

The Role of the Cognate Course in Graduate Professional Communication Programs

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Abstract. The last decade has seen a surge in the number of professional communication doctoral programs. This sudden growth has led to new program administrators around the country rethinking how best to approach graduate study in professional communication. One area is the status of courses taken outside the home department, also known as cognate courses. This article explores the rationale for the various approaches to the cognate course by PhD programs in technical and professional communication. We explain reasons for discouraging, allowing, or requiring the cognate course. And though there are good reasons for each stance, we conclude by arguing for an interdisciplinary approach to doctoral professional communication programs of study that requires cognate courses.

Keywords. cognate courses, collaboration, interdisciplinarity, PhD programs, program administration

The last decade has seen a surge in the number of professional communication doctoral programs. Foundational pedagogical essays in the late 1990s on designing professional communication programs lamented the unfortunate reality of only seven PhD-granting institutions producing trained scholars and researchers in professional communication (Wahlstrom, 1997, p. 301). Today, there are approximately 22 doctoral programs, with more anticipated in the near future. In just the past four years alone, four universities have established doctoral programs in professional communication—East Carolina University, North Dakota State University, Utah State University, and Virginia Polytechnic Institute and State University. The field is growing as never before.

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This sudden growth has led to new program administrators around the country rethinking how best to approach graduate study in professional communication. These new administrative perspectives have led to some interesting experimentation in search of the right mix of coursework and experience for doctoral students. One area in which there is plenty of variation is the status of courses taken outside the home department, also known as cognate courses. These cognate courses, although taken outside the department, relate directly to the student's program of study, even enhancing it by providing a different theoretical approach to the student's project. For example, students with an interest in organizational communication and management may benefit from courses in the business school, or students researching environmental rhetoric may augment their coursework with environmental studies in the department or college of natural resources. In the prior case, one of us, a doctoral student studying the genre and social structures evident in grant proposal writing, took courses in organizational change and training in the business school. These courses have proven valuable for gaining insight into the organizational structures that come to bear in such writing as well as helping to identify best practices and developing interventions for professors and principle investigators engaged in it. In the latter case, cognate courses in environmental history, theory, and psychology allowed another author of this article, a PhD student studying proenvironmental behaviors and civic engagement, numerous opportunities to network with subject matter experts and scholars in the environmental field. Networking has proven valuable in helping this PhD student form a diverse dissertation committee of environmental and professional communication scholars, enriching both the depth and breadth of her research agenda and the eventual contributions to the field.

The institution at which we study and teach requires PhD students to take at least two courses outside the English Department. We have seen some benefits and some difficulties of this requirement, but we knew from conversations with colleagues that many PhD programs do not have such a requirement. Our goal with this article is to explore the rationale for the various approaches to the cognate course by PhD programs in professional communication and closely related disciplines.¹ In the remainder of this article, we report on our research,

¹ Discussions of interdisciplinarity necessarily depend on an understanding of one's discipline. As we describe below, when technical and professional communication scholars speak of their "discipline," however, they are often referring to a number of different areas: technical communication, business communication, professional communication, rhetoric, rhetoric and composition, and English studies. This ambiguity can complicate the notion of interdisciplinarity for the professional communication scholar or student. There has been much scholarly work done on the importance of interdisciplinarity regardless of what is considered to be one's home discipline (see, for instance Johnson, 1998; Klein, 1998;

providing explanations for discouraging, allowing, or requiring the cognate course. And though there are good reasons for each stance, we conclude by arguing for an interdisciplinary approach to doctoral professional communication programs of study that requires cognate courses.

