5 Smart Growth of Professional Writing Programs: Controlling Sprawl in Departmental Landscapes

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INTRODUCTION

At our first departmental planning retreat in January 2004, we gave a twenty-minute presentation in front of our assembled colleagues. Our goal was the creation of an administrative position for a professional writing coordinator, a course release for that position, and some other additional resources. To that end, we detailed the constraints under which our Professional Writing program had been operating: we had 108 students—fully one-third of the department's majors—enrolled in our program, yet we were the only two tenure-track faculty in an English department of twenty-five fully dedicated to our PTW major and certificate program at UNC Wilmington[1]. In addition, we detailed some of the administrative duties involved in meeting the needs of the program in its first four years, including establishing and obtaining university approval for the program; communicating with prospective, current, and former students; auditing graduation requirements and distributing certificates; scheduling all PTW courses every semester; recruiting, screening, interviewing, and mentoring part-time faculty; applying for and carrying out grants for curriculum development within the program; chairing the professional writing committee; and advising prospective and current students in the program. We felt that we could no longer carry out these ever-increasing duties without harming our research agendas (and, thus, our tenure hopes), so this presentation was of critical importance.

Once we finished stating our case, we opened the floor for questions, and the hand of a colleague with primary interests in literature was raised. She asked quite earnestly, "What exactly *is* professional writing, anyway?" We responded by giving a few working definitions and moved on to more specific concerns about the changes we were proposing, but the question had tremendous impact on us. Part of the impact derived from the difficulty in answering this question briefly. More significantly, though, being confronted by this

question impressed upon us both the lack of understanding among some of our colleagues for what we do and the position of our program as something of a foreign entity within the English department, where, to our knowledge, all other subdisciplines were accepted on their face as comprehensible and appropriate. The question speaks to scholarship in professional and technical writing that raises the issue of how and even whether to define professional and technical writing. Pithy definitions have been developed, such as David Dobrin's assertion that "Technical writing is writing that accommodates technology to the user" (242), which is still referenced positively in introductions to the field and discipline (see Lutz & Storms). However, other scholars, such as Jo Allen, object to restrictive definitions like Dobrin's, especially as they are not based upon systematic study, and are often used to exclude certain types of work or other writers from the field. Allen cautions against creating definitions and argues that it is better for us to "keep our field intact—with our impressionistic, experience-based ideas of what technical writing encompasses—than to succumb to simplistic or exclusionary definitions that separate us from one another" (77). Recently, many seem to agree with scholars such as Spilka, who argues that the diversity of definitions of professional and technical writing indicates that the field is healthy, characterized by "diversity, fluidity, a contextual nature, interdisciplinarity, and multiplicity in terms of career paths and specializations" (102-3).

In our local departmental environment, we have experienced both a continual request for definitions of our field as well as the objections that follow when our descriptive definitions of our major and the field contain something objectionable, such as references to technologies or workplace contexts, or exclude something that colleagues outside the field perceive as belonging to it, such as journalism. In January 2006, we were again asked to define professional and technical writing at a series of meetings that led up to another departmental retreat in February 2006. Our discussions with colleagues at these meetings and informally in the halls reemphasized that operating a professional and technical writing program within an English department entails more than all of the duties we list above; it also entails operating within a collegial and organizational context, one that reaches out to and is reached by stakeholders and community members at every possible turn. Unless our colleagues share our understanding of our curriculum, mission, and goals—something we continue to struggle with—we will never achieve our hopes for the program and our students will always be underserved. Conversely, our goal of offering a consistent and carefully balanced set of courses with the strongest faculty and most current resources we could muster will not be truly successful until we acknowledge and understand our program's unique departmental and university environments.

