Reformist Possibilities? Exploring Writing Program Cross-Campus Partnerships

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Abstract

This article characterizes WPA collaborations with cross-campus partners using the concepts of interdisciplinarity and outcomes assessment. Interdisciplinarity, as both a mode of collaboration and a context for learning, emphasizes integration of knowledge across conceptual and epistemological boundaries, and offers a way to move beyond traditional divisions of labor. As a mode of collaboration, it offers faculty a way to engage campus partners in an intellectual climate that emphasizes the scholarly status of writing as a field. As a context for learning, it offers students a way to reconceptualize writing and its relationship to their work. After reviewing the literature on interdisciplinarity, we examine the role of outcomes assessment in shaping cross-campus collaborations, and argue for its ability to help establish a climate of interdisciplinarity. We then present the results of a two-phase study that examined the experiences of WPAs and students in cross-campus partnerships. Survey data from WPAs nationwide serves to identify the potential for interdisciplinary faculty collaborations; observation and focus group data from students serves to identify ways in which outcomes assessment can provide a site for interdisciplinary learning. The findings suggest that while interdisciplinarity is both possible and beneficial, institutional barriers often prevent its realization. We conclude with recommendations for future study.

Writing programs have a long history of partnering with departments across campus, and these partnerships have borne fruit in multiple ways—from enhancing students' writing skills to spurring curricular innovations

and providing fertile ground for research. But while we have numerous reports about the results of such partnerships, we have fewer sustained characterizations that situate them within theoretical frameworks for collaboration. Such characterization, however, may offer productive ground for positioning our work in the context of current discussions about the nature of both research and learning. Such repositioning remains part of the ongoing dialogue among writing program administrators (e.g., Townsend; McLeod; Jackson and Morton; Gladstein, Lebduska and Regaignon)–a dialogue often framed by continued struggle with the place of writing in the university and the persistent images of writing instruction as "service" rather than intellectual enterprise. To that end, in this article we explore cross-campus partnerships through the lens of one such framework—interdisciplinarity—and examine the opportunities this lens offers to WPAs, to our collaborators across campus, and to students. Our exploration focuses on two sets of questions:

- How do cross-campus partnerships operate at the faculty level? Are they interdisciplinary? If so, how are they sustained? If not, what hinders them?
- How do these partnerships operate at the student level? Can they promote interdisciplinary learning in which writing operates as a discipline? If so, how? If not, what inhibits interdisciplinary learning?

We begin by using current scholarship on interdisciplinarity to theorize cross-campus partnerships and define their value for both faculty and students. Within this framework, we consider the role that outcomes assessment might play as a basis for creating and sustaining interdisciplinary partnerships. Finally, we present findings from a two-phase empirical study as a starting point for characterizing cross-campus partnerships. The study was conducted by the Center for the Study of Rhetoric in Society (CSRS) and the Virginia Tech Engineering Communications Center (VTECC) and supported through a grant from the Council of Writing Program Administrators, with additional support from the National Science Foundation.

Theorizing Partnerships: Interdisciplinary
Collaboration and Learning

When we began our examination of writing program partnerships, we started with the concept of "reciprocity"–the idea that WPAs who engage with faculty across campus should experience a sense of equality and mutual exchange in which all partners value one another's expertise. Yet

the current scholarship on collaboration in the twenty-first-century university suggests that this framework may not be sufficient to address either the intellectual challenges facing researchers or the learning needs of students. Consequently, we turn to the concept of interdisciplinarity as a lens to explore these partnerships, using the term here as it has been defined by scholars exploring models of collaborative engagement. Over the past decade, interdisciplinarity has emerged in the literature as a critical construct for describing the kind of intellectual engagement that should result when multiple disciplines come together around a central issue (Committee on Facilitating Interdisciplinary Research et al.). Importantly, scholars distinguish "multidisciplinarity," often described as the "divide and conquer" model, from "interdisciplinarity," characterized by complex knowledge synthesis in which participants integrate with and learn from one another (Lattuca, "Learning Interdisciplinarity"; Lattuca, "Creating Interdisciplinarity"; Lattuca, Voigt and Fath; Boix-Mansilla and Duraising; Boix-Mansilla and Gardner; Klein). That is, "interdisciplinary" as used in the literature does not simply refer to partnerships that involve more than one discipline; instead, the term refers to a particular kind of intellectual engagement that has a transformative effect on the partners themselves. Figure 1 illustrates the distinction.
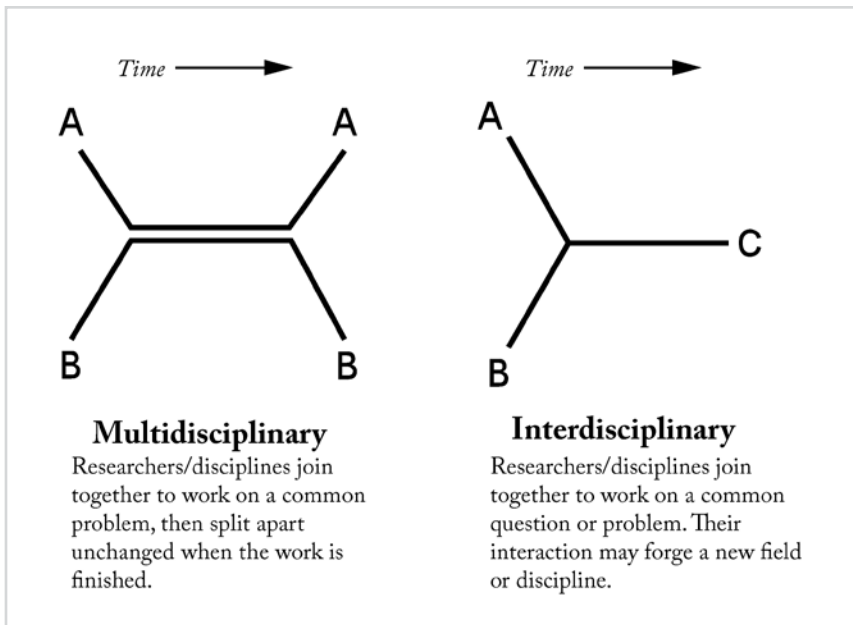

Figure 1. Multidisciplinary versus interdisciplinary collaboration (reproduced from Borrego and Newswander)

Both types of collaboration may be "reciprocal" in terms of interpersonal respect, but multidisciplinary partnerships, which require less cognitive engagement, are more likely to reinforce images of writing as a skill and writing instruction as a service, while interdisciplinary ones hold more promise for engaging with the intellectual substance of the discipline. Multidisciplinary partnerships may be founded on mutual respect, but they may also simply represent service contracts in which one party needs something outside their expertise so they hire someone to do it for them. These partnerships are often faster and easier, but, we suggest, provide less opportunity for advancing the intellectual development of faculty and students.

The Committee on Facilitating Interdisciplinary Research and the Committee on Science, Engineering, and Public Policy, leading voices nationally in promoting research partnerships, define interdisciplinary research as

> a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or field of research practice. (26)

Essential to this formulation is the concept of integration, which involves mutual learning across disciplinary boundaries and the willingness to engage not only with new knowledge, but with new ways of constructing and valuing knowledge. These interdisciplinary partnerships depend on "collaborators' abilities to identify, integrate, and value multiple perspectives and to learn from one another in ways that reshape their own understanding and practices" (Richter and Paretti 31). Both knowledge synthesis and intellectual transformation are key. Interdisciplinary partnerships between writing faculty and faculty from other disciplines include teaching approaches developed by integrating disciplinary practices and research-based writing pedagogy—not simply a "lecture on writing" but an intentional synthesis of the discipline's epistemological and discursive practices and the current research on students' writing development. Lee Odell (in writing) and Burt Swersey (in engineering) implicitly argue for this approach when they suggest

> that writing specialists collaborate with faculty in other disciplines in making explicit—and demonstrating to students—the often tacit processes of thinking that are important for a given assignment in a given discipline. In other words, we pro-

> pose that writing faculty collaborate with their colleagues in understanding and teaching the processes of invention that are fundamental to understanding a given academic subject. (39)

Odell and Swersey's formulation is specifically interdisciplinary because it advocates the synthesis of disciplinary epistemologies. Similar interdisciplinary teaching collaborations have been evident, for example, in the work of WPAs at both North Carolina State University and at Northwestern University. In both cases, collaborations between campus writing programs and engineering disciplines have led to co-authored publications and conference presentations that integrate domain knowledge across fields (e.g., Anson et al.; Blanchard and Carter; Carter et al. "EC 2000"; Hirsch et al.; McKenna and Hirsch; Yalvac et al.; Dannels et al. "Instruction and Assessment"; Dannels et al. "Integrating Teaming").