Background

Students are as varied as the programs they enter, but there is one common thread among them all—today’s emerging instructors, scholars, and researchers in professional communication must be prepared to succeed in an interdisciplinary workplace of academia or industry, and they must successfully prepare future practitioners to do the same. A broad, cross-functional perspective is a must in today’s collaborative, global workplace. The reality of the twenty-first century workplace, then, raises questions about how best to prepare students to meet these workplace expectations. In 1998, Robert Johnson encouraged the broadening of technical communication, warning against becoming “defensively monodisciplinary” (p. 76). Johnson (1998) suggested that technical communicators borrow from historians, sociologists, and philosophers, crafting an “interdisciplinary space that we should enter as our discipline grows” (p. 97). Stephen A. Bernhardt (1995) argued that we need to provide students with “a key adaptive ability: the ability to learn new behaviors within new technological environments” (p. 601). This adaptive ability is critical as more and more researchers and practitioners collaborate across disciplines to solve complex problems and address multiple issues that affect more than just one discipline in the workplace. For example, professional communicators collaborate with engineers, computer specialists, scientists, and other subject matter experts in various disciplines. Professional communicators write about health, environmental, social, and economic issues that can affect behavior as well as public policy. Furthermore, professional communicators strategize with marketers, public relations practitioners, and organizational or political decision-makers. All these people may be located as close as down the hall or as far away as another state or country.

The good news is that professional communication programs are not the only ones thinking beyond themselves. Sharachchandra Lélé and Richard B. Norgaard (2005) have noted that interdisciplinary scientific collaboration often breaks down when the participants

Toynton, 2005; Frodeman and Mitcham, 2007; and Brew, 2008). We are here arguing alongside these scholars about the importance of interdisciplinary thought in that it provides us with various points of view from which to address rhetorical situations. To simplify our terminology, however, when referring to the discipline generally, we call it “professional communication.” Utah State University, our home institution, has adopted this terminology in the name of its PhD program because we believe it includes technical and business communication while remaining focused workplace communication. When referring to the programs of other schools and their disciplines, we will use the names they have chosen.

find that their colleagues define the problem quite differently or seek different types of answers. . . . [they] decide that it takes too much effort to communicate and share knowledge within such a disparate group, and happily retreat to their own special fields, where all the participants use the same models of analysis, are comfortable with the assumptions they share as a group, and consequently 'know' the same things. (p. 967)

Julie Klein (2004) has argued that the only way to overcome these disciplinary barriers is to cross boundaries both horizontally (across disciplines) and vertically (across individual experts and the public) (p. 515). Although difficult, interdisciplinary collaboration and communication is almost always beneficial; it makes for greater policy, products, and actions as low-laying barriers are transformed into far-reaching opportunities (Bammer, 2005, p. 1; Lélé & Norgaard, 2005, p. 968).

Just like professional communication, other disciplines are facing complexity, uncertainty, change, and imperfection—the characteristics of modern society (Bammer, 2005, p. 1). More and more, academic and professional communities are beginning to understand the value of crossing traditional boundaries to gain a broader perspective for managing these characteristics. The time is ripe, therefore, for professional communication to reach broader as well, taking advantage of the strengths other fields of study have to offer. Providing students with this breadth is an important goal, and professional communication program administrators are thinking critically about how best to structure curricula. New PhD programs must pay particular attention to building courses of study that train adaptive students since PhD graduates will occupy important positions in industry or academia, training new professional communicators in the workplace or teaching them in the classroom. One strategy for providing the broad background necessary for students is allowing (and, in some cases, requiring) cognate courses to make up a portion of the PhD coursework. Cognate courses can fill an important role in doctoral students' training because they give students the opportunity to view professional communication through the lens of other disciplines, and vice versa.

Research Rationale and Results

Building and sustaining a PhD program in professional communication requires near-constant wrestling with the difficulties of satisfactorily characterizing professional communication and how best to teach it (see, for instance, Allen, 1990; Britton, 1975; Clark & Andersen, 2005; Connors, 1982; and Hart-Davidson, 2001). We began thinking specifically about the role of the cognate course in that characterization when two of us completed the cognate course requirements

in a professional communication doctoral program, and the other became the program's administrator at USU. As noted above, USU's program requires professional communication doctoral students to take courses outside the English Department, and the three of us had many conversations, discussing the utility of such a requirement. These conversations led to this formal research project in which we try to place the cognate course in the ever-evolving definition of professional communication.

Certainly, understanding the role of the cognate course is important for another reason. The political, cultural, and economic issues at play often influence decisions about program design and administration. For program administrators, encountering these generally non-negotiable issues is their reality. Part of the reason we conducted this research was to examine how these programmatic issues factored into the administrative decision-making process. From our research, it is apparent that many professional communication programs weather a variety of political, cultural, and economic undercurrents that reveal the strain of designing and maintaining salient programs for doctoral students.

