8 Certificate Programs in Technical Writing: Through Sophistic Eyes

Jim Nugent

INTRODUCTION

Technical communication certificates are offered by many colleges and universities as an alternative to full undergraduate or graduate degrees in the field. Certificates typically require only one or two years of coursework strictly within technical communication, and typically can be earned while working full time or while seeking another degree. As Sherry Burgus Little notes in "Designing Certificate Programs in Technical Communication," certificate programs are diverse in their charter and construction. Some programs are geared toward those entering the field, while others are designed to augment the skills of practicing professionals. Some programs are designed to serve those in scientific and technical fields specifically, while others are designed to serve technical communicators more generally. Programs are offered at both the undergraduate and graduate levels, and the courses they require vary widely (Little 276–77).

According to the CPTSC/STC joint publication *Academic Programs in Technical Communication* (third edition), there were sixteen programs offering technical writing certificates in 1985 (Hayes 1). In 2003, the website of the Society for Technical Communication (STC) listed about eighty-four individual certificate programs, representing an approximate fivefold increase in number over eighteen years. Compared to the approximate doubling of the number of technical communication programs overall during the same period (Little 274), we can see certificate programs are an increasingly popular means of meeting the demand for skilled technical communicators.

Despite their increasing popularity, however, surprisingly little information or discussion exists in the current literature specifically about certificate programs. (Excepting, of course, the works presented for the first time in this volume, including Jude Edminster and Andrew Mara's valuable chapter "Reinventing Audience through Distance.") This informational and conversational void is unexpected, as certificate programs are currently situated in the middle of a number of related conversations in the field. With their vocational emphasis,

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certificate programs are potentially the site of conflict "on the issue of *training* opposed to *education,* or in other words, the conflict between theory and practice" (Little 278, emphasis in original). With their role in meeting the needs of local industry, and with their potential as the locations for academy-industry cooperation, certificate programs speak to the conversation of who shapes technical communication programs: academy or industry (Anderson, Bosley, Bushnell, Coon, Krestas, Yee, Zimmerman). With certificate programs' role as a gatekeeper to the profession—that is, the role of "certifying" implicit in their very name—they shape the professional identity of technical communicators and they present a number of significant implications to the project of professionalizing the field (Savage 364–5).

In this chapter, I seek to begin addressing the informational void surrounding certificate programs with the hope of making way for more productive dialog in the above conversations. In addition, I hope to provide some information, considerations, and cautions useful for administrators interested in implementing their own certificate programs. I begin the chapter by relating a two-part study of certificate programs that I performed in 2003. In the first part of this study, I examine sixty-two certificate programs to characterize them in terms of their curricular requirements. In the second part, I perform a survey of certificate program administrators to gauge who teaches in such programs, the age of such programs, and the relationship of such programs to local industry. Finally, I conclude by drawing from the work of Gerald Savage and others to suggest a potential framework for theorizing the certificate program in technical communication, namely sophistic rhetorical theory. Sophistic rhetoric, as Savage demonstrates, can act as a valuable tool for constructing the professional identity of the postmodern technical communicator. Likewise, I argue, it proves to be a valuable tool for theorizing the technical communication certificate program.

SITUATING MY APPROACH

Before I begin, I would like to step back for a moment and explain my (perhaps unusual) theoretical and methodological approach. In the course of completing and relating the work that follows, I have opted to employ a methodology itself informed by sophistic rhetorical theory. Such theory seeks to restore the reputation of the ancient sophists against the critiques of Plato. As part of a flourish of revived interest in rhetoric in general (see Jarratt, Poulakos, Crowley, McComiskey, and Leff), the revival of sophism embodies a potent critique of received Platonic and Aristotelian master narratives: narratives that

inform the modernist belief in a coherent, external, and absolutely knowable reality set in opposition to a stable human subject.

The sophists were—and are—skeptics. Eschewing the foundationalist impulse toward fixed and transcendent Truths, the sophists maintain that a multiplicity of truths exist in any given context. The ancient sophists were travelers; they witnessed localized, multiple truths firsthand and they recognized how to work with them toward their own ends. However, despite their relativistic orientation, as Kenneth J. Lindblom notes, sophists avoid the paralyzing "trap of Pyhrronian skepticism"—"a nihilistic abyss of skepticism that refuses to regard even temporary truths" (93). The sophists are also teachers; the ancient sophists invented the profession of teaching and offered their instruction to any man who was able to pay their fees. Furthermore, the sophist is socially engaged. A sophist believes that the key to meaning-making lies in our social interactions, and not in an abstract realm of Platonic ideals (Jarratt, Leff, Lindblom). The sophists, then, provide a very productive metaphorical and historiographic embodiment of a broader postmodern critique.