Beyond addressing curricular matters, interdisciplinary partnerships can also lead to work in which writing faculty and disciplinary faculty collaborate to examine the discursive practices of a variety of fields or the ways in which rhetorical practices shape public reception of information. To an extent, that is the sort of collaboration The New London Group engaged in when they came together to argue for a "pedagogy of multiliteracies." That collaborative consisted of an international gathering of faculty from Communication Studies and Schools of Education in the United States, the United Kingdom, and Australia. The initial product of their 1996 meeting, "A Pedagogy of Multiliteracies: Designing Social Futures," continues to influence the ways we talk about literacy education today. Such partnerships are distinct from studies by writing faculty alone about these topics and from studies in which disciplinary faculty serve as research subjects: while such studies are significant in their own right, they do not reflect the intellectual synthesis among researchers of diverse disciplinary backgrounds that characterizes interdisciplinary work.

In exploring collaborations between engineering and education faculty, Borrego and Newswander examine factors that supported interdisciplinary work. These collaborations provide a useful parallel to our exploration of WPA partnerships: both involve faculty in disciplines that lack a strong research base in pedagogy (e.g., engineering, science, business) collaborating with experts in student learning (i.e., in education and in writing studies). Four factors emerged as keys to successful interdisciplinarity–three at the individual level and one at the institutional level:

- Successful collaborations result when engineering faculty identify the problem and the need for external collaboration with experts in student learning.

- They are characterized by a high degree of interpersonal trust and respect among collaborators.
- Collaborators display a high degree of cognitive flexibility that enables them to recognize, value, and adopt multiple epistemological frameworks; that is, they not only recognize other areas of expertise, but they recognize and can adjust to differences in ways of approaching, studying, validating, and disseminating knowledge.
- Institutional support helps reduce barriers between academic units and provide faculty rewards for the collaborators.

Cognitive flexibility is particularly important, we argue, because while the other three factors may sustain reciprocal partnerships, they are not sufficient to yield the level of knowledge synthesis associated with interdisciplinarity. Such synthesis requires cognitive engagement across epistemological borders. This may be particularly true for WPA partnerships because, as the empirical research presented later in the article suggests, while disciplinary faculty may recognize a problem that requires external collaboration and respect WPAs personally, the inability to recognize writing as a robust academic discipline can limit transformative intellectual engagement in addressing that problem.

At the student level, studies of interdisciplinarity in individual learners also emphasize cognitive flexibility. For example, Boix-Mansilla focuses on helping students develop "the capacity to integrate knowledge and modes of thinking drawn from two or more disciplines to produce a cognitive advancement … in ways that would have been unlikely through single disciplinary means" (16). Her research identifies three dimensions of interdisciplinary competence (Boix-Mansilla; Boix-Mansilla and Duraising):

- disciplinary grounding: the understanding and mastery of content, methods, purpose of inquiry, and genres;
- integrative advancement: the advancement of understanding through the integration of multiple disciplinary perspectives; and
- critical awareness: meta-disciplinary awareness and the ability to consciously reflect on the process of integration.

Students with interdisciplinary competence not only understand the methods and knowledge base of their own field; they also recognize and can integrate knowledge and approaches from other fields. They have a meta-awareness of both the ways in which knowledge structures vary from field to field and the ways those structures can inform and benefit one another. Lattuca et al., in their review of research on student learning in interdisci-

plinary courses, identify similar characteristics and note that such courses can help students develop critical and analytical skills, enhance their ability to view complex problems from multiple perspectives, and increase their ability to navigate this information age in ways that synthesize multiple sources of knowledge.

Why Interdisciplinarity? Opportunities and Barriers

"Reciprocity," the term that sparked this project, moves beyond notions of service to suggest an equal partnership in which participants value one another's intellectual expertise and contributions. But as noted above, reciprocal relationships may remain multidisciplinary even when they involve mutual respect and collaboration. Interdisciplinarity moves one step further, implying that collaborators not only acknowledge the complexity of one another's knowledge domains but also engage in an intellectual exchange that synthesizes elements of those domains to create new shared knowledge. When both faculty and students recognize writing as a discipline with its own domain knowledge, theoretical frameworks, and epistemology, then cross-campus partnerships that integrate writing and disciplinary content can themselves become sites for interdisciplinary development. And given the increasing importance of interdisciplinarity in both research and student development, we suggest that they should operate in this way, despite the difficulty of shifting our colleagues' understandings of writing from skill to discipline. Achieving interdisciplinarity in cross-campus writing partnerships can provide significant benefits to both faculty and students, though creating them is not without substantial challenges.

For writing faculty, interdisciplinary partnerships can help affirm the status of the intellectual work of the field, and thus support WPAs' status as tenurable teacher-scholars. They can, in fact, help create and sustain the kind of scholarly reputation suggested by the 1998 WPA statement "Evaluating the Intellectual Work of Writing Program Administration" (Council of Writing Program Administrators), which describes the need to value the expertise of writing faculty who understand the theoretical underpinnings of both learning to write and "writing as social action" (Cooper and Holzman). Interdisciplinary relationships, because they depend on cognitive flexibility that engages participants across disciplinary boundaries, can lay the foundation for teaching and research collaborations that promote this intellectual work.

One impediment to such engagement emerges from the fact that although writing—and by extension the expertise of writing faculty—is recognized as foundational to undergraduate education, the disciplinary

expertise that WPAs offer is often not well understood outside the field. But unlike other academic disciplines that may be equally ill-understood by non-experts, writing is rarely recognized as a discipline, or even a sub-discipline of English, but is instead often considered simply a skill. This misconception can reinforce any preexisting tendencies toward cognitive inflexibility: if collaborators do not recognize writing studies as a discipline with its own epistemological framework, it is difficult to value that framework and use it to build new knowledge.

The problem arises, at least in part, from the ways in which writing is a verb as well as a noun; that is, it is something university faculty (and many other professionals) do as part of their routine work. Its very pervasiveness makes it difficult for faculty and students alike to recognize it as a field with domain knowledge, theoretical frameworks, and intellectual contributions to the broader work of the university. And because the field of writing studies itself borrows research methods from other disciplines, scholars outside the field don't expect researchers with doctoral degrees in writing to be experts in ethnographic methods, survey research, or other tools of empirical inquiry. At the same time, although many of us use those tools regularly and expertly, many of us also use methods of textual analysis drawn from our literary roots. Thus our own interdisciplinary approach to methods can in turn make it difficult for us to represent our expertise as a discipline in a uniform, consistent way. Given this lack of understanding, often coupled with other political factors, the onus lies on WPAs to explain our disciplinary expertise to colleagues.

For students, being introduced to writing studies as one discipline within an interdisciplinary environment can help them both understand and enact discursive power in a range of personal, professional, and public settings. As a discipline, writing is not solely about providing students with a narrow tool they can deploy in the workplace to enhance their career potential; it is about the ways in which language shapes and is shaped by a variety of social dynamics. Interdisciplinary classrooms can thus help them see writing and speaking as something more than a chore or an ornament tacked on at the end of the "real" work of their field, and help them develop a richer understanding of the process of creating, maintaining, and using knowledge. This understanding becomes a way not only to help students "give voice" to their own experiences as well as the experiences of others (Rude), but also to develop a more complex understanding of the ways in which discursive power operates in the world. But developing this understanding requires, to use Boix-Mansilla's formulation, both integrative advancement and critical awareness. Students need to engage with writing intellectually. When they recognize its multiple societal and epistemological implications and

embrace the field's domain knowledge, it becomes a useful framework for navigating larger cultural and political–as well as workplace–issues.

The challenge of engaging students in this interdisciplinary enterprise is no less than the challenge of engaging faculty. Even the American Association of Colleges and Universities, in its definition of liberal education, relegates communication to an "intellectual and practical *skill*" (emphasis added) rather than part of the "broad knowledge of the wider world" represented by the engagement with multiple academic disciplines (American Association of Colleges and Universities, "What Is"). Students often perceive writing as something they do to communicate their disciplinary knowledge—not a way of thinking but an act of translation conducted after the real work is done. Hence they might speak of "writing up" their work as a separate (and often unpleasant) exercise. Yet in doing so, they risk losing the potential richness afforded by seeing writing as a robust discipline in dialogue with their own.

Despite these challenges, we believe that interdisciplinarity as a mode of collaborative teaching, learning, and research offers both faculty and students a rich framework that not only enhances cognitive growth but also better positions the work of WPAs within the intellectual landscape of the university.

Enacting Interdisciplinarity: Outcomes
Assessment as a Site for Engagement

In seeking ground for moving from multidisciplinary partnerships, with their overtones of service contracts, to interdisciplinary partnerships that foster intellectual engagement, we turn next to the recent prominence of outcomes assessment in higher education, and the pervasiveness of writing as a key outcome. The American Association of Colleges and Universities (AAC&U), for example, although it treats writing as a skill, does designate "written and oral communication" as one of the fifteen central outcomes of a liberal education (American Association of Colleges and Universities, *Liberal Education Outcomes*). Similarly, in terms of disciplinary assessment, ABET, Inc., the agency responsible for accrediting U.S. engineering programs, identifies "an ability to communicate effectively" (*Outcomes*) as one of eleven outcomes that all graduating engineers must demonstrate. Although outcomes assessment can be seen as both burdensome and intrusive, we follow Huot's lead here as he argues that "assessment can and should be not only an important component of a healthy research and administrative agenda but also an integral, important and vital part of the effective teaching of writing" (11). Since outcomes assessment frequently positions writing

as a central outcome of college education, we believe it offers a test of, and an opportunity to rethink, cross-campus partnerships. At a minimum, the pervasiveness of writing as an outcome provides a basis for achieving the first of Borrego and Newswander's four factors–recognition of the problem and need for external collaborators by disciplinary faculty.

