His legacy is for us to carry on— together.

Katherine with Ken at the 2005 CPTSC annual meeting in Lubbock, Texas.

Teresa Hunt

Elizabeth Tebeaux

Texas A&M University

At the March 2006 annual conference, Teresa was elevated to Fellow in the Association for Teachers of Technical Writing (ATTW). This was the last time most of us would see Teresa before her death. She died December 23, 2006. Her death left a huge vacancy in technical communication because of her commitment to technical writing and her service to ATTW.

Teresa received a PhD in Rhetoric and Technical Communication from Michigan Technological University in 1994. She taught a wide range of rhetoric, composition, and technical communication courses at Northern Michigan University (NMU) and served in many positions, including department head, director of composition, and director of graduate studies. She developed courses for various curriculum levels in technical writing and arranged interviews/internships for technical communication students. In 2004, she received the NMU Distinguished Faculty Award. And until her death, she was serving as Interim Assistant Vice President for Academic Affairs. In this position, she administered and coordinated NMU's Academic Quality Improvement-related activities, documents, and annual updates.

Teresa joined ATTW in 1991 and served on the Executive Committee as a member-at-large from 2001–2004. She became the fundraiser for ATTW in 2001 and by early 2006 had raised nearly \$50,000 to support the annual ATTW meeting. To be blunt, without this fundraising support, the annual ATTW meeting would not have been possible. She served as chair for the ATTW Committee on Technical and Scientific Communication from 1999–2004.

From a research perspective, Teresa largely focused on the history of technical communication. With Michael Moran, she co-edited *Three Keys to the Past: The History of Technical Communication*. Her book, *Writing in a Milieu of Utility: The Move to Technical Communication in American Engineering Programs, 1850–1950*, was reissued in 2000 as part of the ATTW Contemporary Studies in Technical Communication series. This small book

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does an exemplary job of explaining the problems that technical writing courses faced in the late nineteenth-century through the early years of the twentieth century. Teresa was a superb writer. Her analysis of the cultural situation in the university academy that underpinned the problems faced by technical writing curriculum and faculty remains the most incisive of all efforts to discuss the modern history of the teaching of technical writing.



Teresa Hunt

Teresa received the 1999 Nell Ann Pickett Award for Outstanding Article published in *Technical Communication Quarterly*—“Technical Communication from 1850–1960: Where Have We Been as a Discipline”—a summary of much of her work in this area.

Teresa has also targeted professional issues in her research. Her co-edited, two-volume collection with Jerry Savage, *Issues of Power, Status and Legitimacy in Technical Communication*, focuses on the professional challenges faced by technical communication faculty. During the fall of 2006, she and I were in the final stages of drafting a history of ATTW. Her sudden death left me with that project, which because of her absence, became the toughest of my two decades of writing about the history of technical writing. In every paragraph, I could hear her voice in emails, late night phone calls, and drafts we compiled, one during a two-day writing session at NCTE in 2004. The history will appear in *Technical Communication Quarterly* in 2009, an appropriate venue because *TCQ* would not exist without *The Technical Writing Teacher*, the first journal established by the founders of ATTW in 1974. Teresa was deeply committed to the project; she wrote me in a 2002 email that the “new kids in ATTW don’t know anything about ATTW or the people who made it happen. We need to write our history before it’s too late.”

Those of us who had the privilege of knowing Teresa remember her as a clear-headed, pragmatic, hard-working, and committed member of ATTW and the preparation of both technical communicators and technical writing students for the world of work. She was forever charming, funny, and real. She was a solid academic, but never took the academic game too seriously. She loved her friends, her students, her garden, her cat, and her family. She loved clothes, shoes, and shopping. Research was important, but she never thought it should take the place of what was really important in life. Teresa was in the process of writing about the origins of technical writing instruction at West Point, a project that fascinated her. During our last phone conversation the first week of December 2006, she was sick,

but talking about the need for more historical studies of technical writing. A comment I keep making—technical communication cannot claim disciplinary status without finding and writing its history, from its earliest beginnings—is a comment Teresa made repeatedly: “Tech writing has been around for centuries,” she would say. “We have to lay it out, piece by piece; then connect the pieces.” And from another email, she wrote: “Mike’s [Moran] correct: The history of technical writing hasn’t been written, but we’re moving forward. In another decade we can show the world that we have a richer history than literature.” She envisioned a book on the history of technical writing in the USA, one for England through the 1800s and one for ancient technical writing. We both knew that each book would take multiple authors for the project to happen.