Drawing from Susan Jarratt's work on sophistic historiography ("Toward"), Bruce McComiskey suggests that "A certain view of historiography goes along (or *should* go along) with the neosophistic goal of appropriation and methods of mining and transporting doctrines, a view [itself] based on sophistic principles" (56, emphasis in original). As a researcher, then, I have attempted to remain aware that the historical instance that I am examining "does not exist in any *essential* form," and that even if it did, I "can not know it except through the process of interpretation" (McComiskey 56, emphasis in original). My assertions in this study, therefore, do not "strive for cognitive certitude, the affirmation of logic, or the articulation of universals" (Poulakos 37), but rather are grounded in conversations within the field of technical communication and in the needs of those working within the discipline. Put simply, in this chapter I make no pretense of offering anything other than partial, contingent, assailable, contextual, localized—and hopefully useful—knowledge.

Throughout this chapter, I attempt to avoid what Donna Haraway terms the "god-trick": the act of producing knowledge that pretends "to be from everywhere and so nowhere, to be free from interpretation, from being represented, to be fully self-contained or fully formalizable" (196). Although I use decidedly empirical methodologies, I make some departures from their traditional implementation. In Part I, for instance, I develop a heuristic for categorizing the courses in the certificate programs I look at. However, in no way do I conceive of this heuristic as taxonomic or representative: it is not a bijective mapping between the spaces of objective reality and a higher Platonic realm. Rather, I recognize that this heuristic is a product of my perspective on certificate programs,

and it simultaneously—not to mention paradoxically and recursively—shapes that very same perspective.

I have done my best to avoid the rhetorical moves common to "god-trick" scientific narratives: I try to resist using the passive voice to disguise my own interpretive role; I attempt to avoid the familiar conceits of the scientific report genre which serve to obscure its own constructedness; and I attempt to bracket my findings not as articulated universals, but as paths for moving forward in conversation. These ethical moves are what I believe to be necessary to remain consistent with the situated and contingent practice of technical communication as a sophistic profession.

PART I: LOOKING AT CERTIFICATE PROGRAM CURRICULA

As I mentioned earlier, little information exists in the literature about technical communication certificate programs (see Bosley, Hayes, Bridgeford, Little). Little's chapter in the 1997 volume *Foundations for Teaching Technical Communication* is perhaps the most expansive work specifically on certificate programs. Here, Little provides a general review and synthesis of the information on certificate programs found in the four editions of *Academic Programs in Technical Communication* published between 1976 and 1993. While this overview provides useful conclusions about the diversity of certificate programs, it does not attempt a systematic or detailed characterization of them. In this part of the study, I attempt to gauge in greater detail what certificate programs in technical communication require in terms of coursework.

The Society for Technical Communication (STC) maintains an online Academic Programs Database containing information on technical communication programs at all levels, and which served as the origin of this study. This database is publicly available at http://www.stc.org/academicDatabase.asp, and the data held there include the name of programs, the department that houses them, contact information (address, phone, email, and homepage URL), the programs and degrees offered, the number of credits required to graduate, the approximate time of completion, the number of students in the program, the number of graduates per year, and a brief description of the program. In the spring of 2003, I used the database's web interface to select all programs listed as offering a certificate program, yielding 122 records. I copied the data from those records into a Microsoft Access database.