A number of recent articles by writing scholars have identified the value of outcomes assessment as the basis for cross-campus partnerships. Hall makes a powerful case for using outcomes assessment as a tool for developing an integrated approach to writing across the university, with a clear sense of the relationships among multiple sites of writing instruction. Thaiss and Zawacki describe the ways in which state-mandated outcomes assessment formed the basis of a series of collaborative workshops among writing across the curriculum (WAC) experts and disciplinary faculty around the concept of assessment, and Peters and Robertson describe the ways in which developing outcomes portfolio criteria can facilitate rich conversations around writing. Bean et al. argue for the ways in which overall institutional assessment can reinvigorate WAC partnerships. Millsaps provides a model for the ways in which an outcomes-based discussion can form the basis for collaboration through the development of a campus-wide writing guide. More narrowly, Williams and her colleagues argue that the shift to outcomes-based assessment in engineering in particular can transform the partnerships between writing and engineering faculty (Williams, "Technical Communication"; Williams, "Transformations"; Williams et al.). Carter et al. address similar issues as they examine the ways in which outcomes assessment in engineering can provide the basis for robust programmatic thinking regarding technical communication ("Assessing"), and recent work by Leydens and Schneider examines the ways in which composition programs in particular have been responding to shifts in engineering education.

In extending this discussion, we believe that the 2000 WPA Outcomes Statement ("WPA Outcomes Statement for First-Year Composition")(see Appendix A), when set in dialogue with other outcomes statements or criteria, provides a fruitful opening for WPAs to establish "collaborations and rhetorical interchanges" (Yancey and Huot) that are interdisciplinary. It does so first by identifying the knowledge domain and disciplinary expertise of writing faculty, and second by pointing towards intersections between this domain and other disciplines across campus. The WPA statement, as a set of outcomes defined and accepted by a body of disciplinary experts, can be set in dialogue with other disciplinary and cross-disciplinary outcomes statement as the basis for collaboration around teaching and learning. Moreover, by defining how faculty "in all programs and depart-

ments" can build on the work of first-year programs, the statement lays a foundation for integrating knowledge across disciplinary boundaries.

Interdisciplinarity in Faculty Program Partnerships and Student Learning: Empirical Research Findings

Situating WPA collaborations within both the research on interdisciplinarity and the climate of outcomes assessment led us to the questions that frame our study:

- How do cross-campus partnerships operate at the faculty level?
- How do these partnerships operate at the student level?

In particular, we are interested in the degree to which these partnerships are not only reciprocal (i.e., founded on mutual respect and equitable benefits to each partner) but interdisciplinary (i.e., characterized by transformative intellectual engagement and synthesis). To address the first question, we surveyed members of the WPA listserv to characterize the experiences of WPAs nationally, including the nature, motivation, costs, and benefits of cross-campus partnerships. To address the second, we conducted a case study of first-year writing sections designed for engineering students that explicitly foregrounded both the ABET and WPA outcomes statements and integrated students' learning across them. These studies, we hope, represent a first step in theorizing WPA partnerships in ways that can help re-position writing programs in the university and shape the direction of future research.

## The Survey: A Picture of Cross-Campus Partnerships

The survey was designed to supplement existing literature on cross-campus partnerships, which suggests a variety of approaches with varying degrees of success. Recent WAC literature reveals a variety of roles taken on by reformist-minded WPAs who are establishing relationships across campus. The WPA is alternately consultant (Bazerman; Peters and Robertson), guest speaker (Chanock); certifier of courses (Brent), facilitator (Thaiss and Zawacki; Anson), preacher informing faculty of their ethical duty (Pennington and Boyer) and justifier of writing programs or initiatives (Mullin and Schorn). Many of these articles tell stories of success, but others, even in noting successes, also describe challenges such as disciplinary stereotyping, resistance to writing pedagogy, and struggles to locate common ground (Brammer et al.). To provide a systematic national perspective on these partnerships, we distributed a survey (Appendix A) to members of the

WPA-listserv. Our goal was to create a snapshot of cross-disciplinary col-laborations established by writing programs nationally, including the ben-efits and barriers, as the starting point for a richer characterization of WPA work within the university. As an initial exploration of these partnerships, the survey does not fully capture nuances regarding inter- versus multi-dis-ciplinarity, but the findings do suggest that the distinction is a fruitful one worth subsequent research as writing program administrators continue to collaborate with campus partners.

Profile of Respondents

Writing program administrators from 50 different colleges and universities responded to the survey; Figure 2 illustrates the institutional demographics:

Figure 2: Respondents by Institution Type (Carnegie Classification)
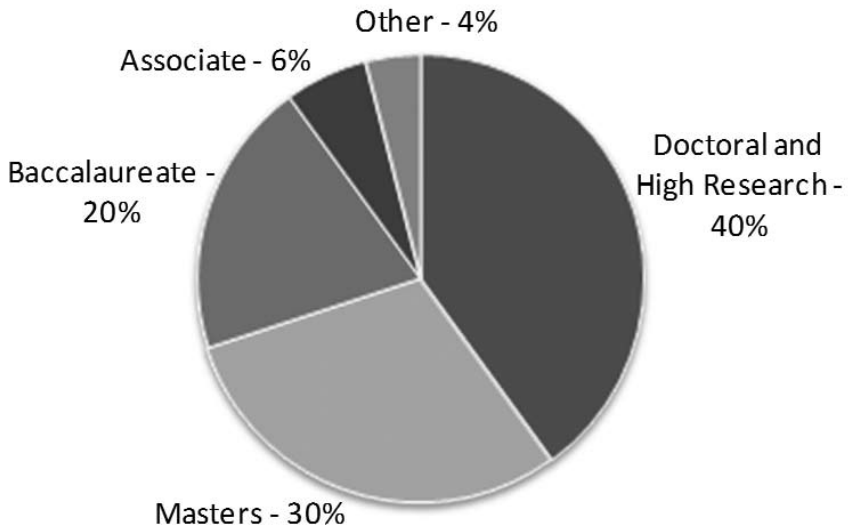
Respondents oversaw a variety of programs, as shown in Figure 3 (note that respondents could check more than one category; clearly many WPAs lead more than one type of program). In terms of staff, 64% of the respondents had a tenured program director, but 52% worked with a staff dominated by instructor/adjunct faculty.
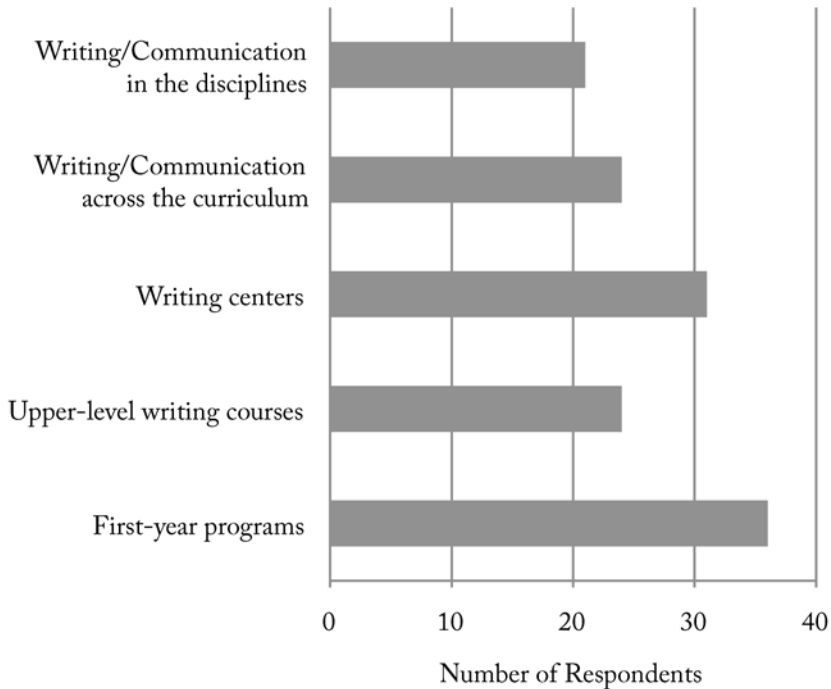
Figure 3: Types of programs that respondents oversee

Profile of Partnerships

Figure 4 summarizes the campus units that partner with WPAs. As these charts indicate, the most frequent writing program partnerships were within the humanities and after that, with general education and social science. Fewer than 50% had partnerships with the sciences, with engineering, or with business, but only 8% had no partnerships. As one respondent wrote, "Not all other programs and units will want to develop a relationship with the writing program; it's not worth the effort to push too hard if there's no positive response." Such comments echo Borrego and Newswander's finding that interdisciplinary collaborations were more successful when the disciplinary faculty identified the need for collaborators with educational expertise.