To investigate the role of the cognate course in PhD programs in professional communication, we contacted the 22 universities that grant PhDs in technical or professional communication.² Between September 2008 and January 2009, we spoke with individuals who are now or have been involved with developing and maintaining these programs, asking them for their opinions about the role of the cognate course in their curricula. And although the departmental requirements are sometimes more complicated than a simple three-part classification system can explain (for example, Purdue), of the 22 programs, we found that fifteen schools allow cognate courses, six require them, and one school discourages but does not forbid them (see Appendix).

In this article, we discuss the place of cognate courses from a variety of perspectives, or recurring themes, which emerged as a result of our research. These perspectives provide a greater understanding of the rationale behind cognate course requirements in professional communication doctoral programs. First, we explain the rationale behind the department that discourages students from taking courses outside the department. There are many issues behind such a decision, including support for graduate faculty throughout the department and a desire to provide graduate students with a broad English background. We then describe the programs that allow, but do not require cognate courses (these include programs that simply allow and some that strongly encourage, as we will describe below). This *laissez-faire* approach gives students the freedom to put together an outside minor that will strengthen the

² As of January 2009, the ATTW website lists 23 institutions that grant PhDs in technical or professional communication.

technical portion of the professional communication degree or deepen their programs in an effort to attract other English departments. Finally, we discuss the programs, our own among them, that require a number of cognate courses to supplement the English department courses. We examine the positive and negative aspects of such a requirement.

Discouraging Cognate Study

One of the 22 PhD programs in technical communication does not quite fit into either category of allowing or requiring cognate courses, nor do they completely forbid students from taking courses outside the department: Purdue University. The Purdue program allows students to take courses outside the English department under very limited circumstances: If one of the required core classes (such as rhetorical theory) is offered in another department (such as Communications), that department's version of the course can be counted toward the degree. Elective credits, however, must be taken inside the department unless permission is obtained, but no mention of cognate courses is made on the program's website. This passive discouragement of cognate courses has two main causes, according to Richard Johnson-Sheehan: (a) There is a sense among the faculty that outside courses will not help the students, and (b) there has not been a lot of demand by the students to take courses in other departments. For Purdue, these reasons make a fair amount of sense. There is evidence for the former that students graduating with a PhD from Purdue tend to do very well on the job market, and this continued marketability has not inspired the faculty to search for ways to change the degree; the program is not broken; so, as the old saying goes, no one is trying to fix it. The lack of student demand is also seen as a good thing: students keep their courses of study focused and are more likely to complete their coursework in a predictable, timely fashion without getting distracted by overly broad classes. Johnson-Sheehan noted that at the University of New Mexico, his previous institution, students would occasionally get caught going in too many different directions with their courses of study; the more focused Purdue program avoids that temptation (R. Johnson-Sheehan, personal communication, January 12, 2009).

On the other hand, Johnson-Sheehan points out that Purdue is not necessarily opposed to the notion of cognate courses; his own PhD work, for instance, was aided by courses he took in Environmental Studies, and he works with many students who could benefit from coursework in, for instance, the History of Science or Environmental Management, courses not available from the English Department. He also notes that there have been discussions among the Purdue faculty for some time about expanding students' options in this regard, but there has not yet been actual movement in this direction. Purdue's

PhD in English has been around much longer than any of the current doctorates in technical or professional communication, and it is housed in a large department more able to staff the number of courses PhD students require. Absent any specific exigence for change, it is understandable that they continue to keep students in their own department.

Allowing Cognate Study

The majority of the technical communication PhD programs allows, but do not require, cognate courses for students. In our interviews with program directors, the rationale for allowing courses taken outside the department tended to fall into one of three groups: definition of the field, administration of the program, or application of the degree.

Administration of the Program

The first reason for allowing cognate courses was, for many programs, less an intentional choice than it was an administrative reality. As many new PhD programs were getting started, the faculty realized they did not have the personnel to teach all the doctoral-level courses students would need. Texas Tech now houses the largest technical communication PhD program in the country, but in the beginning, Joyce Carter noted, they needed some help: "Originally, when we had very few courses and very few students, it would have been administrative suicide to insist our students stay in our courses" (personal communication, September 9, 2008). This need to offer more courses than their original faculties could support drove many departments to allow students to go outside the department for a portion of their coursework.