Next, I attempted to visit the websites for all 122 programs using the URLs provided in the database, or by performing a general web search when

I found no working URL. My initial goal was to determine which programs I would include in the study, and then later to collect program curricula and course descriptions from online sources. I selected for inclusion programs that met all of the following criteria:

- The certificate program was expressly in technical communication or technical writing
- The certificate was an independent degree, and was not required to be earned concurrently with another degree as a minor would be (however, programs could prerequire a degree for admission to the program)
- Sufficient information was available online to determine the program's curriculum and course requirements
- The program information was available in English and courses were taught in English

Of the 122 initial records, I determined that sixty-two met the above criteria for inclusion. Of the sixty records that I excluded:

- Six were duplicates of other records
- Thirty-two were misidentified as certificate programs or offered no identifiable certificate program in technical communication
- Nine were for programs that required a concurrent degree (specifically, a bachelor's degree)
- Nine were for programs that did not have sufficient program information available online to determine their curricula
- Four were for programs in a foreign language

I should note that these criteria may be the source of possible selection bias in the results that follow. By excluding nine programs for not having sufficient information online, for instance, I may have encouraged an overrepresentation of digital technology courses, as the lack of sufficient web presence at those institutions may conceivably also reflect the lack of major technology initiatives, training, or funding. In addition, by limiting the study to independent certificate programs (which do not require a concurrent degree), I may have also encouraged a small overrepresentation of industry-connected programs in the surveys for Part II, below. Such programs, lacking the "captive audience" of an undergraduate student body, may have a greater incentive to recruit students and feedback from local industry. Although I don't feel that these decisions significantly impair the usefulness of the data I developed, I do feel that a sophistic approach compels me to point out these possible biases here.

For each of the sixty-two certificate programs I identified, I obtained the requirements for completion from the institution's website or online course catalog. Next, I compiled a list of every one of the 863 non-unique course titles counting toward certificates in these programs. By iterating through this list several times, I developed a course title coding heuristic that identified nine major categories of courses: General Technical Communication/Technical Writing, Technical Communication Genre Writing, Other Writing, Editing, Communication and Rhetoric, Management, Visual Design, Digital Technology, and Miscellaneous. From these categories, I further identified subcategories, and where necessary, sub-subcategories. By making the heuristic hierarchical in this way, I was able to adapt the level of particularity to meaningfully group courses together, while still being able make claims about broader trends across programs. For instance, the Title Software subcategory of Digital Technology is for courses dedicated solely to specific titles of software. In order to determine further what kind of software is being taught—while still maintaining Title Software as a meaningful course category—I created sub-subcategories for the specific types of software titles: Layout and Publishing, Digital Graphics, Documentation and Help, etc.

After refining the heuristic to contain over sixty categories and subcategories—an early indication of the breadth of course offerings in certificate programs—I went on to examine the individual curricula for each of the sixty-two programs, coding their course titles according to the heuristic. In addition to coding the category courses belonged to, I also noted whether they were required or elective according to the following definitions:

- Required courses are courses that are required of all certificate students and are not elective
- Elective courses are courses that are selectable from a list of two or more

In Table 1, I show the data I developed in the course of this study. In the left column, I list the categories and subcategories of the course heuristic. The first column (#R) lists the number of surveyed programs I found requiring at least one course in that category, and the second column (%R) lists the same quantity expressed as a percentage of the sixty-two surveyed programs. Similarly, the third column (#E) lists the number of surveyed programs I found offering at least one course in that category as an elective and the fourth column (%E) lists the same quantity expressed as a percentage of the sixty-two surveyed programs.

The certificate programs I examined require on average 7.6 courses for completion, but they range in number from three to fourteen courses. While a vast majority of the programs follow a typical fifteen-week university semester

schedule, several follow a different schedule according to the policy of their institution—a small few of which are non-academic. Since my primary focus was on the topic of instruction in certificate programs, I made no attempt to record the length of time required for program completion.

The first and most immediately apparent finding of this study, I believe, is that certificate programs include a very wide variety of courses in an equally wide variety of curricula—confirming Little's 1997 conclusions regarding program diversity (276). This is supported by the fact that, in order to meaningfully categorize program courses, I had to develop a heuristic with over sixty different course types. Of these course types, I was unable to identify a single one common to each and every certificate program curriculum, whether as a requirement or as an elective. In addition, I found only one broad course type that is required by a majority of certificates. With such a disparate makeup of programs, I maintain, there is no such thing as a "standard" or "core" technical communication certificate curriculum.[1]

But despite the breadth of certificate programs' course offerings, I found some courses to be clearly more popular than others. The most popularly required courses, I argue, could be said to represent a "not uncommon cluster." These courses fall into the following categories:

1. General technical communication (including introductory and advanced technical communication/writing service courses)
2. Editing
3. Technical communication genre courses
4. Digital technology

