The following describes our attempt to extend and resituate the graduate programs in Scientific and Technical Communication at Bowling Green State University. Our revisioning of our program includes developing an online graduate certificate program in international technical communication.

OVERCOMING DISCIPLINARITY

One of the challenges in offering a certificate program in Northwest Ohio comes from the lack of high-technology jobs in the area. Although online programs ostensibly hold the promise of erasing distance limitations altogether, there still seems to be a general rule that people will look for programs in their area. This is not surprising, considering that people who work in technology centers like Austin, Palo Alto, and the Research Triangle have likely heard little to nothing about Bowling Green State University. So, with few technology workers to train, our S & TC program wanted to offer something more recognizable to the business writers that physically and professionally inhabit the area from Columbus to Detroit, an area that roughly corresponds with the I-75 corridor. Thus, our challenge included thinking of courses that would apply more generally to professional writers of all stripes. Because our goal was a graduate certificate program, and not a full-blown online graduate degree (we already had a resident graduate program in S & TC), it was easier to create a more generalized program.

Although the strategy of adding a certificate program may seem either an overt attempt at pure growth, or even a step back from our resident undergraduate and graduate degree programs, it really has had more of a leavening effect. By demonstrating that a program can occur exclusively online, and by demonstrating its value to the enterprise community, our program can make a case that future expansion and curricular realignment can and should take these two approaches. Fortunately for us, this also helps the S & TC program
integrate two new professors who both have expertise and experience in both business and online issues and practices.

Having experience and expertise are not enough in the competitive forum of acquiring academic resources, though; Bowling Green State University has programs in both Communications and Visual Communications Technology which have also been eyeing the creation of writing programs that serve the business community. Fortunately for us, the English Department has been at the front of efforts to offer online courses. That fact, coupled with our program’s reputation for more cutting-edge approaches within the department, gave us some leeway in creating an online certificate.

NEW FACULTY/NEW DIRECTIONS

The use of an online certificate to develop our Scientific and Technical Communication program is one that combines institutional and personal history. As new members of our English Department, both of us were immediately thrust into the formidable job of heading up our program (Dr. Edminster in her third year and Dr. Mara in his second). Like many other institutions shifting their curricular focus to digital approaches (University of Central Florida’s “Text and Technologies” program, North Carolina State’s PhD in “Communication, Rhetoric, and Digital Media,” and Michigan State University’s “Rhetoric and Writing” program just to name but three), Bowling Green State University’s English department has been enjoined to find ways to offer more courses through online distance education and hybrid computer classes with online components. In point of fact, our Dean for Continuing Education urged our department to take “bold measures” (a prompting that has led our department to offer more online courses than any other academic department).

BGSU’s English Department hired both authors in the midst of the increased academic pressure to offer more online and distance courses. Importantly, both new S & TC professors have an expertise in electronic communication (Edminster in electronic theses and dissertations and Mara in hypertext rhetoric and histories). While these hirings may be nothing more than coincidence, they offered a kairotic opening to propose the certificate and to shift our programmatic focus from more traditional technical communications concerns (rhetorical approaches, documentation) to some newer issues (technical marketing, entrepreneurship, and globalization). Issues such as audience, departmental territory, resource allocation, and finding personnel to teach courses were all complicating factors that needed addressing before the certificate was proposed. Proposing the certificate introduced complications as well as providing a certain
amount of institutional cover to solve these problems because of the promise of online course delivery. As more experienced faculty well know, proposing untested solutions to enduring problems like scarce resources can be a dangerous business. A new faculty member might propose a bold solution; two new faculty can get downright giddy when looking for possible solutions.