This sense of dependence on other departments is uncomfortable, though, and the goal for most beginning programs is to eventually build a strong faculty that will be self-sufficient enough to take care of student needs on their own. Unfortunately, political or economic realities do not always make this self-sufficiency possible as soon as we would like. The University of Memphis began its technical communication PhD ten years ago; at the time, they were a small program covering both composition and technical communication, but had planned to expand so they could meet the needs of new graduate students. It is now, however, a decade later, and Loel Kim told us that "we have never caught up in our hiring" for a variety of reasons, and they still need students to pursue courses outside the department (personal communication, September 11, 2008). For instance, they offer an introductory research methods course, but when students begin selecting a primary methodology for their dissertation project, they are encouraged to take additional methods courses in anthropology, education, or psychology.

Even when a faculty is large, mature and offering a large array of courses, some departments still find themselves unable to provide enough diversity for students. Tom Warren pointed out that at Oklahoma State, they teach 19 courses at the undergraduate and graduate levels, and all but two of those can be taken for graduate credit. The range of student interests, however, still leaves them with courses the English Department faculty couldn't teach; one recent example was a management course that, understandably, could not be found inside the department. Therefore, Oklahoma State allows any course outside the department as long as it is approved by the student's committee and the Graduate College. Indeed, Oklahoma State only requires that students take one pre-dissertation class: Introduction to Research. Every other course the students take are electives, none of which must be in the English Department. Most courses tend to be from the English Department, of course, but their flexibility has served students well, as we will describe later (T. Warren, personal communication, September 18, 2008).

Definition of the Field

A program may be initially forced to offer cognate courses as options for students, but many larger programs that could potentially cover their administrative needs still allow students to take courses outside their home departments. As we spoke to program administrators, we began to see that this allowance was due largely to the way we view our field. As long as there have been technical communicators, there have been attempts to define technical communication. We described previously some of the difficulty of these attempts, and there remains today much disagreement over exactly what we're talking about when we talk about technical communication. One commonality, though, among nearly all the definitions we've encountered is what technical communication is not: it is neither simple nor narrow, and many of our interviews revealed the practical consequences of this belief. Texas Tech, for example, which had to allow students to go outside the department to avoid "administrative suicide," still allows, even encourages, students to take at least a few cognate courses. Carter commented that "we still believe that we don't have all the answers—the 'field,' as we call it, is so broad and has such a wide umbrella that's happy to embrace other things, that maintaining outside courses as good things seems very reasonable." Loel Kim told us that the University of Memphis also supports this notion of a "wide umbrella" as they encourage students to learn research methods from researchers across campus. They noted that students have taken programming courses in the computer science department and typography from the art department, coming away better prepared to approach their dissertation research.

Interdisciplinarity is another common theme in technical communication definitions, and it came up as an important part of several program rationales for allowing cognate courses. Roberta Trites, Director of Graduate Studies at Illinois State, noted that the broadening of English Studies generally is encouraging this expansion: "Our definition of the English Studies model is so rooted in our commitment to intradisciplinarity within the field of English that it would seem a bit hypocritical for us to assume students can't gain anything from courses taken interdisciplinarily." Their emphasis on interdisciplinarity is department-wide: they have had students take courses in psychology, art, music, history, Spanish, and French as they seek to stabilize the foundation of their PhD work (R. Trites, personal communication, September 14, 2008). Rachel Spilka at the University of Wisconsin–Milwaukee also that their goal is to provide students with "the chance to develop a strong interdisciplinary education." They encourage technical communication PhD students to take courses in other programs within the English Department (e.g., rhetoric, linguistics, creative writing, and film.) and outside the department. They note that they have had students take courses in psychology, sociology, communication, business, design, and computer science. They believe this allowance is giving students a "broader knowledge and scope of insights" that is serving them well as students and later as professionals (R. Spilka, personal communication, September 9, 2008).