The most commonly required courses are in general technical communication, with 71% of surveyed programs (44) requiring at least one. The advanced general course—which frequently goes by the title Technical Communication II or Advanced Technical Writing—is the only specific course subcategory that I found to be required in a majority of the programs surveyed, with 56% of programs (35) requiring it. The next most commonly required courses are in editing, with 45% of programs (28) requiring at least one course in some form of editing (including the subcategories of technical editing, copyediting/proofreading, and grammar). After editing, the most commonly required group of courses are those dedicated solely to a specific genre of technical writing such as reports, procedures, and proposals, with 40% of identified programs (25) requiring at least one course. The most popular genre courses are dedicated to manuals and procedures (with 18% of programs requiring at least one) and computer documentation (with 16% of programs requiring at least one). Fi-

nally, over a third of programs surveyed (22) require at least one course related to digital technology, with courses dedicated to specific titles of software making up the largest portion of both required and elective offerings.

The courses I classified into the "Miscellaneous" category are those that were difficult to meaningfully include in other groups. The most prevalent such courses include projects and practicum courses (with 15% of programs requiring at least one course), internship courses (13%), and courses in usability or human factors (13%). Also within the "Miscellaneous" group, I found that some of the least commonly required certificate program courses provide an interesting glimpse at the competing priorities for certificate programs. A very small minority of the surveyed programs' curricula reflect the historically common situation of technical communication within departments of English: 3% of programs (2) offer a course in literature as an elective, 6% of programs (4) offer a course in creative writing as an elective, and 3% of programs (2) offer a course in the teaching of writing as an elective. While none of these programs went so far as to explicitly require these offerings, they nonetheless reflect the priorities of an English studies curriculum and not necessarily those of technical communication.

However, I found that the least commonly required courses also suggest a different, emerging set of priorities for technical communication certificate programs. One program requires a course in the history of technical communication for certificate completion, and two programs offer such a course as an elective. Meanwhile, two programs require a course in law or ethics, and 8% of programs (5) offer a similar course as an elective. The very least common courses—those that were so singular that they defied classification as anything besides "Miscellaneous–Other"—included course titles such as: Job Search for Technical Writers, Applied Psychology of Technical Communication, Starting a Technical-Writing Career, People Skills for Technical Writers, and Marketing Technical Writing Services. These courses reflect a surprising specificity to individual certificate program curricula, as well as reflect the diversity of technical communication as an emerging discipline.

In summary, I found that the technical communication certificate programs I surveyed vary widely, and no core curriculum can be said to exist among them. The programs I looked at in this study, although disparate and wide-ranging, clearly favor four major groups of courses, which we can consider to be a "not uncommon cluster" of certificate program courses: general courses in technical communication (including the technical communication/writing service courses, particularly the advanced course), courses in editing, courses devoted solely to specific technical communication genres, and courses in digital

technology. Finally, while the least commonly required courses can't be said to reflect the pedagogical priorities of certificate programs most broadly, I believe that they may reflect those of either the past (those of an English studies curriculum) or the future (those of an emerging technical communication discipline).

COURSE CATEGORY	#R[1]	%R[2]	#E[3]	%E[4]
Technical Communication/Technical Writing	**44**	**71%**	**26**	**42%**
Introductory General Course	16	26%	3	5%
Advanced General Course	35	56%	10	16%
Other General Course	17	27%	16	26%
Technical Communication Genre Writing	**24**	**39%**	**25**	**40%**
Reports	6	10%	8	13%
Manuals and Procedures	11	18%	7	11%
Computer, Software, and Online Documentation	10	16%	22	35%
Proposals	6	10%	10	16%
Portfolio and Resumé	1	2%	1	2%
Other Writing	**18**	**29%**	**22**	**35%**
Composition	12	19%	5	8%
Introductory Service Course	10	16%	2	3%
Advanced Service Course	3	5%	1	2%
Other	1	2%	4	6%
Business and Professional Writing	9	15%	7	11%
Science and Medical Writing	1	2%	7	11%
Journalism and Newsletter Writing	2	3%	9	15%
Creative Writing	0	0%	4	6%
Other	2	3%	9	15%
Editing	**28**	**45%**	**27**	**44%**
Technical Editing	15	24%	**8**	13%
Copy Editing and Proofreading	10	16%	**6**	10%
Grammar	8	13%	**6**	10%
Other	0	0%	**1**	2%
Communication and Rhetoric	**17**	**27%**	**33**	**37%**
Speech and Presentation	6	10%	12	19%
Business and Professional Communication	2	3%	10	16%
Public Relations	1	2%	5	8%
Marketing and Advertising	0	0%	6	10%
Interviewing	2	3%	2	3%
Training and Instruction	2	3%	6	10%
Rhetoric	4	6%	4	6%
Other	2	3%	8	13%