More than just an empire-building opportunity, this certificate program has proved advantageous in helping the English Department bridge the gap between different programs. In the process of formulating the new certificate program, we serendipitously connected with another member of the faculty who also specializes in digital issues, Dr. Kristine Blair. Through our discussions, we quickly ascertained that there was much common ground and many similar aspirations percolating in the English Department. Our literature program is reorganizing around a textual studies paradigm and our Rhetoric and Writing program has increasingly integrated online components like Electronic Dissertations and eportfolios. All of these trends indicated a migration towards a more digitally-oriented curriculum—a migration that a Scientific and Technical Communication graduate certificate could propel. Working in concert with the Rhetoric and Writing Program, and by including a proposal to help all English faculty develop online courses, Drs. Edminster, Mara, and Blair all applied for an Ohio Learning Network grant for a “Digital Studio.” Using a learning community model, we carved a conceptual space to evaluate, and even migrate some of our curriculum towards an online environment. The studio repurposed then-unused offices and computer labs to host group workshops, one-to-one training forums, and curriculum revision document drafting in order to help stimulate discussions and eventually to help drive curriculum change. The Ohio Learning Network “Digital Studio” grant allowed the three co-Primary Investigators to hire a small staff and fence off time that would otherwise be taken up with teaching, and granted a certain credibility in justifying our declaration of off-hour facilities as studio space. In short, the grant allowed us the ethos to structure an otherwise unauthorized environment. By re-mapping idle classrooms and offices as studio spaces and calling meetings to fill those spaces with digital training or future planning, two non-tenured faculty members were able to triangulate several programmatic needs in the department and eventually create a new programmatic iteration.

**GOING DIGITAL/RECREATING CONTEXT**

While English departments have traditionally deployed a range of common objects, referents and places to define what we do (the classroom, the novel,
Shakespeare, Nineteenth-Century American Literature), many of these referents take on a different embodiment when they go digital. While English Departments have been entirely comfortable disputing which referent should have precedence, there has been a tangible avoidance of discarding these common referents in all but a few universities. Technical and Scientific Communication programs are no different. Stuart Selber’s and Johndan Johnson-Eiola’s recent compilation, *Central Works in Technical Communication* signals a traditional gesture of binding departments, programs, and academic disciplines together with artifacts like editions and anthologies. While this is neither surprising nor alarming, it does signal a sort of disciplinary inertia that we have to face when proposing something more negotiated and ephemeral, like online transactions, as a centrally-organizing principle of a program. In the case of our program, the organizational principle—creating a mutually-negotiated space—involves emphasizing the ground upon which these negotiations can occur.

Much recent discussion has ensued on the role of different types of electronic contexts and contextual aids. Websites, MUDs, MOOs, blogs, WIKIs, and other hybrid electronic fora have all provided fodder for journal, conference, and even blog discussion. Instead of positing which form best facilitates student interaction and learning (along with the multiple political connotations), our program has decided to emphasize the importance of providing the ground and emphasizing the constructedness of both place and agreement. The negotiations will include not only approaches to coursework and pedagogy, as were mentioned earlier, they will also include notions of techne, technology, and even evaluation. Program evaluation provides the tool through which traditional notions of success will be challenged.

Using BGSU’s Provost-championed University Academic Plan (*Inquiry, Engagement, and Achievement*) as both exigence and starting point allowed us an additional measure of freedom in establishing the program. In the Academic Plan, Bowling Green State University emphasizes the new ways to integrate online technology as part of the university learning experience—in fact, the push towards a vaguely defined “New Media and Emerging Technologies”:

> By providing focus to the current activity and a platform for investigation into emerging technologies, we can achieve national prominence in creative teaching, innovative research, and industrial collaboration. (Plan 19)

The push towards new media (officially one of five “themes”) granted potential power to two relatively powerless faculty members (at least in the hierarchy of tenure-line faculty members and administrators). Realigning our program with a broader, university-wide planning document allowed two young professors to
create a future vision that might help staff, senior faculty, and even administra-
tors make future requests for funds (or at the very least, request smaller cuts in
funding).

Seizing upon the general impetus of building a technologically savvy
university, we were empowered by the dean of Continuing Education to craft
our online certificate. As a way to build upon an already large commitment to
online curricula, our certificate presents a wider strategy to migrate online en
masse. Also voiced in the Academic Plan is the university’s renewed commit-
tment “to develop students who seek intercultural and international engagement
and who possess a capacity to relate to diverse others at home and abroad.” The
international focus of the certificate will support this institutional commitment
as well.