Application of the Degree

The final consideration for allowing students to take cognate courses is less administrative or conceptual than it is practical: the courses help students get jobs. Although many programs are encouraging students to specialize ever more narrowly, especially at the graduate level, many administrators we spoke to noted the value of technical communication graduates in remaining broadly knowledgeable. Scott Sanders of the University of New Mexico mentioned that, while a "tight focus" is beneficial, a "broad base of experience" has been particularly helpful for UNM students on the job market: "Professional writers in the workplace may find a niche over time, but for much of their careers they will range over the varieties of work that are done in large organizations—broad educational experience helps them prepare for broad work experiences to come." New Mexico has placed many students in Sandia and Los Alamos National Labs, and they pointed out that UNM students have tended to "find themselves moving around those large organizations quite a bit in their careers." The broad base of experience they encourage with cognate courses has prepared them to be successful in these variable work environments (S. Sanders, personal communication, September 16, 2008).

A variety of educational experience can also help prepare our students for a variety of professional opportunities. Tom Warren noted that Oklahoma State's

last three PhD graduates have gone into academia, but several PhD students before them went into industry; the only way for us to help our students build their credibility for either situation is to allow them to take courses outside the English Department. Rachel Spilka also believes cognate courses have helped UWM students become more marketable for a variety of careers as they gain experience outside a single department. Even for those students planning to stay and teach in English Departments, Spilka noted that the experience of the cognate courses helps them become better teachers: So many of our technical communication students come from other departments, we are more effective if we approach the classroom with some experience with outside perspectives.

Why Not Require?

With so many reasons given for allowing, and even encouraging, students to take courses outside the home department, we found ourselves wondering why these programs do not simply require cognate courses. Spilka noted that the University of Wisconsin–Milwaukee has students with a variety of backgrounds, some less prepared for study in technical communication than others: “Some MA students come to us with a specialization already, but little background in professional writing and technical communication . . . our goal is for them to take as many courses in our own field as possible, so that they can establish clear and thorough foundational knowledge in our field. We don’t want students to take courses outside our department if they fall into this category” (R. Spilka, personal communication, September 9, 2008). One of us was in a similar situation at the beginning of his master’s program: having come from a bachelor’s program in physics, he needed to focus on building an English background. He took extra literature and rhetoric courses and never left the English Department in doing so. By allowing, but not requiring, cognate study, these programs are anticipating some students who will need a broad course of study and some students who will need to strengthen their English backgrounds.

Requiring Cognate Study

Of the 22 PhD granting programs we investigated, our research revealed that six schools require that courses be taken outside the department. Not surprisingly, rationale for this requirement generally falls into the same three general areas as those discussed for the schools that simply allow courses to be taken. Differences in motivation in these areas become apparent, however, with regard to how program designers and administrators account for their requiring cognate courses. The order in which we discuss these areas changes somewhat in accordance with our observations that those schools requiring cognate courses are generally newer programs. Their more recent establishment

has afforded them the luxury of observing, thinking through, and perhaps even experiencing firsthand what has worked in pioneering institutions. Programs that require cognate courses, based on our interviews, seem to develop curricula by first conceptually defining the field—as well as that development can be done given its interdisciplinary nature. After such definition, these programs may identify their available resources, many of which are found outside their home departments, to pinpoint the best possible administrative and instructional approach, which, based on their conceptual definitions of the field, necessarily includes scholarship across disciplines. Finally, in both the philosophical and practical application of the degree, a distinguishing feature of departments requiring cognate courses seems to be how they place a critical value on emphasizing—and, therefore, requiring—interdisciplinary scholarship. The next sections discuss our findings for these six programs.

Definition of the Field

Regarding how a program defines its conceptual development, it is instructive to remember that many programs are situated within a strong rhetorical foundation. The conceptual shaping of doctoral studies, then, becomes a strong philosophical consideration. Paul Heilker, Co-director of the PhD in Rhetoric and Writing at Virginia Tech, a recently minted doctoral program in technical communication and one that requires outside courses, stressed that “Rhetoric is multidisciplinary, and a complete study demands outside study.” Borrowing a classical rhetorical notion, those programs that stem from programs or professors with a tradition in rhetoric understand that much of professional communication is finding and adapting the best available means for persuasion, and ultimately understanding and meaning. This philosophical direction for conceptually defining what a PhD program should be is illustrated in Heilker’s further comment: “Fully understanding ancient rhetoric texts, for instance, requires a study of classic languages so the texts can be read in the original Greek or Latin. Communication Studies of Science and Technology Studies can also provide this necessary background” (personal communication, September 10, 2008). Scholars at these schools would maintain, further, that as we prepare PhD students to contribute across a wide array of fields and disciplines, those students do indeed need to search out the *best available means* by taking outside courses to become confidently conversant in specific fields (e.g., environmental planning courses to understand environmental rhetoric, management and human resources seminars to better understand organizational rhetoric, and computer sciences classes to gain insight into the intricacies of the rhetoric of artificial intelligence).