(more)

Management	**17**	**27%**	**8**	**13%**
Project Management	11	18%	5	8%
Organizational Management	2	3%	3	5%
Information and Knowledge Management	6	10%	3	5%
Other	0	0%	2	3%
Visual Design	**19**	**31%**	**20**	**32%**
Layout	9	15%	9	15%
Graphics and Graphic Design	6	10%	10	16%
Multimedia	2	3%	3	5%
Photography	0	0%	2	3%
Illustration	0	0%	1	2%
Other	2	3%	5	8%
Digital Technology	**22**	**35%**	**20**	**32%**
Introductory	6	10%	4	6%
General Web	4	6%	10	16%
Desktop Publishing	6	10%	8	13%
Title Software	11	18%	14	23%
Layout and Publishing	0	0%	2	3%
Digital Graphics	0	0%	5	8%
Documentation and Help	5	8%	8	13%
Word Processing	3	5%	2	3%
Web	3	5%	3	5%
Other	2	3%	0	0%
Programming Languages and Protocols	1	2%	6	10%
Database and Information Technologies	2	3%	4	6%
Other	4	6%	7	11%
Miscellaneous	**21**	**34%**	**27**	**44%**
Usability and Human Factors	8	13%	5	8%
History of Technical Communication	1	2%	2	3%
Internship	8	13%	10	16%
Projects and Practicums	9	15%	6	10%
Law and Ethics	2	3%	5	8%
Linguistics	0	0%	2	3%
Literature	0	0%	2	3%
Mathematics	1	2%	0	0%
Print Production	1	2%	5	8%
Research and Critical Thinking	0	0%	9	15%
Teaching Writing	0	0%	2	3%
Other	5	8%	12	19%

TABLE 1: THE DATA I DEVELOPED IN PART I

[1] The number of surveyed programs requiring at least one course

[2] #R expressed as an approximate percentage of the sixty-two surveyed programs.

[3] The number of surveyed programs offering at least one course as an elective.
[4] #E expressed as an approximate percentage of the sixty-two surveyed programs.

PART II: SURVEY OF PROGRAM ADMINISTRATORS

During the fifteenth annual meeting of the Council for Programs in Technical and Scientific Communication (CPTSC) in 1988, the workshop group on certificate programs recommended that the council perform a nationwide survey to "gather information on the context of existing Certificate programs" and to determine the status of instructors in such programs (Hayes 29). In Spring 2003, I sought to respond to this long-unheeded call by surveying the administrators of certificate programs included in Part I of the study. My survey included questions on the size of the program; the status, qualifications, and specialization of instructors in the program; the age of the program, and the relationship of the program to local industry. The survey was sent by email to the contacts specified in the STC database, and of the sixty-two surveys I sent, 42% (twenty-six) were returned complete. The results are summarized as follows:

- Most certificate program instructors are required to have at least a master's degree, and much less frequently, a doctorate. A majority are required to have experience in industry as well. When asked what qualifications were required of their certificate program instructors,
    - 96% of respondents (25) indicated a bachelors degree
    - 85% of respondents (22) indicated a master's degree
    - 31% of respondents (8) indicated a PhD
    - 62% of respondents (16) indicated industry experience
    - 4% of respondents (1) indicated other experience, specifically, "Experience with relevant software or markups such as FrameMaker, RoboHelp, HTML, Word, Powerpoint, Acrobat, Dreamweaver, Photoshop depending on course."
- The mean reported age of certificate programs (in 2003) was 10.4 years, with programs ranging in age from one to twenty-two years
- 54% of respondents (14) indicated that their program makes use of an industry advisory board, while 42% (11) indicated that they do not
- 58% of respondents (15) indicated that their program actively recruits from local industry
- 62% of respondents (16) indicated that their program employs other procedures or mechanisms to gather feedback from local industry, while 35% (9) indicated that they do not

- 38% of respondents (10) indicated that their program requires work in industry as a part of courses required for program completion
- When asked how industry feedback is solicited, the most commonly specified sources were: professional associations such as the STC or the CPTSC (five respondents), followed by feedback from students (four respondents), feedback from internship partners (four respondents), guest lecturers (four respondents), program-sponsored events (three respondents), and alumni contacts (two respondents).