The most common activities characterizing these collaborations involved faculty development: teaching faculty to design, evaluate, and integrate writing were all reported by approximately 60% of respondents. An almost equally high percentage (50%) of the collaborations involved assessment. A majority (60%) also included one-on-one tutoring, as might be expected given that almost half of the respondents indicated their programs included
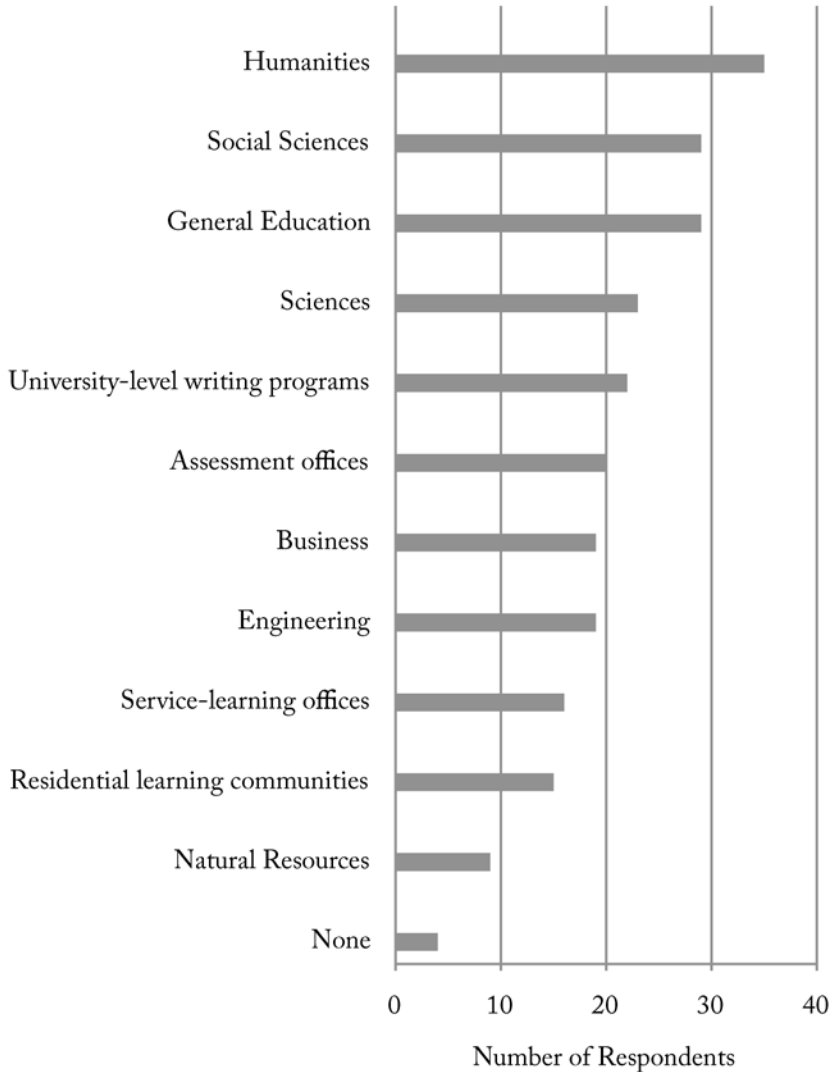
Figure 4: Units that partner with WPAs

writing centers. A smaller percentage included writing faculty providing lectures on writing (38%); team-taught courses, which require more intellectual engagement, were least common (16%). These activities suggest that the respondents have a clear service to offer their campus partners, but the degree of interdisciplinarity remains in doubt.

Interdisciplinarity seems more apparent at the research level, where more than half of the respondents (52%) are also involved in research partnerships centered on the teaching and learning of writing; a smaller percent-

age (34%) conduct research on the role of writing in the discipline. These collaborations do bear fruit, with 36% of respondents indicating joint conference presentations and 26% indicating joint journal articles. Such collaboration points to a measure of intellectual engagement in which the teaching of writing has scholarly value to both partners. What is not clear, however, is whether these joint activities are multidisciplinary or interdisciplinary: the low number of journal articles, which typically require a higher degree of knowledge synthesis, suggest that interdisciplinarity may be limited, a suggestion borne out by the barriers we discuss later in this paper. To better understand the degree of knowledge synthesis, future research could include an analysis of co-authored publications by WPAs and campus partners, as well as a series of interviews with WPAs who have engaged in such projects.

Benefits

Not surprisingly, the responses regarding the benefits of cross-campus partnerships closely mirror the nature of the activities as illustrated in Figure 5. A majority of respondents cited improved student learning as a benefit, while even higher numbers cited a positive reputation for the program and positive relationships with other faculty. As one WPA commented, "Being engaged widely with faculty has allowed us to be viewed more positively across campus and beyond." Such comments reinforce the centrality of interpersonal relationships in successful partnerships. A smaller, though still substantial, number identified gains in scholarly activities more likely to support cognitive flexibility and engagement, again with conference presentations dominating. On the other hand, successful fundraising was more limited. Developing a reputation appears easier than developing a sustainable budget.

Supports and Barriers

The survey also yielded insights into how these partnerships are developed and maintained, as shown in Figure 6. Developing one-on-one relationships with individual faculty was by far the most widely used approach, while relationships with program or department administrators was second. "Relationship-building (what I call coalitions) is the key to sustainability and growth," as one respondent put it. These mechanisms again reflect the need for strong relationships. Linking writing program work to desirable student outcomes, to university priorities, and to accreditation needs also appeared to play critical roles; such strategies align with the importance of having faculty recognize the problem and identify need for pedagogi-
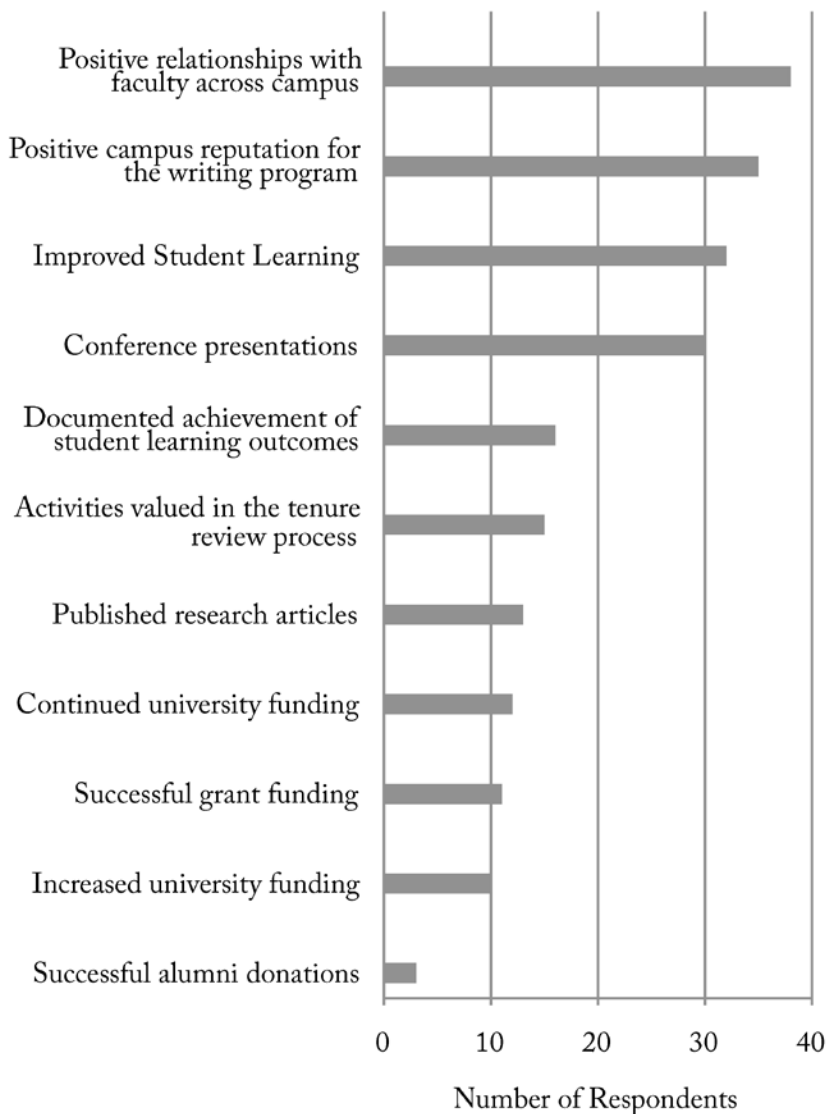
Figure 5: Benefits of Cross-Campus Partnerships for WPAs

cal experts. The responses confirm that both the personal connections and problems associated with recognized faculty needs are dominant factors in establishing successful partnerships and highlight the potential for interdisciplinary engagement.