Although this philosophical undercurrent may, in many cases, lie in rhetoric, its influence has equally been felt as a matter of continuing precedence as

new generations of PhDs have begun to develop programs. Kelli Cargile Cook and Mark Zachry, designers of the program at Utah State University, for example, acknowledged that in their program conceptualizing the value of relevant rhetorical perspectives available with outside courses to provide “knowledge in a specialized field related to their research.” As philosophical as that decision was for them, they also acknowledged the power of precedence: “At the time we wrote the [program] proposal, [we] . . . had recently graduated from programs . . . that required doctoral students to take courses in other departments. We gained from these experiences and decided to follow the lead of these institutions” (K. Cargile Cook, personal communication, September 9, 2008). Coincidentally, as Cargile Cook indicated, their decision to require cognate courses reflects the luxury of observing, thinking through, and even experiencing firsthand the process at already established programs at other institutions.

Administration of the Program

Conceptually defining a program to follow rhetorical imperatives or even precedent naturally leads designers to program administration considerations. These considerations are the practical issues (including not only a program’s original design and its continued administration, but also those recurring decisions about course offerings that maintain a program’s viability) that must be addressed relative to what resources are available at a school and within a department in which the program’s concept and plan is put into play. As would be expected, each school we surveyed faces its own set of dynamics and internal issues, needs, and protocol. Some programs, such as Virginia Tech, allow students to transfer MA credits. This approach, in effect, fills some of the more basic courses up front, thus allowing the “students to spend more of their PhD coursework on their primary and secondary areas, rather than simply fulfilling required coursework,” outlined Heilker. We recognize, as does Virginia Tech, that not all PhD students in professional communication will have received a masters in rhetoric and writing—or even more broadly, English—but such an approach both promotes flexibility and creates a culture of interdisciplinarity. Tison Pugh, Director of the PhD Program in Texts & Technology from University of Central Florida echoed the need for interdisciplinarity and that students be empowered by such an approach because it brings to the dissertation different perspectives. More importantly, in Central Florida’s case, he said, that when they were establishing the program, they had to set themselves apart from the traditional English Literature PhD so common in the Florida system. Consequently, they focused on texts and technology and emphasized interdisciplinarity (T. Pugh, personal communication, September 16, 2008). Utah State experienced similar needs setting up and maintaining its PhD program as the only doctoral

degree offered in its English department, and, not coincidentally, the only PhD specifically in the theory and practice of professional communication in the Utah system.

In addition to (or, perhaps, in consideration of) creating sustainable program requirements, program designers who require cognate courses have recognized administrative value in pushing students beyond the confines of their own departments. Those programs that allow or even encourage outside study recognize the value of elective courses for creating valuable PhD candidates, a task that students undertake in cooperation with faculty. As co-USU program designer Mark Zachry, now at the University of Washington, explained, “It requires students [not faculty] to formalize thinking about their electives” (personal communication, September 26, 2008). In essence, the requirement initiates intentional planning by students themselves—it moves students to purposefully think about broadening their knowledge base while deepening their individual scholarship.

As students plan, intentionally, their courses of study, they also engage in assistantships and internships. Moreover, they fill their committees, whose members help cultivate emerging scholars. Several program designers have found that requiring students to take cognate courses helps them identify experts in compatible fields outside the department, which, in turn, helps both faculty and students facilitate programs of study. This approach pushes students to identify experts from compatible fields in other departments outside members on their dissertation committees as well as form a network to find research assistantship and internship opportunities. Relative to requiring outside, or interdisciplinary coursework, Pugh also noted that “Our program is interdisciplinary because we are preparing students to work in both academia and industry/business. [This] approach provides students a broader perspective” (personal communication, September 16, 2008). The value of requiring students to think purposefully about how electives fit into their programs of study and research direction seems apparent. If pushing students to think deliberately about courses they take outside the department to promote flexibility, self-accountability, and broad interdisciplinary perspectives, which influences intelligent scholarship by facilitating entrance into academic networks, requiring cognate courses would seem strategically and administratively prudent.