In short, technical communication has lost one of its visionaries, not to mention a person who was a mentor to many students and a friend to many of us in technical communication.

Memories of Teresa Hunt

Gerald Savage

Illinois State University

I met Teresa Hunt (then Kynell) when we were taking a night class at Michigan Tech, probably in 1993. I think at first a lot of the graduate students in the class didn't know what to make of her—she did not dress in slightly musty jeans, sweatshirts, and ragged tennis shoes or appear otherwise unkempt. In class she spoke with grace and authority. Because I was among the not-so-kempt students in the class, I regarded her at first with perplexity if not outright suspicion. Nobody seemed to know her; she wasn't a teaching assistant and therefore not part of our *elite* clique who generally dominated class discussions and spent Friday evenings at The Library (a restaurant/bar in Houghton, Michigan, popular with students). Like most night classes that met one night a week for three hours, we had a break halfway through the period. One night during the break I remember speaking with her. I don't remember who initiated the conversation or any of what we spoke about, but only that I quickly discovered there was a person there beyond the alarmingly focused and disciplined scholar we heard during class. She was good humored, friendly, and although not too much given to talking about herself, she probably told me she commuted to class from Marquette, Michigan, a hundred miles east of Houghton along the southern edge of Lake Superior. I think it was some time before I learned she was a full-time, non-tenure-track faculty member at Northern Michigan University,

The winters in northern Michigan are well known, but in the Keweenaw Peninsula where Michigan Tech is located, winters can be epic, with snow accumulations of up to twelve feet on record. My wife Sue and I wondered if Teresa had contingency plans for the winter nights when it snowed heavily, which was at least as common as clear weather in that part of Michigan's Upper Peninsula. Sue urged me to invite Teresa to stay with us if the roads were really bad. But I began to learn what an independent person Teresa was. She gratefully said she would accept the offer if she ever felt she couldn't get back

safely, but because she had classes at Northern to teach the following day it was important that she get home the night before. Cell phones were rare in those days and were not at all reliable in the thinly populated UP. I don't think anyone I knew at that time owned one. Teresa didn't. However, she usually drove an SUV and never let the weather stop her.

A year or two later, Teresa took a leave of absence from Northern for one term at Michigan Tech so that she could carry a full load of classes and finish her coursework requirements. She stayed on campus part of each week that quarter and became a beloved member of the graduate student gang. On a few festive weekend occasions, her spouse (at the time), Kurt Kynell, a history professor at Northern, would join us for parties.

At some point I learned that, like my wife and me, she had lived in Alaska for a number of years. Teresa had grown up mostly in Anchorage, Alaska, and had worked as a reporter for the *Anchorage Daily News*. Teresa and Kurt lived some distance from Marquette in a rural setting where they kept horses. And yet, despite a friendship that developed over some fourteen years, I have come to realize I never knew much about her. She was close to a sister who lives in Oregon, and she would often go out there to visit and spend time romping with her two nephews. She also visited her father in Texas frequently, especially in the last year of his life when illness resulted in frequent emergencies. A few years ago, just before Christmas, she wrote to me about an anticipated visit from her sister and nephews. She was looking forward to spending the holiday with children, commenting that because she and Whit had no children they had never shared the excitement of Christmas morning with kids.

Teresa set high standards for herself. By the time she began writing her dissertation, she was back at Northern Michigan University teaching full-time. The task was more than usually arduous. She told me afterward that she would shut herself in her office at home every night and write. Kurt would bring food and leave it outside the door as she pushed herself to keep on schedule by working far into the night, then going to work the next morning. The task paid off when she defended the dissertation in the spring of 1995. She had by that time submitted the draft to Ablex Publishing, a leading publisher of scholarly books in communication at that time. *Writing in a Milieu of Utility: The Move to Technical Communication in American Engineering Programs, 1850–1950*, was accepted for publication by Ablex within a year after she earned her PhD. It is one of a very few scholarly books in the technical communication field to go into a second edition.

Teresa never called attention to her accomplishments. She published constantly, both articles and books, which she began doing long before

she earned her PhD because she felt a great deal of pressure to prove herself as a scholar in her department. It wasn't long before she had outperformed some faculty members considerably senior to her. Not long after completing her PhD, her position was converted to tenure track and she became an assistant professor. Over the next few years, she taught technical communication, composition, and—what she described as a self-indulgent and beloved sideline—mythology.