In the pages that follow, we borrow concepts from systems thinking and from the smart growth movement to conceptualize the necessity and potential for situating professional and technical writing programs interdependently within their larger organizational contexts. Systems thinking offers clear guidelines for designing and maintaining programmatic operations, guidelines that delineate specific goals and actions on the way to creating sustainable and resilient programs. Smart growth planning demonstrates the specific actions within each of the systems thinking guidelines that strengthen and clarify the relationships between programs, stakeholders, and communities. Through our discussion, we show how we have tried to plan the future of our program with the help of these two matrices, how these principles have influenced our attempts to define, flexibly and from a systems perspective, professional and technical writing as a field and as a program within our English department at our university, and how we have tried to use these principles to articulate and demonstrate more clearly the connections between our work and that of our colleagues as well as better encourage them to participate in and understand the work that we do. Our successes as well as our failures provide insights into the usefulness of systems thinking and smart growth as bases for directing programmatic growth and expansion in professional writing.

APPROACHES TO PROGRAMMATIC GROWTH IN PROFESSIONAL WRITING

Writing programs in general and professional writing programs in particular often fit uneasily within humanities departments, such as English, despite often originating in those departments and sharing many characteristics and goals with other humanities disciplines (Di Renzo, Rutter). Professional writing's epistemological and methodological connections to English can be seen as tenuous (Hocks, Lopez, and Grabill), and professional writing programs may have more success obtaining resources and finding support for collaborative scholarship, for example, in departments of business or technology (Davis). Institutional circumstances, however, may make it impractical for programs to relocate in other areas of the university and, therefore, growth and development strategies must be developed that work within institutional limitations and realities.

Numerous scholars and writing program administrators in professional writing advocate interdisciplinary approaches to program growth and development in order to prepare students broadly to work with information and communication technologies and gain expertise in subject areas outside of the

humanities. In addition to competency in writing and rhetoric, scholars note that professional writing students benefit from training in computer sciences, graphic design, and organizational communication, which they can best and perhaps only get from other departments, depending on the expertise and size of program faculty (Blythe). In certain institutional contexts, creating professional writing programs as extra-departmental, interdisciplinary structures provides the best means for providing educational options for professional writing students; supplementing the skills of the professional writing faculty, who often number only a few; and gaining access for students to more technological resources than small programs in English departments may be able to provide (Blakeslee; Blythe; Andrews & Worley). Forging partnerships with and gaining participation from faculty in other departments can integrate professional writing into the broader university community, which can in turn provide exposure and stability to the program. Such integration can be accomplished using the model of WAC/WID programs already in existence and, in fact, a number of scholars advocate allying professional writing with WAC programs (Bosley; Hocks, Lopez, and Grabill). Other approaches to program development emphasize the work that needs to be done at administrative levels, including compact planning, which focuses on setting specific, incremental goals for the program and gaining administrative support for those goals (Allen).

A number of the approaches to program growth and development that we surveyed highlight the importance of and problems with creating a space within traditional academic structures, like English departments, for technical and professional writing programs (Hocks, Lopez, and Grabill), whose interdisciplinarity and focus on workplaces and technologies are not always easily accommodated by traditional notions of discrete departments and the concerns of humanities disciplines. The focus on space is by no means accidental, for academic units, including departments, schools, and universities as a whole, are organic entities sharing attributes of biological and environmental systems. Addressing the space and environmental issues raised by many developers of professional and technical writing (PTW) programs requires systems thinking, as we explain in the next section.

SYSTEMS THINKING AND ACADEMIC ECOSYSTEMS

Imagining our universities, departments, programs, students, and faculty as part of an academic ecosystem has both utility and precedent. Systems thinking dominates in contemporary scientific endeavors, putting emphasis on the interdependence of relationships between organisms and their environ-

ments. Our work as PTW program administrators is no different; resource allocation and day-to-day challenges may dominate our thinking, but relationships constrain or support our success.

Sydney I. Dobrin and Christian R. Weisser define ecosystems as "groups of organisms which function together in a particular environment (physical and chemical) and exchange energy within the system in order to metabolize, grow, and reproduce" (73). Dobrin and Weisser have put together volumes on the link between ecosystems and writing systems, and the connection has been touted for more than twenty years. Marilyn M. Cooper, who made the most widely-cited early suggestion of the potential of an ecological approach to composition, still emphasizes the idea that "the systems that constitute writing and writers are not just like ecological systems but are precisely ecological systems, and that there are no boundaries between writing and the other interlocked, cycling systems of our world" (xiv).