Application of the Degree

Whether practical, philosophical, or political, a focus on interdisciplinarity appears to be at the center of programs that require outside courses. Indeed, it seems to be a fundamental difference in thinking about PhD program design and whether cognate courses should simply be allowed or come with a mandate.

It also appears that the application of the approach, or how the requirement of cognate courses is used to empower a vision of interdisciplinarity, is the key difference from those programs that simply allow or encourage them (and, incidentally, many programs that allow outside coursework also stated that they strongly encourage them). Thus, to apply interdisciplinarity necessitates outside coursework, which, according to the programs that fall in this category, presents a compelling argument for their requirement.

Without a doubt, requiring students to network and learn outside their home department takes them out of their comfort zones. Often, doctoral students in the field come straight from master's programs with little to no experience in the worlds of business or industry. That absence of workplace experience, however, can certainly be compensated for as students look beyond the halls of an English department for marketplace perspectives. Virginia Tech's Heilker may have said it best when he suggested that "pushing students outside their comfort zones is a good thing, and it helps prepare students for a variety of faculty positions, especially at smaller schools where they might be asked to teach a variety of courses." He also pointed out that this capacity for interdisciplinarity helps doctoral students see the academy more broadly. As we work with students pursuing research programs in a variety of different directions, this broad view will be an important asset.

Coming full circle from defining the field and how programs can and should prepare scholars to enter it, moving students out of comfort zones and enabling them to see the academy in a broader scope accomplishes a program's *raison d'être*. It behooves us to anticipate where students (at any level, undergraduate or graduate) are going to be once they leave our institutions and project where they might be in one, five, or ten years from now. On another pragmatic note relative to application, Cargile Cook, now at Texas Tech University, explained, "Interdisciplinarity is even more important for today's PhDs than it was when I graduated in 2000. Having depth of knowledge in professional and technical writing and breadth across one or more other disciplines increases graduates' ability to serve on cross-functional teams and work with specialists in other fields" (personal communication, September 9, 2008). It may also behoove academics in this field to think briefly about the last several job postings they have seen in rhetoric, composition, and technical/professional communication (whether in academia or the marketplace) and then think about not only the preferred but also about the required skills listed in those job postings. The interdisciplinarity principle and its present and future application presents another compelling argument for requiring outside courses.

According to Bernadette Longo, Director of Graduate Studies at the University of Minnesota, the decision to design that program with the requirement

to take outside classes was consistent with the designers' "belief that people in rhetoric, scientific, and technical communication need to have content area expertise in order to practice the RSTC" (personal communication, September 13, 2008). In other words, it may not be enough in today's marketplace and academic arena to be just a rhetoric guru, or an excellent writer, or an excellent editor, or an excellent designer, or a usability expert. Taking courses outside the department is a key ingredient that makes successful PhD students in this field successful beyond the dissertation by providing knowledge both in breadth and depth.

As a peripheral but complementary commentary on the merits of mandating interdisciplinarity, Thomas Friedman (2007), in *The World Is Flat: A Brief History of the Twenty-first Century*, illustrates a real need and plausible call for requiring coursework outside a home department by describing how Georgia Tech recently redesigned its computer science major. He explained that students must take two "threads" out of nine possible threads that include "Computing and Intelligence, Computing and Embodiment . . . Computing and People, Computing and Media . . ." Friedman explained further, "Each thread is a combination of computing with another field, producing a synthesis of knowledge." Finally, Friedman cites a thread's course description (and we will replace the word thread with the word interdisciplinarity),

[Interdisciplinarity] represent[s] a departure from a vertically oriented curriculum whose goal is the creation of students with a fixed set of skills and knowledge . . . [Interdisciplinarity] is a fundamentally horizontal idea whose goal is to give students the broad collection of skills and learning experiences they need to thrive in the globally competitive Conceptual Age. (pp. 327–328)

Such a synthesis of knowledge that results from requiring technical communication PhD students to enroll in classes outside their home departments would surely pay dividends to both of them individually as scholars and instructors as well as to the future of the field generally.