In contrast, Figure 7 shows the cognitive and institutional factors that create some of the primary barriers to cross-curricular partnerships.
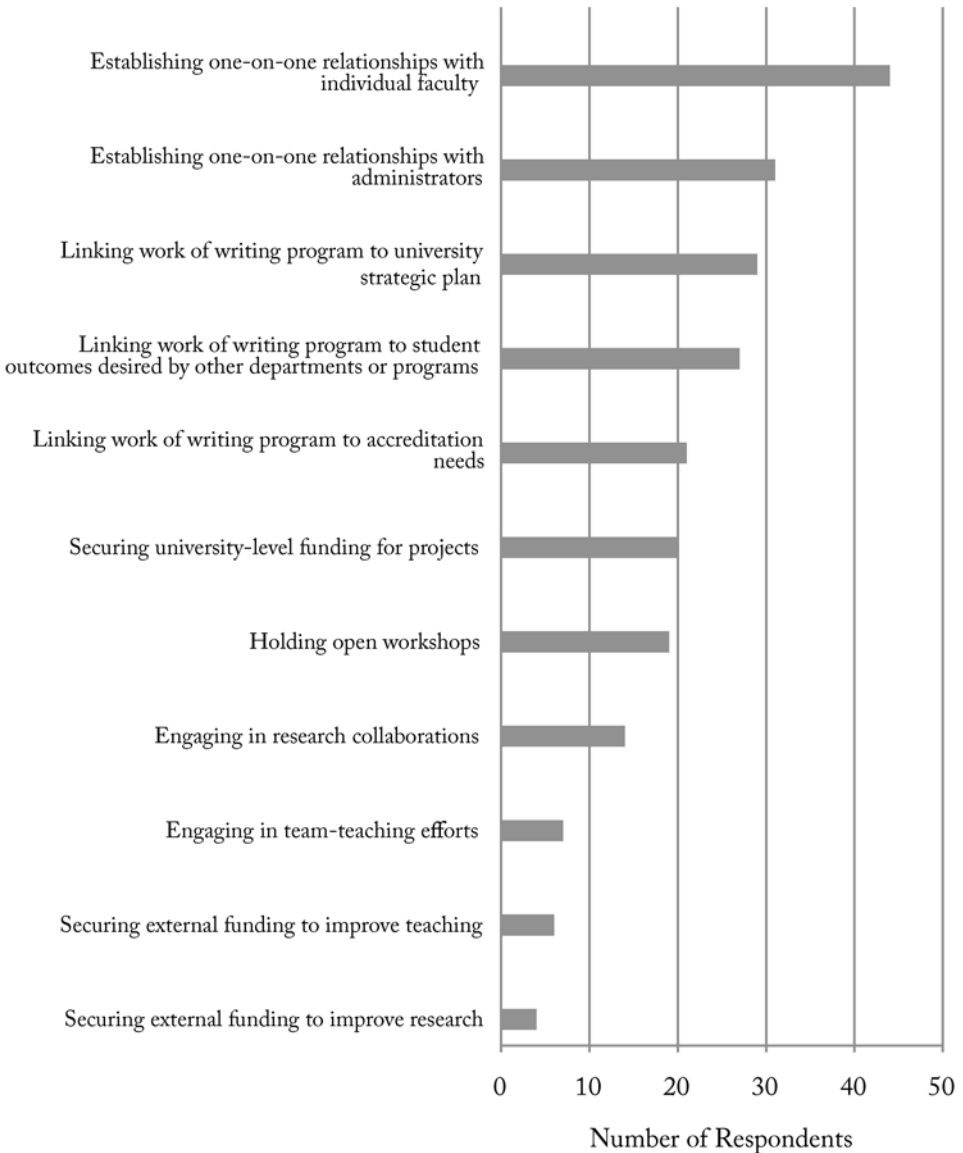
Figure 6: Strategies for Developing Partnerships

Although almost all respondents indicated that they wanted to improve the cross-campus partnerships they have and/or continue to develop new ones, both cognitive and institutional barriers remain strong. At the cognitive level, respondents cited lack of interest on the part of other units, though it is not clear whether lack of interest results from lack of understanding or
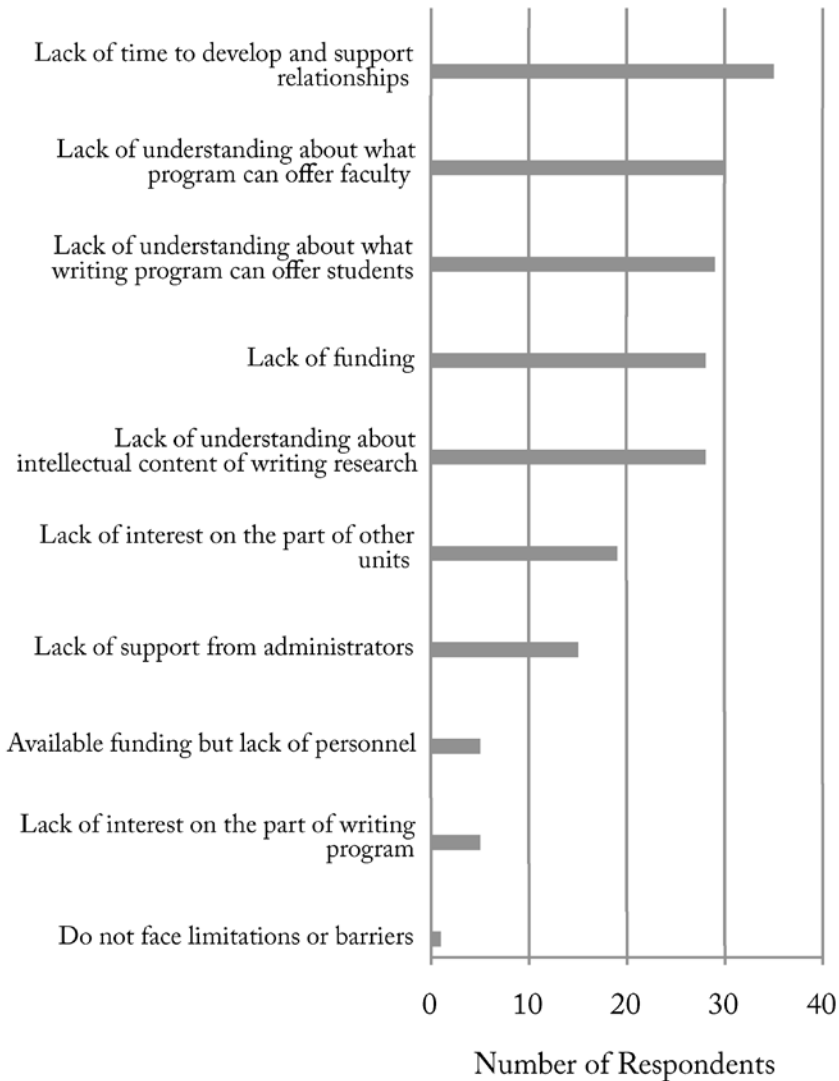
Figure 7: Barriers to Forming Partnerships

more simply lack of time. Its prevalence, however, points to both a potential failure of faculty to recognize the need and a potential lack of cognitive flexibility. This gap represents an ongoing barrier to interdisciplinarity, though the number of WPAs involved in research partnerships is encouraging and suggests that this challenge can be overcome.

Lack of institutional support forms an equally significant barrier, however, including both lack of time and lack of funding. One respondent cited "Lack of funding, the corporate mindset of college administrators, and lack

of vision and reflection of what our General Education Curriculum should be doing," as the key set of barriers. Another noted that "our school's writing program is strangled by administrators' limited understanding of writing instruction, the need for programs to make a profit, and other political in-fighting." Even those who report positive experiences overall continue to face barriers; as one explained, "So much of what is up here sounds good, but funds are tight here and we have not had much luck in that area. I have found that the relationship I maintain with the administrator of the other program is crucial." A general sense of fragmentation and isolation also emerged, exemplified by the description of one university: "In sum, the English Department works within their own 'shop,' and the administration either doesn't care or doesn't care to support activities to help professors collaborate with one another." Such institutional structures clearly act as disincentives to interdisciplinary collaborations.

Summary

The survey responses demonstrate that WPAs continue to forge meaningful cross-campus partnerships, and these partnerships are often strongly rooted in interpersonal relationships founded on recognized needs associated with student learning. However, the degree to which these relationships emerge as interdisciplinary, characterized by a high level of intellectual synthesis and knowledge integration, remains less clear. While half of the WPAs who responded to the survey are forging relationships with an eye toward collaborative research, the tangible fruit of those collaborations is more limited, particularly in terms of more academically valued outcomes such as journal articles and grants. When considered in light of the theoretical frameworks presented earlier, the survey results highlight the clear *potential* for interdisciplinarity at the same time that they suggest fertile ground for future research. Subsequent explorations of cross-campus partnerships could productively supplement this quantitative data with interviews of both WPAs and campus partners that probe the degree of familiarity with collaborators' fields, the changes collaborators have made in their own teaching, and the nature and sustainability of resulting research partnerships.