Teresa had a genius for collaboration. She formed professional friendships with many leading scholars in composition and technical communication, including Robert Connors, Michael Moran, Beth Tebeaux, John Lannon, Katherine Staples, Jo Allen, and Merrill Whitburn. But more than professional collaborations, she made deep, lifelong friends, and her friends became friends with each other.

In 2003, she emailed me to share her sadness at the death of a colleague at Northern, an irascible professor students either feared or discovered the heights of their abilities. Teresa clearly admired him because of his concern for students and his love of teaching. They had occupied neighboring offices for years in an ancient, rundown building. This colleague was among half a dozen Teresa counted among her best faculty friends, all “outcasts,” as she called them. This perspective, oddly, was a perception she had of herself, perhaps because of her unorthodox career path and persistent sense that she always had to work hard to prove herself an equal in the academic community.

In 2004, Teresa wrote to tell me of seeing a former Michigan Tech classmate of ours while she was at the Conference on College Composition and Communication (CCCC) in San Antonio. He had suffered a life-threatening bicycle accident and was finally back on his feet after a long recovery. Teresa was glowing with delight at seeing him well and whole again, telling me she nearly wept as she talked with him and urging me to write to him myself.

After we graduated, Teresa and I would try to meet for lunch or dinner at least once when we were at a conference. This was not always possible because Teresa was continually in demand, busy with meetings concerning her many projects. The exception was the year CCCC was in Nashville. For years afterward, Teresa told friends about the afternoon she and I skipped out on the conference and went out to see Nashville. I don't know how we found it, but after some walking and a cab ride, we arrived at the Nashville Parthenon, a life-size replica of the original Athenian Parthenon. I was amazed at the seven-and-a-half-ton doors that could be swung open and closed with one finger. Teresa was taken with the twelve-ton, forty-

two-foot statue of Athena. Before we left, we purchased souvenirs in the gift shop. Teresa bought postcards of Athena and sent me one sometime later. We walked the couple of miles back to the conference hotel, stopping on the way for burgers at a replica of a 1950s diner. Some of our friends scoffed at our delight in ersatz classicism. I was a bit defensive, but Teresa just laughed.

Like any of us, there were contradictions in her nature. She was one of the most determined and gutsy people I've ever known, and yet, she could be fearful as well. She thought nothing of driving alone 200 miles round trip through heavy snow and icy roads in the northern Michigan winter nights, yet, one evening at CCCC in Washington, DC, we went out with a group of Michigan Tech alumni and faculty. We were walking to a restaurant within a block of an area we had been advised could be dangerous after dark. Teresa admitted she was frightened and huddled close among several of the men in the group on the way to and from dinner.

As was typical for her, she didn't say anything about it when she was appointed acting chair of her department, a position she held for about two years, I believe. She continued to teach, write, and work with the Association for Teachers of Technical Writing raising funds for the annual conference. When eventually she happened to mention she was chairing the English Department, I asked her how she managed to keep up with so many duties. She acknowledged that it was a lot to do, but said, "I just compartmentalize." That meant that she set aside specific times each day for each duty and focused only on that task. She didn't discuss her incredible ability to focus and maintain self-discipline that enabled her to do it all successfully.

Teresa hated to be seen at a disadvantage. She didn't want anyone to feel sorry for her. She was seriously injured one September in a collision with a deer late at night driving home from class. The deer came through the windshield, and she received head and upper body injuries as it thrashed about. She was scheduled to appear on the program for the Council for Programs in Technical and Scientific Communication (CPTSC) that fall, and although she was back on her feet by then and had returned to teaching, she didn't want her colleagues to see her looking so physically battered.

Once when I had grumbled about having been drafted for another responsibility when I was already too busy, she told me, "You'll figure out a way to manage. We've been figuring out ways to manage for well over ten years now. Eventually, we'll both decide we've had enough. We'll open a used car/used book shop and showroom, and we'll call it Cruise and Peruse!"

She was asked by Northern Michigan University, in 2002 or 2003, to take the lead in writing their accreditation self-study report, a task that involved some two years' work. It turned out to require much more work than she had been led to believe, but she went through with it and succeeded to such a degree that she became in demand for accreditation training and consulting around the nation. For the next couple of years, she seemed to be away often doing such work.