In summary, I found that almost all of the responding certificate programs require a master's degree or better for their program instructors, and a strong majority require instructors to have had industry experience. Most significantly, I found that the programs I surveyed demonstrate close ties to industry: most programs actively recruit from local industry, maintain industry advisory boards, or employ other less formal mechanisms for industry feedback. However, only 38% of programs (10) indicated that they require students to actually work in industry for program completion.

PART III: SOME POSSIBLE IMPLICATIONS

The data and findings I develop here only begin to address the informational void surrounding technical communication certificate programs. In an attempt to draw this work closer into existing conversations, I would like to conclude this chapter by suggesting a potential framework for theorizing the certificate program. As Gerald J. Savage demonstrates in his chapter "Tricksters, Fools, and Sophists: Technical Communication as Postmodern Rhetoric," the sophist provides a compelling model for the identity of the technical communicator:

> [T]he work of technical writing seems to be consistent with a sophistic practice in which knowledge is always contingent, in which rhetorical purpose must be reconciled to the needs of a particular audience at a particular time and place. Technical writing as we find it today has emerged in relation to particular economic, political, and technological circumstances which combine in complex and contradictory ways that make the work our practitioners do both useful and disruptive, both materially rewarding and risky […] Yet these circumstances present us with the strongest argument for accepting the apparently weak role of the non-expert, unrecognized, incompletely professionalized, uncertified, hard to define sophist-technical communicator. (189)

By situating technical communication as a sophistic profession, its members become "politically and socially engaged communicators who recognize the inevitability of their texts as socially transformative" (171). Its members also embrace their status as "liminal subjects," "occupying marginal zones between the subject matter expert and the lay audience, trading status both in the corporation and in larger society for relative freedom to travel across the boundaries of these social-cultural domains" (180).

Certificate programs in technical communication can be seen as occupying a similar liminal zone: that between academy and industry; theory and practice; education and training; local and universal. Just as sophism concentrates on the individual locations and contexts of knowledge production at the expense of universal precepts and monolithic Truths, certificate programs often situate themselves to meet the practical needs of local industry at the expense of teaching more generalizable academic theory (Little 278). Just as sophism threatens the modernist distinction between theory and practice (Leff 24, Scott 193), the situation of the certificate program between academy and industry lends it the potential to collapse theory and practice into postmodern *praxis*. Certificate programs, I assert, are theoretically consistent with—and are poised to support the work of—technical communication as a sophistic profession.

Existing programs, as I explored in this chapter, support this assertion. In Savage's characterization of technical communication as sophistic, the field avoids the modernist impulse to gain professional status and market closure. At the expense of achieving fixity in its professional identity and knowledges, then, the field gains the ability to remain flexible in the face of an ever-changing postindustrial workplace (188–9). As I show in this chapter, existing certificate programs display a programmatic and curricular flexibility that is consistent with this characterization. In Part I, I suggest that the curricula of certificate programs are so wildly disparate that no core curriculum can be said to exist among them. And in Part II, I show that the certificate programs I surveyed display strong ties to local industry, with most employing some means of soliciting industry feedback. These findings together are consistent with a conception of technical communication as a postmodern profession in a market where no standard, universally-required skill set has emerged—whether from the collective needs of industry or as a result of professionalizing gestures from elsewhere.

However, while technical communication certificate programs are decidedly sophistic in their flexibility, this very feature makes them fraught with the potential for appropriation. By embracing flexibility alone, certificates could easily become "value added" degrees that serve the most immediate material interests of schools and students while failing to provide any relevant preparation for the situated practice of technical communication. Fortunately, sophistic

theory addresses this concern by suggesting a number of vital caveats for certificate program design. Platonic curricula—which sophistic curricula can be said to be articulated against—would hold that the practices of technical communication are entirely reducible to formalizable first principles, and therefore such curricula only demand sufficient classroom time to facilitate the "transfer" of formalized knowledge from teacher to student. By contrast, a thoroughly sophistic curriculum must recognize that the practice of technical communication is contingent, localized, and social, and should therefore make space beyond the classroom for students to develop appropriate professional capacities in context. In other words, a sophistic curriculum demands social engagement.