Conclusion

The sudden growth of doctoral programs in professional communication has led to new program administrators around the country rethinking how best to structure curricula for PhD students who will occupy important positions in both industry and academy. The reality of today's interdisciplinary workplace makes this issue even more compelling. A broad, cross-functional perspective is a must in today's collaborative, global workplace. This reality, then, underscores the importance of preparing students to meet interdisciplinary workplace

expectations. One strategy for providing the broad background necessary for students is allowing or requiring cognate courses to make up a portion of the PhD coursework. Cognate courses can fill an important role in doctoral students' training because they give students the opportunity to view professional communication through the lens of other disciplines, and vice versa. More and more, the interdisciplinary community is beginning to understand the value of crossing traditional boundaries to gain a broader perspective. By reaching broader as well, professional communication programs can take advantage of the strengths other fields of study have to offer students.

By exploring the various approaches to the cognate course by PhD programs in technical and professional communication, we were able to more fully understand an institution's rationale for discouraging, allowing, or requiring cognate courses. There are compelling arguments for each position regarding cognate courses, but there appears to be something of a consensus settling on at least allowing students the option of taking courses outside the home department. Twenty-one of the twenty-two PhD programs allow or require cognate courses, and the justification for these two positions touch on similar themes: the practicality of running a PhD program, the interdisciplinary nature of our field, and the marketability of students. The question, then, is whether to specifically require or simply allow students to enroll in cognate courses, and this decision seems to hinge on an evaluation of the possible risks of the two options. The risk of requiring cognate courses is embodied in the students who will come to technical communication from another discipline needing to build their background in English studies. This need is clearly a potential problem, but as Rachel Spilka noted (and as our own experience illustrates), it is largely an issue in master's programs, when students may be migrating to technical communication from scientific disciplines. Indeed, we would argue, this is one of the jobs of master's programs, to provide the background in English studies a potential PhD student would need. It seems unlikely that a student would be prepared for a PhD program in technical communication without a solid foundation in English or writing studies a master's program would provide. Thus, the risk of requiring cognate courses seems rather small.

The risk of simply allowing cognate courses, on the other hand, is much more significant. As many program administrators and instructors know, students too often take the path of least resistance. Given the choice, some students may not take advantage of the cognate course. It's much easier and more comfortable to stay in one's own department. This choice may do a disservice to students, by making them less marketable, and to the profession, by making it less interdisciplinary. Even if only 10–15% of students choose to stay inside their home department, that is one of every 7–10 students who might have

a more difficult time getting a job and a more limited perspective once they have it. There is certainly virtue in letting students make choices for themselves, but we believe there is a significant enough upside to taking cognate courses (along with almost no downside) that professors and program administrators owe it to students to step in and make the cognate course a requirement.

Appendix

Cognate Course Requirements in Professional Communication Doctoral Programs

	Institution	PhD Degree
Discourage	Purdue University	Rhetoric & Composition
Allow	Carnegie Mellon University	Rhetoric
	East Carolina University	Technical & Professional Discourse
	Illinois Institute of Technology	Technical Communication
	Illinois State University	English Studies
	Iowa State University	Rhetoric & Professional Communication
	Memphis, University of	English
	Michigan Technological University	Rhetoric & Technical Communication
	New Mexico, University of	Rhetoric & Writing
	New Mexico State University	Rhetoric & Professional Communication
	Oklahoma State University	English
	Pennsylvania State University	English
	Rensselaer Polytechnic Institute	Communication & Rhetoric
	Texas Tech University	Technical Communication & Rhetoric
	Washington, University of	Technical Communication
Wisconsin-Milwaukee, University of	English	
Require	Central Florida, University of	Texts & Technology
	Minnesota, University of	Rhetoric & Scientific and Technical Communication
	North Carolina State University	Communication, Rhetoric, & Digital Media
	North Dakota State University	English
	Utah State University	Theory & Practice of Professional Communication
	Virginia Polytechnic Institute and State University	Rhetoric & Writing

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