Yet, as her career advanced and her responsibilities and commitments increased and she sometimes seemed to grow weary, she often returned to her long-time love of teaching as a focus for everything else she did. In the fall of 2004, we were working together on a book chapter at the ATTW conference while Teresa was also very busy with accreditation travel and other duties. She wrote to me then that she felt her energy flagging and that it was increasingly challenging to maintain a balance among her many duties, including travel, administrative work, teaching, scholarship, and still having a home life. Yet, she ended the message by saying she would be fine, that it was not as if she were facing a health crisis or a life tragedy. She looked forward to having lunch that day with a first-year student whom she had agreed to mentor. She said that commitment helped her remember what all her work was really for.

She was also asked to serve as interim Assistant Vice President (AVP) for Academic Affairs at NMU, a job that I think proved increasingly discouraging to her. She began it with more trepidation than I had seen in her before. But when she began the job in January 2005, she was hopeful. She wrote to me about one of the perks of the new position, a beautiful view of Lake Superior from her office window. On one particularly beautiful day, she said that people kept coming to her office to take pictures of the view, surely another indication of her generosity to allow such disruptions in a very demanding job. She gave me some sense of her schedule as she exulted that she had the next month free from travel. Her most recent trip to conduct accreditation work had taken her to four states.

Although she never told me much about it, she told me sometime in the last year of her life that she was thinking of stepping down from the AVP position, but she had hope for accomplishing the goals she had set for herself in the job first. She missed teaching and writing, but also believed there were important things to do in her administrative role.

Everyone knows what Teresa did for the Association of Teachers of Technical Writing (ATTW) as the conference fundraiser. She took on that job for the first full-day conference held in 2002 in Chicago. She saved our bacon that year, raising more sponsor funding than ever before. Teresa

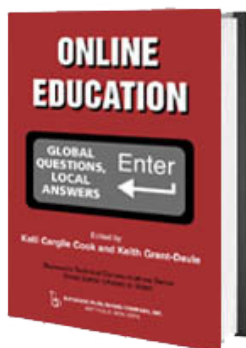
would notify me every week, sometimes every day, as she nailed down another sponsor. She often said she should have gone into selling used cars. Each year thereafter she met or exceeded those accomplishments. Like everything she did, she treated the job as if it was the only thing she had to do. What amazed me was that the sponsors she won for ATTW saw her as a friend, not simply as a business contact. She insisted on giving them the best possible representation in the conference setting and program for their support of the organization.

One of the last times I heard from Teresa was when she and I were notified that we were to receive the ATTW Fellows Award for 2006. We exchanged some excited emails, but in the midst of the excitement she mentioned that the past year had been difficult, made worse by poor health that winter. But in the last message I ever received from her, she reminisced about our lunch in the greasy-spoon restaurant in Nashville.

It was in that message, also, on February 24, 2006, almost exactly ten months before she died, that she wrote the sentiment she would express a few weeks later when she received the Fellows Award: "All I ever wanted to do was NOT embarrass Michigan Tech." She certainly achieved that hope and much more, as a scholar and teacher, as a friend, as an extraordinary human being.

Book Review Editor

Kathryn Northcut, *Missouri University of Science and Technology*

***Online Education: Global Questions, Local Answers***

Editors

Kelli Cargile Cook

Keith Grant-Davie

Amityville, NY:

Baywood Publishing Company, Inc.

2005. 336 pp.

Reviewed by Barry Maid

Arizona State University

As I read through the essays collected in *Online Education: Global Questions, Local Answers*, I find myself torn between nodding my head in agreement and shaking my head in frustration. However, sitting back and thinking about what I've read, I realize my differing responses are likely caused by two facts. First, most of this collection is targeted for those who do not have significant experience in developing and delivering online technical communication programs. Second, as is so often the problem with publishing books on current technologies, by the time the book is published, much of the material appears somewhat dated.

Assuming my realizations are correct, what should potential readers know about the collection? I would suggest that the playing field has changed since most of these essays were written. As I write this review in June 2008 (just as with discussions about technology, the date of composition may be as important as the date of access in Web citation), I think it is fair to generalize that almost every college or university now offers some online instruction. In addition, I think it is safe to assume that every program that offers one technical communication course has, at least, thought about putting a course online or had an administrator suggest they offer

an online course. Even though we are only around five years removed from when these essays were written, we live in a world different from the one these pioneer online educators were facing.