As Susan Jarratt notes in *Rereading the Sophists,* "the sophists could be termed the first public intellectuals in a democracy" (98). Sophism is, by its nature, publicly accountable and "immersed in the adjudication of immediate cultural concerns" (Crowley 318), an attribute that Savage foregrounds in his own characterization of the sophist technical communicator. An important consequence of this social orientation, I believe, is that sophistically conceived certificate programs must include opportunities for students to take their work beyond the walls of the academy. Although I found that the programs in this study demonstrate a commitment to the interests of local industry, the fact that only 38% (10) of the surveyed programs in Part II require students to work in industry for program completion suggests that, at least at a curricular level, certificate programs could do more to prepare students for their social roles in a sophistic profession. This thesis is further corroborated by the findings in Part I: only 13% (8) of the sixty-two certificate programs I surveyed require an internship for course credit, and only 18% (9) require a project or practicum for course credit. Nonetheless, it remains to be seen if programs enact social engagement at other levels: for instance if students already work extensively in local industry, or if individual courses and pedagogical methods already emerge from local needs.

Another strategy that sophism suggests for program design is the incorporation of reflexive professional development. When seen as a sophistic profession, the qualification of a technical communicator is not a discrete skill set that he or she possesses; rather it is a professional *ethos* that he or she has developed. Phrased another way, the identity of the sophist–technical communicator can be seen not so much as a subjectivity (one who possesses knowledge in the Platonic sense), but rather as an *intersubjectivity* (one possessed of a certain *ethos,* or way of acting within and among social realms). This intersubjectivity is not assumable by rote and it cannot be taught through a Platonic curriculum of disjointed courses; it must be developed instead by allowing students to make the connections between their coursework and the social realm of technical com-

munication in practice. This development can be facilitated, I believe, through self-conscious reflexivity.

Such reflexivity is comprised of an explicit engagement on behalf of the student with the issue of what it means to be a practitioner of technical communication. It can take the curricular form of retrospective portfolios, capstone projects, student symposia, close instructor advising, or even developmental journals; but the end goal of these activities should be for students to self-consciously adopt the professional *ethos* of a technical communicator within—and as shaped by—their specific social and cultural contexts. To be sure, such reflexive practice is conceived here not as a Platonic act of philosophical contemplation but as a sophistic act of rhetorical engagement: each of these activities should be constructed with a genuine audience, purpose, and context. Through these kinds of reflexive activities, students are provided with the curricular space to make developmental connections through social and discursive means. Although it is not certain the extent to which the kind of reflective professional development that I am sketching here is a part of current certificate programs, it remains an intriguing issue for future research, as well as a compelling consideration for the design of any technical communication curriculum.

I hope I have made clear that I do not see the value of sophism as a means to excuse programmatic configurations that are convenient, but otherwise inexcusable. Rather, in offering a model of professional identity as an alternative to those of market closure and fixity, sophistic rhetoric provides a more situated and responsible figuration for the technical communicator. As I find in this chapter, certificate programs in technical communication show great potential as the sites for realizing this sophistic model. My research on existing certificates shows that they are consistent with a sophistic model of programmatic flexibility and concern for local needs. However, the sophistic model also provides important cautions for the design and administration of certificate programs. A sophistically-informed certificate program must remain socially engaged, and it should present opportunities for students to work in real social contexts. In addition, a sophistically informed certificate program must be reflective: it should present opportunities for students to reflexively and self-consciously develop their professional *ethos.*

Again, I make no claims to transcendence or universality in the research and interpretations I present here, and I hope that I have avoided any of the familiar rhetorical techniques that would suggest otherwise. I also hope that the information and discussion I have presented are useful—either for participants in conversations within the field or for those considering the development of their own certificate programs. Sophistic rhetorical theory, I believe, provides an

invaluable theoretical model—one that is both descriptive and prescriptive—for building and understanding certificate programs in technical communication.

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NOTES

[1] An identical conclusion was reached about baccalaureate degree programs in a comparable 2005 study by Sandi Harner and Anne Rich. There they conclude: "It is clear from this study that there is no standard curriculum for technical communication programs" (219).

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