Case Study: WPA and ABET Outcomes for
Engineering Students in First-Year Writing

Interdisciplinarity might well be achieved through the kinds of ongoing faculty and program partnerships described in the survey, especially as cross-curricular collaborations work to address disciplinary gaps. As important as that outcome is, however, we consider achieving interdiscipli-

narity especially rich when our students begin to recognize it in their own programs of study. To investigate interdisciplinarity in student learning, we turn to a case study that itself represents a cross-campus partnership between English and engineering, though given that all of us either are or have been WPAs, it was a partnership that did not face the cognitive barriers noted earlier. The four of us were at a particularly timely moment in the development of our programs. In the fall of 2005, two of us had been hired with tenure by the Virginia Tech English Department to help develop a Ph.D. in Rhetoric and Writing, to create a Rhetoric and Writing research center (now the Center for the Study of Rhetoric in Society, CSRS), to direct the Composition Program, and to revitalize the Writing Center. One result was a significant revision of the Composition Program. The two-semester sequence that historically focused on analysis of and research related to literary texts now includes writing of all sorts framed by both the WPA Outcomes Statement and two important university-wide outcomes—visual literacy and skill in oral presentation. Consequently, both instructors and students were encountering a course defined more by outcomes than by specific genres or modes of writing. Meanwhile, both the doctoral program and the research center designated a focus on "rhetoric in society," a focus that encourages writing and rhetoric scholars to pursue research questions that often involved interdisciplinary efforts to address social problems and their solutions.

Only two years earlier, the Engineering Education Department had also hired to support the newly restructured department in developing a strong research program and a PhD in Engineering Education. One thrust of this restructuring was the inclusion of communication faculty who would both conduct research and help other engineering departments address communication in the curriculum. The newly hired faculty, in turn, created the Virginia Tech Engineering Communication Center (VTECC) as a home for these efforts. Of the two communications faculty, one has a B.S. in engineering and a PhD in English and had served as the assistant director of the Virginia Tech English Department's Professional Writing Program. The other has a PhD in Linguistics and had served as the assistant director of the Brittain Fellows Program at Georgia Tech. Both have significant experience teaching first-year writing, literature, and technical communication.

Our motivation included both a common interest in outcomes-based course design and a desire to work with like-minded colleagues across campus. Together, we envisioned a project that would advance the intellectual work of writing studies through a first-year writing course that would use the WPA Outcomes and the ABET Outcomes for engineering accredita-

tion (Appendix C) as a basis for helping engineering students not only "develop communication skills" but also forge interdisciplinary identities shaped by a broader understanding of discourse practices. Interdisciplinary thinking was central to the learning goals, and we were especially aware of the ways in which the WPA Outcomes, which emphasize analytical thinking, a process-oriented approach, collaboration, and life-long learning, paralleled many of the ABET Outcomes. With these connections, students would perhaps not experience the first-year writing course as just another requirement to get "out of the way" before they could progress toward their engineering degree.

As much as we wanted students in engineering to begin to see communication as key for their work as engineers, we also hoped they would experience a stronger sense of academic integration, understand the power of discourse as it operates in social as well as professional settings, and more fully embrace the value of a liberal education. For the Engineering Education faculty, a first-year composition course, framed by WPA Outcomes, had the potential to not only address a full range of professional practices, but also expand students' understanding of the value of different ways of thinking. For the Writing Program faculty, a first-year writing course designed for a cohort of engineering majors had the potential to encourage students to make connections between the aims in the engineering curriculum and the outcomes for first-year writing in ways that enhanced their rhetorical understanding as well as their ability to write. In other words, we wanted to create an interdisciplinary relationship between the WPA Outcomes and the ABET Outcomes in hopes of enriching students' metacognitive awareness of their education and promoting intentional, self-directed learning.

Our collaboration itself reflects an attempt at institutional interdisciplinarity in the form of a "cross-campus partnership" between the first-year composition and first-year engineering programs. Intellectually, we shared a common understanding of writing as a discipline and had already satisfied the first three of Borrego and Newswander's criteria (problem identification, interpersonal trust, and cognitive flexibility). Institutionally, however, we belonged to academic units with differing priorities in terms of both research and teaching, and thus our collaboration faced significant structural barriers. And indeed, one of the first barriers we faced was institutional: the challenge of setting up cohorts of engineers in first-year composition required significant administrative time on the part of the English department. Perhaps equally important, despite the fact that we had known one another for some time and we shared a commitment to enhancing students' first-year experience, the project only gained traction once it involved

funded research. External funding was essential for engaging both CSRS and VTECC, and thus enabling three of us to link the teaching work to our primary mission as researchers. And even for the first-year composition director, external funding provided both institutional incentive and institutional justification for engaging in efforts outside the "normal" workload.

Course Overview: An instructor from the English department, who herself had a background in creative writing, technical writing, and literary studies and an interest in technology and society, volunteered to teach English 1106, our second-semester composition course, to two cohorts of engineering students. To create an integrated syllabus, we met with the instructor to discuss approaches that might invite students to make connections. Our interest in interdisciplinarity led us away from efforts to bridge writing and engineering by incorporating technical documents such as proposals, laboratory reports, and design reports into engineering courses. The literature is rich with strategies for effectively creating such bridges (e.g., Catalano; Linsky and Georgi; Mahan et al.; Shwom et al.), but this pattern, while effective in improving students' communication skills, leans toward the multidisciplinary model in which writing is subsumed into engineering as a supporting skill, rather than an interdisciplinary approach in which a rich understanding of the discipline of writing is designed to foster broader ways of knowing and understanding discourse.

Similarly, rhetorically-based approaches to integrating communication into engineering courses have been described by a variety of scholars (e.g., Hodges et al.; Douglas et al.; Alford and Rocheleau), but again these partnerships tend to position rhetoric in the service of engineering thinking and learning. The distinction here parallels Leydens and Schneider's recent historical summary of the "culture-utility" debate surrounding the relationship between "English" and engineering—at its simplest, are we broadening students' educational experiences (culture) or providing them with workplace skills ("utility")? As they note, the debate is not yet resolved, though their empirical data suggests a number of promising new partnerships between compositionists and engineering faculty. Downs and Wardle's recent proposal to treat first-year composition as an introduction to writing studies is closer to the kind of structure we sought, although their conception does not explicitly engage cross-disciplinary partnerships. Their work, and the lively discussions that followed it, delineate ways in which writing faculty can foreground the intellectual disciplinarity of the field.

In creating this case study specifically to foster an atmosphere of *equal* intellectual exchange and *synthesis* between the two disciplines, we emphasized two factors: (1) the integration of engineering into the first-year composition program (rather than the other way around) and (2) the explicit

connection between two separate outcomes statements as a vehicle for integrating students' learning experiences. Thus the course did not attempt to teach technical writing to first-year students or integrate composition into engineering. Instead, as with all sections of composition at Virginia Tech, it was structured around the WPA Outcomes. It did, however, bring ABET Outcomes into the course explicitly as part of the learning framework.

The course centered on the theme of Ethics and Creativity and used Mary Shelley's *Frankenstein* as a springboard for exploring the complex nature of technology and the possible unintended consequences of engineering solutions. The course emphasized "creation/design and the ill consequences of abandoning one's creation" where "published work by women and minority writers offer[ed] voices frequently not heard in the engineering profession, and [was] used to promote discussions of the responsibilities and complexities of the work engineers do." Working with this theme, the instructor routinely connected issues in the course to issues within engineering. In addition, students completed one reflective assignment that foregrounded two sets of outcomes: in response to *Frankenstein,* they worked in teams to present oral arguments debating the ethics of Victor Frankenstein's actions; each student was then asked to reflect on three questions pertinent to our study:

- What ABET Outcomes did you address in this group work?
- What WPA Outcomes did you address in this group work?
- What correlations did you see between ABET and WPA outcomes?

Additional assignments included generating research problem statements centered on engineering education and interviewing individuals from engineering (students or professionals).

Data Collection

Data for this study included a survey that asked students to compare/contrast the two sets of outcomes, participant observer and instructor field notes collected over the entire course, students' reflective assignments, and end-of-semester focus groups.

Survey Findings

As described in more detail elsewhere, the survey responses were encouraging (Paretti et al.). Every ABET Outcome appeared at least once as a point of intersection between the two sets of outcomes, suggesting students could see broad applicability of the WPA Outcomes. While "the ability to communicate effectively" was cited most often, many students also noted

overlap concerning the ability to analyze and interpret information and the ability to follow a process. The results suggest that students can explore programmatic outcomes and identify ways in which the work they do in their first-year composition course can support their development as engineers. Perhaps most importantly, they recognize that such support is not limited to the mechanics of writing, or even metacognitive knowledge about communicating across various contexts, but encompasses analytical thinking and a process-oriented approach to design and problem-solving.