Because we now live in a world where online courses are normal, the important message that readers of this collection need to take away is not whether to put a course or program online, but rather how to do so effectively. And in this crucial aspect, the authors of the various essays consistently provide information still worthy of attention. The essays only look at a handful of pioneer programs. However, the faculty who developed those programs consistently demonstrate that even at the beginning they understood some basic premises about online education. For example, despite the fantasies of administrators, the faculty who developed these online programs realized that the programs needed to exist to serve a particular population not to create an enormous new revenue stream. The reality is that online education costs money—especially if it's done correctly.

I would suggest then, that even though administrators of technical communication programs may have already learned this through experience, the collection provides them with credible evidence they can use when arguing this point with others. Years of administrative experience have taught me that citing published disciplinary evidence for programmatic decisions carries more weight with deans and provosts than my simple assertions. The essays in Section One of the collection certainly provide good information to help program administrators make their case for developing online courses and programs that hold to disciplinary principles and practices. One point that strikes me as essential is that all the programs described are different from one another, whether in name, location within the institution, or in the target population. For a program to be successful, all these factors need consideration. I'd suggest that what program administrators who read these essays take away is not the specific process each essay describes as much as the ability to develop a process that best fits a particular institutional context. Carolyn Rude specifically addresses this issue.

Another crucial point Rude makes in her essay is that online courses should be defined no differently from face-to-face classes. They are simply technical communication classes. Too often universities attempt to define online classes by the courseware software used to deliver the classes. These attempts lead to an assumption that the courses are somehow different from face-to-face classes. That misconception is never an issue with any of the essays in this collection. The authors are much more likely to debate the virtues of synchronous components of online classes over solely asynchronous classes. I suspect the overwhelming ambivalence to courseware shown in this

collection is a function of the fact that all these essays were written by technical communication faculty. Many faculty who have taught online courses allow courseware to become a hot button. There are many reasons for such an intense reaction. Faculty get used to what they are using and don't want to change. Courseware provides relatively nontechnical faculty with a simple interface to teach online. Yet these essays, especially those in Section Two, don't obsess over courseware. Their concern is, rather, as it should be, with developing good online pedagogies instead of on the software being used to develop those pedagogies.

I think a good analogy for this emphasis on developing good pedagogies comes from the writing center community. Those who have worked in writing centers often say that doing so has changed their classroom teaching forever in a positive way. Becoming more sensitive to how student learning takes place in a writing center makes them create situations in their classrooms that will engender the same kind of learning. Likewise, I think the same can be said for good online teaching. Being sensitive to developing good online pedagogies transfers over into good face-to-face pedagogies. This transference may be best demonstrated in Susan Lang's essay where she specifically chooses to look at pedagogies for graduate classes—something she consciously acknowledges is too rarely done.

Finally, I think the last two chapters present administrators of technical communication programs with the most interesting set of issues that remain to be resolved. Most institutions have decided on one courseware option. That option is usually, though, not always a commercial solution such as Blackboard, which is costing schools what seems to be an ever-increasing amount of money. Open source software gives institutions other options. Brenton Faber and Johndan Johnson-Eilola present a solid argument for open source solutions. However, perhaps the most thought-provoking chapter is the last one. Here Billie J. Wahlstrom and Linda S. Clemens raise questions that online education is forcing us to address. They are critical questions because they demand not just technical communication faculty but all of higher education to look at how we do business. Why do we think we can graduate students and be done with them, especially when all indicators show that people currently in the workforce need constant updating of skills and information? Why, for example, do we assume courses must all start at the same time? Why do we assume that a lone faculty member is the best way to design and deliver a class? The conversation Wahlstrom and Clemens begin is one that is only starting and only in certain places. Still it may well be more important than the decision of placing our programs online.

Call for Papers

2009 Annual Conference of the Council for Programs in Technical and Scientific Communication

Conference Location

Aarhus, Denmark

Conference Dates

August 19-21, 2009

Conference Theme

The Language(s) of Technical and Scientific Communication: Global Perspectives and Local Practices

Since this year's conference coincides with the XVII European Symposium on Languages for Specific Purposes (LSP) in Aarhus, Denmark, the CPTSC theme embraces the opportunity to investigate the language of technical and scientific communication and its role in global and local practices. As an effort to coordinate with LSP, we see this year as an excellent chance to cross linguistic, institutional, and disciplinary borders while maintaining a focus on programmatic issues. We encourage submissions that yield new ideas pertaining to language in technical communication and that could possibly provide a foundation upon which to build programmatic connections and partnerships.