Further support for the graduate certificate’s international focus is con-
textually situated in the university’s exchange program agreement with Xi’an
Foreign Languages University (XFLU) in China. Under this agreement, Bowl-
ing Green State University has the flexibility of sending either two or three facul-
ty members or graduate students (holding an M.A.) to Xi’an Foreign Languages
University in exchange for three XFLU graduate students who come to Bowling
Green. Our Scientific and Technical Communication MA Program regularly
accepts and enrolls exchangees from XFLU under this agreement, and S & TC
county have also participated in the exchange, teaching courses in technical writ-
ing at Xi’an and working with Chinese graduates of our MA program to try and
establish a technical writing program at XFLU. As Ping Duan and Weiping Gu
point out in their article, “The Development of Technical Communication in
China’s Universities” (434) technical writing, as a subject of study, is virtually
non-existent in China. At least two of our Chinese MA students have produced
master’s theses documenting the current need for technical writing programs in
China and exploring the feasibility of establishing such programs at XFLU and
other, more technically focused universities. As the need for such programs to
support China’s rapidly expanding technological and global economic develop-
ment continues to grow, an online graduate certificate program such as the one
we have developed may appear extremely attractive to a variety of Chinese busi-
nesses and industries interested in developing employee communication skills as
a long-term, quality management strategy.

When Edminster arrived as a new hire in the S & TC Program in the
fall of 2002, tentative plans for the online graduate certificate program were
already germinating in the mind of the current (and veteran) S & TC Program
director. The desire to create the certificate arose, in part, out of the program
director’s desire to move S & TC from the confines of the English Department.
A year or two earlier, the director had tried to convince the Dean of Arts and
Sciences and the Provost that S & TC belonged in the College of Technology rather than in the College of Arts and Sciences as part of the English Department. The administrators were not persuaded, so the director calculated a different, less dramatic move in the direction of independence—a collaboration with the Continuing Education Program to develop and market an online graduate certificate program. This collaboration coincided with the university’s new initiative—developing and offering more online courses campus-wide.

However, plans for the certificate were embryonic, requiring a good deal of brainstorming and late afternoon coffee as Dr. Edminster and the former program director began to target and assess the needs of a market, to conceptualize courses that would meet those needs, and to negotiate with an associate dean of Continuing Education, who is also a member of the English Department. Many of the potential students for this program are in industry seeking ways to increase job security or to improve their abilities to communicate in an expanded, global market, but lack the flexibility of being able to come to campus for primarily daytime classes. Others reside in other countries, either in residential programs in those countries (including those who teach and/or study at Xi’an) or also working in business and industry without the flexibility of leaving jobs and countries to enroll in residential programs. Still others are seeking upgrades or updating (certification) of skills and knowledge without need for a degree. The program is designed so that students who are enrolled in a degree program can substitute some courses for residential requirements for the degree, while others can pursue the entire certificate program.

Gradually, student performance objectives for the program began to take shape. After completing the program, students were supposed to possess the ability to:

- Create common technical vocabularies within “transaction” cultures as they are socially constructed through intercultural interaction
- Analyze cultural bias
- Employ forms of project management that facilitate intercultural collaborative writing (dialogic rather than hierarchical)
- Apply “learning organization” management concepts in order to learn from diversity
- Develop collaborative relationships that generate mutual knowledge within “transaction” cultures
- Assess and reflect on their collaborative processes
- Design effective usability tests for documents with international or culture-specific audiences
- Develop evaluation criteria for processes and products
• Analyze processes by which specific cultural values interact