At the same time, in terms of interdisciplinary thinking, the survey responses are less encouraging. The students could readily identify ways in which the WPA Outcomes supported their work as engineers, as suggested by the following example comments:

> I learned to communicate better by learning to write better. My dad is an engineer and he said that his biggest problem with his employees is their ability to communicate with him.

> The [English] class reinforced the ability to communicate effectively.

> The essays helped me in writing my Engineering team project.

Yet only one response included any discussion of the ways in which the ABET Outcomes, or what students were learning in their engineering course, supported the WPA Outcomes. No one, for example, considered the ways in which learning engineering design, with its systematic process and focus on customer needs, might enrich their understanding of rhetorical knowledge. Most treated the English class as something that would help them in their work as engineers, rather than as a potential source of interdisciplinary learning. If we return to Boix-Mansilla's formulation for interdisciplinary development, these students are beginning to establish disciplinary grounding within engineering, but the surveys show little evidence of integrative advancement through *multiple* disciplinary perspectives, and their critical awareness appears limited to the ways in which they can apply skills rather than integrate epistemological perspectives. These findings, like those from the reflective assignments and the focus groups described in the next sections, are not surprising–these students have all selected engineering as a career and are in college primarily to prepare themselves for that career. Their perspective reinforces the challenge of fostering interdisciplinary thinking where writing itself stands as a discipline.

Reflective Assignments
Students' reflective responses to their in-class debate about Frankenstein's ethics yielded similar findings (Paretti et al.). They could articulate the

importance of rhetorical knowledge in creating their debate presentations ("focus on a purpose," "respond to the needs of different audiences"), and consistently talked about defining their purpose and considering the needs of their audience (in this case, their classmates). Some described ways in which they used the audience's responses to adjust their presentations as they spoke, and they could clearly connect this skill to the ABET Outcome on communication. Participant-observer data confirms this connection: students seemed to welcome the opportunity to practice presentation skills and embraced an assignment in which they were to construct a persuasive argument about technology and society because both seemed relevant to their careers. Again, however, the responses focused on the ways the assignment and the WPA Outcomes served the goals of the ABET Outcomes.

Students could also connect this assignment to the ABET Outcome associated with professional and ethical responsibility. Several noted the ethics of carrying their weight on the team and the larger ethical dilemmas raised by the novel. Disturbingly, though, students' ethical analysis of Victor Frankenstein tended to blame his professors for failing to teach him ethical behavior, and they seemed to believe that this "teaching failure" absolved Frankenstein of responsibility. In the debate over his actions, the team that represented the monster's perspective was the most attacked, and the class regarded Dr. Frankenstein's irresponsible methods as less vile than the monster's irresponsible willingness to kill human beings. They didn't consider the monster as a technological creation blending the artificial and the human, but instead treated him as a human being with free will. On the other hand, because the doctor did not learn appropriate ethical behavior from his professors, they believed he could not be held fully accountable for his actions.

A number of reflections also noted overlaps between the assignment and the ABET Outcomes in terms of both analyzing and interpreting data and working in teams. Students could connect their need to use evidence from the novel to support their argument and their need to collect and analyze data to support engineering decisions. Many also commented on the importance of teamwork and described the ways in which the project helped them learn to collaborate. Overall, these students not only recognized the importance of communication and collaboration to their engineering careers, but also identified the ways in which non-engineering courses could build those skills. However, while they provide substantial evidence that the outcomes did help students reach a clear understanding of the usefulness of the first-year writing course as a tool to develop necessary skills, the reflections provided little data to suggest the development of interdisciplinary thinking.

Focus Groups

The focus groups present a similar picture: students could articulate the value of communication to their careers as engineers, but they struggled both to define the WPA Outcomes and to see ways in which their engineering work might enhance their understanding of writing practices or the power of discourse. As in the survey and reflection responses, students could identify the ways in which communication and teamwork in particular would be important to their engineering careers. As one student explained,

> I know that I definitely think about a lot of the comments, just reading over my graded papers I can think of several comments that I can take into my engineering. Because we're writing a design project right now that's probably 10 to 15 pages long, and I mean I've focused the entire project toward a certain audience who my writing is for.

Another noted more broadly,

> I think this [English class] is a good class for freshman engineering because I know that in the past I really didn't learn that much about what exactly engineering is. Especially from like a literary perspective and I like to learn literarily … sometimes. And this class gave me a better idea of what engineering was all about and not just in the theory that I'm interested in but like all the areas.

When pressed, however, the students seemed to have a difficult time, even after almost a full semester, defining some of the concepts in the WPA Outcomes document (including rhetorical awareness); their discussions were continually dominated by the ways in which the course served their needs *as engineers,* as the comments above reflect. Again, not surprisingly, the WPA Outcomes document, and hence the course itself, seems to have value to the students in large part only to the extent that it better prepares them for their careers.

While the focus group responses provide no more indication of interdisciplinarity than the other data, they do offer at least one possible explanation for the gap: placing students in cohorts by major–even in a non-major course such as first-year composition–may work against interdisciplinarity because it represents yet another form of disciplinary isolation. The focus group data revealed two divergent responses to the cohort. Some students (typically women) felt that it provided them with a more comfortable classroom environment, a place where they could easily be understood, where

they related to their classmates, and where the teacher understood their perspective. "When I come to this class I'm like alright it'll be okay to talk about computers and not be called a nerd or a geek," one explained. Another noted, "I like being just like with engineers because I've been I think in one class, which was German last semester that wasn't engineering you know, and I didn't really enjoy it as much as I would my engineering classes." In contrast, others saw the cohort as too insulating, adding yet another "engineering" course to a curriculum that left little room for an interdisciplinary development. The cohort focus, in fact, may have limited students' ability to engage in interdisciplinary learning:

> . . . most engineers view [this English class], even if it's, you know, engineering kind of topic, that it's our last English class, okay, let's get it over with let's pass it, but yeah that's not necessarily a good thing to bring, so maybe if we combined you know forces with you know different people that maybe there's some English majors, maybe there's some psych majors, but you wouldn't have that kind of negative let's get it over with kind of approach.

Another talked more specifically about missing other perspectives in the course, stating, "I just think we miss out on that perspective. We all get the same engineering perspective on stuff. ... it's just another engineering education class just with a spin on composition, really, in my opinion. So it's frustrating in that aspect, because I already have 17 other credits of that, or whatever." That same student went so far as to comment that he felt "cheated out of like a real English class."

These comments about the ways in which the cohort experience forced them to focus yet again on engineering without others' perspectives suggests that even as outcomes-based course design may offer opportunities for interdisciplinary engagement, narrowly defined cohorts may defeat those opportunities. They may, in fact, limit integrative advancement by limiting the range of perspectives on writing as well as on other subjects, and thus increase rather than reduce barriers to understanding discursive power.

The Partnership

Just as the case study findings highlighted the limitations of the cohort concept in supporting interdisciplinary learning, the collaboration itself highlighted the structural barriers associated with cross-campus collaboration. Engaging two large programs in a sustained collaboration represented a significant administrative hurdle. No further attempts to create cohorts by major–either for engineers or for other campus units–have emerged,

though the first-year writing program remains committed to the WPA Outcomes. The engineering program, though recognizing the importance of communication instruction at the first year, remains overburdened with disciplinary content and still struggles to find meaningful ways of addressing this need. Thus although the partnership held strong potential for enhancing student learning, the institutional challenges proved, at least for now, insurmountable.

In the same way, although the research collaboration did include external funding and has led to both conference and journal publications, the project remained small in comparison to other funded research for both CSRS and VTECC. As a result, it was easily surpassed as a priority given the departmental expectations regarding research productivity. As colleagues, we continue to share a commitment to student learning and we remain in touch via various university functions. Moreover, the study findings have enhanced our intellectual work as we examine both student learning and the politics of collaboration in the university. But large-scale transformation has been limited; the partnership provided an opportunity for four colleagues to bring their shared interests together in an interesting project, but a significant lack of structural support (most specifically in terms of funding) has limited the reach of our work. Given that the partnership began with all three cognitive components of interdisciplinary collaboration in place, our outcome, though only a single case, supports the survey results in highlighting the role that institutional support plays in sustaining the work of interdisciplinary partnerships.

Conclusions

We began this study with the concept of interdisciplinarity as a framework for re-examining writing program partnerships; by emphasizing knowledge integration and synthesis across disciplinary boundaries, interdisciplinarity offers a way to both enhance the disciplinary status of the field and foster critical dimensions of student learning. Our examination of faculty and student experiences of these partnerships suggests both possibilities and cautions. Clearly, WPAs in a variety of programs and institutions continue to forge compelling partnerships with faculty and programs across campus; on this count, the survey findings echo recent work by Thaiss and Porter, Leydens and Schneider, the 2008 results from the National Survey of Student Engagement writing questions, and numerous conference presentations and journal articles by individual WPAs describing these partnerships. That these partnerships are thriving and improving student writing seems clear both from our survey and from many of these other studies.

And increasingly, outcomes assessment plays a key role in these partnerships as a way to define a critical set of needs and establish common ground for collaboration, dialogue, and mutual respect.