About the Conference Site

Located in Denmark's second-largest city, Aarhus University's School of Business is home to the programs in business, technical, and scientific communication in various languages, including English. The school is at the forefront in research of knowledge communication. While hosting the CPTSC conference, the school will simultaneously host the European Symposium on Language for Specific Purposes. (Specific purposes include technical and scientific communication.) The decision to have the two conferences coincide is deliberate, with a view to cross-fertilization as participants can attend both. For more on the University of Aarhus, go to <http://www.au.dk/en>. For more on the town of Aarhus, go to <http://www.visitaarhus.com/>.

About the CPTSC Conference

The CPTSC conference emphasizes discussion of programmatic issues. The audience includes people from new as well as established programs and anyone with programmatic interests in technical and scientific communication. We welcome participants—administrators, faculty, and graduate students—from university, community college, or secondary levels as well as representatives from industry. Possible topics relating to the 2009 theme include, but are not limited to, the following topics:

- Opportunities for international collaboration
- Discourse and collaboration
- Natural language interfaces
- Translation of content between natural languages
- Language and accessibility
- International language emphases in TSC curricula
- Computer code as language
- Plain language in TSC curricula
- Methods of assessing language development
- Visual language/language of new media

Two Kinds of Presentations are Invited

Two kinds of presentation options are available at the CPTSC Annual Conference:

Position Paper

Position paper presentations must adhere to the following guidelines:

- Participants present five-minute position papers on programmatic issues (rather than reports of specialized research or presentations of particular teaching strategies) in order to generate discussion.
- Format does not allow for slide show presentations.
- Proceedings, published after the conference, often include expanded versions of position papers.
- Proceedings will only include those papers presented at the meeting

Poster Presentation

Participants choosing this option must make five-minute poster presentations on programmatic issues.

Sample Proposals & Guidelines

Sample proposals/abstracts for last year's CPTSC conference are available from the conference website so interested individuals might review them in preparation for crafting their proposals. Proposals for both position papers and poster presentations must explicitly note how the presenters will address both programmatic issues and the conference theme in the related paper or poster presentation.

Submission Deadline

Proposals are due by 5:00 pm EST on March 27, 2009. For program questions, please contact Stuart Blythe and Julie Dyke Ford, Program Chairs at <CPTSC2009@gmail.com>. For conference information, please visit the preliminary conference website at <<http://www.cptsc.org/annual.html>>.

Submitting a Proposal

Please submit proposals as .rtf files emailed to <CPTSC2009@gmail.com>. Please be sure to use the words "CPTSC 2009 Conference Proposal" in the subject line of the related email message.

Purpose and Status of the Society for Technical Communication Body of Knowledge Project

January 2009

What makes a technical communicator a technical communicator? What are the skills and domains of knowledge specific to technical communication? What do technical communicators need to know in order to practice, teach, and move forward the TC profession?

A Society for Technical Communication (STC) task force is attempting to answer these questions by developing the framework for a body of knowledge for technical communication. For the past 18 months, the STC Body of Knowledge (BOK) Task Force has worked to locate, classify, and make accessible that body of knowledge through the web-based Technical Communication Knowledge Portal. As envisioned, the Knowledge Portal will:

- Help technical communicators assess their level of knowledge and skills;
- Provide easily accessed information for those wanting to hire technical communicators or enter the profession;
- Define the profession as a specialized set of skills, abilities; and knowledge

Last September, when the proposed site map for this portal was posted on the STC website, about 150 STC members provided comments. The task force is currently incorporating those comments into a revised map/taxonomy using a tool called *co-mapping*. By February 2009, we will start populating the site with content (definitions, articles, original content, links), using Delicious and Diigo as tagging and bookmarking tools. We will produce some original content as well by using collaboration tools such as Author IT, Basecamp, and other wiki-based tools.

By May 2009, in time for the STC Summit, we hope to have at least two of the 10 top-level domains populated with content, at least down to the 3rd level. Populating the entire BOK with content will take quite a while, but we want to show STC members in May how they and others will be able to use this portal to find information on specific topics, careers, programs,

research, and practices—all intuitively organized, easily accessible, and in one place.

For questions, comments, or to contribute, please contact Hillary Hart at hart@mail.utexas.edu or Nancy Coppola at nancy.w.coppola@njit.edu.