In our field, international technical communication has traditionally focused on developing both the awareness and the skills necessary to understand how cultural difference affects communication in various technical contexts and to plan for and design documents that meet the needs of an audience that is both culturally diverse and culturally specific. This certificate program relies to some extent on this traditional approach by teaching such skills as (1) how to analyze cultural bias, (2) how to analyze international and nationally specific audiences, (3) how to design effective usability tests for documents with international or culture-specific audiences, and (4) how to translate the culture as well as the language of technical documents. In addition, the program places significant emphasis upon the growing awareness within technical communication research that the application of static notions about particular cultures on the part of technical communicators can degenerate into the reinscription of cultural stereotypes that obstruct communication rather than facilitate it. Thus, our certificate program also emphasizes the need for technical communicators to understand that: (1) every communication situation is context-specific, (2) although context includes culture, cultures do not communicate with each other, individuals do, and (3) the culture that defines individual international communication situations is a “hybrid” or “transaction” culture, which is constructed by the participants as they interact and negotiate their cultural differences. The certificate is designed to prepare students to function in the global workplace by instructing them in how to apply both knowledge about culture and knowledge about negotiating cultural difference in individual communication contexts. The online certificate will situate communicators from different cultures in a mutually constructed third space via the use of online discussion boards and virtual classroom courseware tools. This hybrid space cannot be mapped out in advance of the communication situation, but instead must be negotiated with the paralogic hermeneutic approach described below.

**PARALOGIC HERMENEUTICS**

As we sketched out the specifics of the certificate building process (some of which occurred before we arrived at BGSU) we found it useful to employ
Thomas Kent’s theory of paralogic hermeneutics as a lens through which to view negotiations between the Department of English and the Department of Continuing Education, which oversees all online course development and marketing at our institution. In his work *Paralogic Rhetoric*, Kent describes a communicative approach that fits well in what Bill Readings might have affectionately called the postcultural university. Kent recognizes the need to serve a wide range of students who do not necessarily buy into a liberal arts or strictly cultural education; he forwards the proposal to refocus education on contextual practice:

Paralogy is the feature of language-in-use that accounts for successful communicative interaction. More specifically, paralogy refers to the uncodifiable moves we make when we communicate with others, and ontologically, the term describes the unpredictable, elusive, and tenuous decisions or strategies we employ when we actually put language to use. (3)

The uncodifiable moves make it impossible to definitively map a curricular path for students (especially considering that we have an active international student population and are seeking to increase our focus on international/post-national communication issues). Instead, our certificate program seeks to acknowledge and facilitate the future interactions/decisions/strategies that our students will inevitably take throughout their time in our program.

In order to help our students articulate the contingent and increasingly-diverse communications scenarios that they will face in trans-national, international, and even intra-national situations, we have shifted our focus from the more concrete matters of “content” to include the more ephemeral matters of setting (online) and even unpredictability as an (un)grounding feature. We are not making radical shifts into relativity, however; instead, our certificate program seeks to distribute responsibility across the range of participants. Kent calls this process of distributed responsibility triangulation:

In order to surmise if our marks and noises create any effect in the world, we require at least an-other language user and objects in the world that we know we share. In order to communicate, we need to triangulate (90).

Kent’s use of the term “triangulation” refers to the interaction between two communicators and the world they share. Other language users and worldly objects take on a different dimension in an online curriculum, especially insofar as we cannot count on common facilities and classroom locations to create boundaries and occurrences as our objects of commonality.
At the same time, this paralogic challenge helps our program enact workplace strategies that students will employ in their future workplace settings. Technical writers increasingly have to face writing situations where they will likely never meet or physically interact with their users. Internal documentation increasingly gets fed into websites that will be read and implemented in different countries. External documentation is likewise sent to multiple places and audiences who never physically intersect (often translated by localizers to match an even greater array of paralogic, triangulated interactions).

**TRIANGULATING IN A THIRD CULTURAL SPACE**

This triangulation provides us with a guiding tool for constructing a new certificate. Classes will include few “plug-and-chug” formulas that give the impression that audiences are unchanging, workplaces stable, and technologies separate from interaction. The pedagogy will integrate the back-and-forth motion between students in group interactions. If triangulation provides a good guiding tool for course construction, it provides an even more powerful heuristic to dealing with the complications we face as new faculty, new program directors, and new technologists.