In characterizing these faculty collaborations, however, what remains in doubt is the degree to which "writing" has moved from a service designed to teach important skills to a field with a rich intellectual contribution to make both to contemporary research and to student development. Our survey data suggest that at least some of the partnerships bear markers of interdisciplinarity as they result in both high levels of interpersonal respect and research leading to publication. At the same time, both cognitive barriers (characterized by lack of understanding) and institutional barriers (lack of time, funding, and recognition) continue to inhibit robust, engaged interdisciplinarity. With respect to these issues, the quantitative data presented here serves only as a first step in developing a more robust theory of WPA collaborations. In-depth qualitative case studies of multiple partnerships across a range of contexts, for example, would offer fertile ground for exploring both the cognitive and the institutional components in more detail. Future research might consider questions such as these: How do partners characterize one another's disciplinary expertise? How do collaborations influence partners' epistemological frameworks? Their pedagogical beliefs? Their level of cognitive flexibility? How do successful partnerships navigate institutional barriers? How do they transform institutional structures? Such questions, we note, might themselves be best undertaken through interdisciplinary research that draws on sociology, education, and organizational behavior as well as writing.

When we turn to student learning, again both possibilities and limitations emerge. Across the university, an increasing number of interdisciplinary courses are providing venues for enhancing student learning. Learning outcomes, including disciplinary structures such as those provided by ABET and cross-cutting initiatives such as those delineated by AAC&U offer ways to shape these courses in ways that enable students to develop a more holistic sense of integration and a critical awareness. Again, however, the nature of the connections between the WPA Outcomes and those provided by other sources seems to continue to work against enabling writing to emerge as a field of inquiry rather than simply a skill, and writing courses may not (yet) be sites of interdisciplinary development. Cohort models, or those that only integrate writing into discipline-specific courses, may in fact further limit the possibilities. Alternatives such as Downs and Wardle's proposal for first-year writing as an Introduction to Writing Studies may offer a useful way forward, not only for our field but for achieving the learning goals defined by the WPA Outcomes at the first-year level and beyond.

Subsequent research, for example, might consider how introducing multiple disciplinary outcomes into a writing course structured around the WPA Outcomes might affect student learning, or how exploring the outcomes of other disciplines might affect students who are writing majors.

As difficult as it may be to help both students and faculty understand writing as a discipline rather than simply a skill, we believe that doing so, and creating a climate of interdisciplinary collaboration, has the potential to enhance both writing research and student learning. As interdisciplinarity itself plays an increasingly prominent role in both university-wide research efforts and learning outcomes, WPAs would do well to enter that landscape not as practitioners with a skill that can support such work, but as full disciplinary partners whose intellectual contributions can help create new knowledge.

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Appendix A

1. How would you describe your writing program (check all that apply)?

> First-year writing courses
>
> Upper-level writing courses
>
> Writing Center
>
> Writing Across the Curriculum
>
> Writing in the Disciplines
>
> Communication Across the Curriculum
>
> Communication in the Disciplines
>
> Other:

2. How would you describe your program staff (check all that apply)?

> Tenured program director

Tenure-track program director

Non-tenure track program director with a PhD

Non-tenure track program director without a PhD

Predominantly tenured or tenure-track staff

Predominantly instructor or adjunct staff

Predominantly graduate student staff

Predominantly undergraduate staff

Other (please explain):

3. Does your writing program have working relationships with other department, programs, or organizations across campus?

Yes, and we are content with the relationships we have.

Yes, but we would like to improve those relationships and/or continue to develop new relationships.

No, and we do not want to establish such relationships.

No, but we would like to establish such relationships.

Other:

4. What units across campus do you have working relationships with (check all that apply)?

Do not have any relationships

Engineering Departments

Science Departments

Humanities or Liberal Arts Departments

Social Science Departments

Natural Resources Departments

Business Departments

Univeristy writing or communication program units (e.g. Writing Across the Curriculum, Communication Across the Curriculum)

Assessment Offices

Residential Learning Communities

General Education or Core Curriculum units

Service Learning Offices

Please use this space to provide other responses not listed above or to clarify or elaborate on your response above.

5. What activities characterize these relationships (check all that apply)?

   Do not have any relationships

   Team-teach courses

   Give individual lectures on writing

   Grade written assignments for courses

   Teach faculty how to respond to and evaluate writing assignments

   Tutor/coach students in 1-on-1 sessionsProvide group help sessions for students

   Help develop writing assignments and/or grading rubrics for specific courses

   Help plan and develop curricula to integrate writing effectively

   Help assess students' writing skills (e.g. defining outcomes, creating assessment tools)

   Conduct research related to the teaching and learning of writing

   Conduct research regarding the role of writing in the disciplinePublish articles with faculty/graduate students from other units

   Give conference presentations with faculty/graduate students from other units

Please use this space to provide other responses not listed above or to clarify or elaborate on your response above.

6. What activities have you found most useful in developing and sustaining these relationships?

   Do not have relationships

   Holding open workshops

   Establishing one-on-one relationships with individual faculty

   Establishing one-on-one relationships with program or department administrators

   Securing university level funding for projects

   Securing external funding to improve teaching

   Securing external funding to improve research

   Linking the work of our writing program to student outcomes desired by other departments or programs

   Linking the work of our writing program to the university strategic plan or similar initiative

Linking the work of our writing program to accreditation needs

Engaging in team-teaching efforts

Engaging in research collaborations

Please use this space to provide other responses not listed above or to clarify or elaborate on your response above.

7. What factors limit, prevent, or discourage these relationships (check all that apply)?

Do not face limitations or barriers

Lack of time to develop and support relationships

Lack of interest on the part of our writing program

Lack of interest on the part of other units

Lack of understanding about what our writing program can offer students

Lack of understanding about what our writing program can offer faculty

Lack of understanding about the intellectual content of writing research

Lack of support from administrators

Lack of funding

Available funding but lack of personnel

Please use this space to provide other responses not listed above or to clarify or elaborate on your response above.

8. What benefits have resulted from these relationships (check all that apply)?

Do not have relationships

Improved student learning

Documented achievement of student learning outcomes

Continued university funding

Increased university funding

Successful grant funding

Successful alumni donations

Conference presentations

Published research articles

Positive campus reputation for the writing program

Positive relationships with faculty across campus

Activities valued in the tenure review process

Please use this space to provide other responses not listed above or to clarify or elaborate on your response above.

9. As noted above, we are seeking to understand the kinds of cross-campus relationships writing programs are involved in, as well as the barriers and opportunities associated with those relationships. In the space below, please provide additional details that may help other program or identify key issues about your cross-campus relationships, the barriers that prevent you from establishing or expanding such relationships, the strategies you've used to establish such relationships, and/or the beneficial outcomes of such relationships.

10. What is your institution's Basic Classification as defined by the Carnegie Foundation? (This link opens a new window to allow you to look up your institution - please note the Basic classification is the last one listed. You can learn more about these classifications through the Classifications Description link on the Carnegie site.)

Appendix B

WPA lists the following as outcomes for students at the end of a first-year writing course:

Rhetorical Knowledge

By the end of first year composition, students should
- Focus on a purpose
- Respond to the needs of different audiences
- Respond appropriately to different kinds of rhetorical situations
- Use conventions of format and structure appropriate to the rhetorical situation
- Adopt appropriate voice, tone, and level of formality
- Understand how genres shape reading and writing
- Write in several genres

Critical Thinking, Reading, and Writing

By the end of first year composition, students should
- Use writing and reading for inquiry, learning, thinking, and communicating

- Understand a writing assignment as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate primary and secondary sources
- Integrate their own ideas with those of others
- Understand the relationships among language, knowledge, and power

Processes

By the end of first year composition, students should
- Be aware that it usually takes multiple drafts to create and complete a successful text
- Develop flexible strategies for generating, revising, editing, and proofreading
- Understand writing as an open process that permits writers to use later invention and re-thinking to revise their work
- Understand the collaborative and social aspects of writing processes
- Learn to critique their own and others' works
- Learn to balance the advantages of relying on others with the responsibility of doing their part
- Use a variety of technologies to address a range of audiences

Knowledge of Conventions

By the end of first year composition, students should
- Learn common formats for different kinds of texts
- Develop knowledge of genre conventions ranging from structure and paragraphing to tone and mechanics Practice appropriate means of documenting their work
- Control such surface features as syntax, grammar, punctuation, and spelling.

APPENDIX C

ABET lists the following as outcomes for student learning in Engineering:

Engineering students must attain,

(a) an ability to apply knowledge of mathematics, science, and engineering;

(b) an ability to design and conduct experiments, as well as to analyze and interpret data;

(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;

(d) an ability to function on multi-disciplinary teams;

(e) an ability to identify, formulate, and solve engineering problems;

(f) an understanding of professional and ethical responsibility;

(g) an ability to communicate effectively;

(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;

(i) a recognition of the need for, and an ability to engage in life-long learning;

(j) a knowledge of contemporary issues;

(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.