In order to help students triangulate, we are attempting to simultaneously empower them to participate in meaning-making and to recognize their role in meaning-making. In order to spur communicators who likely understand their possibilities as negotiators of meaning, we have created a program that allows a certain degree of accountability while offering some flexibility in creating a route for negotiating cultural difference within the socially constructed spaces in which students work as technical communicators. Indeed, as Carl Lovitt notes, organizational cultures and professional discourse communities may shape communication in international contexts more significantly than national culture does (8). In his dynamic, process-based model of international professional communication, “international professional communication is constructed by the participants through dialogue, improvisation, and negotiation” (11), a view we think complements Kent’s notion of how paralogy and triangulation as processes operate in any communication context. For Lovitt, international communication situations can “neither be described nor understood as the juxtaposition of two preexisting cultures; rather, the “culture” that defines this encounter is constructed by the participants during their interaction” (10). Through paralogic dialogue and improvisation, a third culture, whose dimensions cannot be anticipated in advance, is negotiated. These are theoretical positions that informed our conception of the certificate program.
THE “OTHER” SPACES OF TECHNICAL DISCOURSE AND ONLINE EDUCATION

As we undertake this curricular re-mapping process, we are also finding it useful to adopt a cultural studies perspective—specifically, a postcolonial one. When they began to administer writing instruction to future engineers, scientists, and students in other technical fields, English departments in effect “colonized” emerging technical discourses arising out of those disciplines. Several articles in the field have questioned the efficacy of the marriage between English and Technical Communication. In a 1994 article, Charles Sides concludes that successful relations between English and Technical Communication programs are rare, and that communications or media studies departments provide a more suitable marriage. And in “Can This Marriage Be Saved: Is an English Department a Good Home for Technical Communication?” Mary Sue MacNealy and Leon B. Heaton report on their results of an exploratory survey to assess the validity of both the anecdotal and documented evidence that “the relationship between teachers of technical writing and their English department colleagues is anything but blissful” (42). Of the sixty-six subjects who responded (39%), thirty were housed in English departments and thirty-six in other departments. The difference in these two groups’ perceptions of departmental support for their programs proved statistically significant. Those faculty whose programs were housed outside English were significantly more satisfied with the level of support they received. Moreover, tenure and promotion problems for technical communication faculty in English departments have been significant enough for ATTW to publish a 180-page booklet on this issue.

Given these misgivings, we chose the postcolonial approach as a way to analyze (and perhaps successfully counsel toward a healthier relationship) this sometimes “odd couple(ing)” of English and Technical Communication. As Bernadette Longo has discussed in her book *Spurious Coin*, early technical communication textbook authors reinscribed in their texts the tension between liberal arts curricula and technical curricula in various ways. Crouch and Zetler’s texts for technical writers clearly differentiated between technical writing and more general composition courses; they encouraged technical students to read more widely by referring them to an appended reading list of canonical literary works. The notion that science and engineering students’ educations were “deficient for producing the type of well-rounded engineer who could understand human issues” (Longo 137) was prevalent among many academics, including science and engineering researchers and teachers themselves (135-137).

Interestingly, however, the tension between curricula played out quite differently in the work of Philip McDonald, author of the 1929 writing text
English and Science, who advocated that technical students would benefit more from reading the histories of civilization and science than works of great literature. Still, the intended outcome was the same—to bridge the gap between the arts and the sciences by implying and attempting to convince students of diverse technical specializations to accept the notion that they possessed a “common background of culture and humanism, which would…weld together the various groups of technical specialists…” (McDonald quoted in Longo 138). The focus on working to efface the differences between technical fields with an appeal to a common humanistic background is interesting we think. We see it as having much in common with politically motivated attempts to “unify” multiple subjectivities and “paper over” difference—difference which might more productively be acknowledged, legitimated, and negotiated. Indeed, the certificate program itself, with its diverse audience (both technically and culturally diverse) will not efface these differences, but rather allow for negotiation and articulation of difference among technical specializations and cultural backgrounds by providing a forum in which to apply, archive and observe the unpredictable and elusive strategies students employ in those negotiations—using the features of synchronous and asynchronous dialogue in the online chat and discussion board spaces of Blackboard.

In any process of colonization, forms of difference are articulated (Bhabha 66-68). With respect to scientific and technical communication programs, these forms of difference are often understood as:

- Differences in style
- Differences in the burden of information carried by text vs. visuals
- Differences in genre
- Differences in purpose
- Differences in audience (includes international now)

However, if we acknowledge, as Bhabha does, that these forms of difference have no “original” identity (as something called “technical communication”) but are, instead, authorial choices that remain “polymorphous and perverse,” that cut across a variety of writing situations variously identified with multiple programs and curricula within English studies, and that always perform a specific, strategic, and contingent calculation of their audience effect (Bhabha 67), then the boundaries drawn around scientific and technical communication programs can become more fluid and flexible, allowing for the establishment of stronger collaborations between and among programs such as the Rhetoric and Writing and Scientific and Technical Communication programs in our own department.
Such fluid and flexible spaces can become highly generative of innovative, hybrid instructional methods and artifacts like our online graduate certificate program. Bhabha’s description of the cultural ‘beyond’ that humanity found itself seeking at the twentieth century is illuminating for us as well. We see that as education moves online, the culture of the academy finds itself in a space/time transition analogous to that which Bhabha characterizes:

We find ourselves in the moment of transit where space and time cross to produce complex figures of difference and identity, past and present, inside and outside, inclusion and exclusion. For there is a sense of disorientation, a disturbance of direction, in the ‘beyond’: an exploratory, restless movement caught so well in the French rendition of the words au-delà—here and there, on all sides . . . hither and thither, back and forth (1).

As members of the academy we find it useful to analyze the subject position of traditional, face-to-face education and its claim to “original” identity among other forms of learning. This analysis will help us “to think beyond narratives of originary and initial subjectivites and to focus on those moments or processes that are produced in the articulation of . . . differences” (1). We see our online graduate certificate program as an ‘articulation of difference’—a collaborative, interstitial space capable of generating an alternative identity for our program. This identity cannot and should not be prescribed by us, but will be shaped by that restless, exploratory, back and forth movement Bhabha describes—a movement emerging from the disorientation and disturbance of direction experienced within our program, the English Department, and the university as we seek our own ‘beyond’ in the world of online education.

There are at least two interstices (Bhabha defines interstices as “the overlap and displacement of domains of difference”) that our certificate program problematizes (2). One is the interstice that emerges from the border drawn between the English Department and the Department of Continuing Education. The other is the interstice generated by the border drawn around the programs of Scientific and Technical Communication and the English Department. We see our online graduate certificate program as a cultural hybridity—an artifact that is emerging in the moment of historical transformation that is online education. We want to exploit the “productive ambivalence” of online education as “Other”—to reveal the boundaries of traditional education’s master narratives and to transgress these boundaries from the space of “otherness” that online education has been constructed as within the academic community.
CONCLUSION

At the same time we use the certificate to help us articulate a new identity for our program from an interstitial perspective, we also seek a new solidarity and community with other programs in the department, such as Rhetoric and Writing, from this interstitial perspective. On the one hand, we want to claim program agency from the in-between space of the overlapping domains of difference out of which our identity has been constructed by the colonial moves of English studies. On the other hand, we want to explore the imaginary of spatial distance—to live beyond the dual borderlands of traditional education/online education, and technical communication/English studies.

Toward these ends, we have successfully negotiated our institutional bureaucracy and received approval from the Graduate College to accept applications for admission to the certificate program. The program is advertised on the university website at both the Graduate College pages (link) and the Continuing Education pages (link). As such, these two links effectively serve as doorways into an as-yet-unnegotiated program space. So as we wait for applicants to materialize and triangulate these conceptual spaces, we continue to reinvent our institution through the perspective of a distant audience.

WORKS CITED