Extending the link between ecosystems and writing systems, we suggest that academic departments are ecosystems of their own, and that by thinking of them in this way we can highlight the spatial, geographic, and relationship aspects of academic units and the importance of considering these elements for the growth of programs within these units. Michael Weiler and W. Barnett Pearce use the term "rhetorical ecology" to describe viewing public discourse as "a kind of ecosystem in which various individual discursive subsystems interact in relations of conflict and mutual dependence" (14). Likewise, in the academic department, special interests must interact over curriculum, instruction and departmental resources.

Our role in this ecosystem is constantly changing and tends to provoke reactive changes in the roles of other members. As Weiler and Pearce suggest,

> Rhetors are forced to act within the confines of the ecosystem, and their discourses must reflect the web of relationships among its species and its surroundings. But as the rhetorical ecosystem evolves, as any living thing must, so too do its discursive possibilities, and within the system there is ample room for authorial creativity and cleverness (15).

The space within the department or university ecosystem for authorial creativity and cleverness offers program administrators opportunities for building programs that have internalized certain survival skills. Survival skills in our case would include careful planning for the inevitable changes that occur in our rhetorical ecosystems. Because "[c]ontext both fits rhetorical action and is reconstructed by it" (15), our decisions as administrators change the system and all of the relationships it affects and is affected by.

DEVELOPING ACADEMIC ECOSYSTEMS THROUGH SMART GROWTH

A number of fields in the humanities, including ecocomposition, rhetorical ecology, ecocriticism, and ecofeminism, look to ecosystems as foundational constructs. Outside the humanities, urban planners, political scientists, and sociologists use environmental science in other ways that can inform our thinking and bring a systems approach to program planning, development, and adaptation. A recent and particularly useful systems-based approach, smart growth, involves the application of broad-based systems thinking to land-use decisions and community development. Smart growth offers concrete strategies for handling growth and change that can be used productively to address the concerns of new Professional and Technical Writing programs. These strategies combine strategic planning, environmental awareness, and political negotiation as opportunities for identity construction and chances to demonstrate the appropriate place of the PTW program within the department and the university. In the face of fears that PTW is the academic equivalent of urban sprawl, the language and strategies of smart growth can help us to develop and strengthen our programs in ways that are in the best interests of the department, the university, and the community.

On the surface, smart growth principles may seem distant from the needs of PTW programs because they refer specifically to physical spaces and environmental concerns. According to both major smart growth coalitions in the United States, the Sustainable Growth Network and Smart Growth America, the main principles of smart growth are as follows:[2]

1. Create a range of housing opportunities and choices
2. Create walkable neighborhoods
3. Encourage community and stakeholder collaboration
4. Foster distinctive, attractive communities with a strong sense of place
5. Make development decisions predictable, fair, and cost-effective
6. Mix land uses
7. Preserve open space, farmland, natural beauty and critical environmental areas
8. Provide a variety of transportation choices
9. Strengthen and direct development towards existing communities
10. Take advantage of compact building design
            (Sustainable Communities Network, "About Smart Growth")

When considered through the lens of the academic program, however, the basic

goals of this kind of systems thinking can serve as a framework for program administrators when setting goals for program design, program development, outcomes assessment, and strategies for anticipating and managing change.

According to Joseph Fiksel, resilient systems feature diversity, efficiency, adaptability, and cohesion. In order to design a resilient system, Fiksel recommends "identifying system function and boundaries, establishing requirements, selecting appropriate technologies, developing a system design, evaluating anticipated performance, and devising a practical means for system development" (5330). As Fiksel indicates, resilience leads to and fosters sustainability, which "is not an end state that we can reach; rather, it is a *characteristic* of a dynamic, evolving system." In order to foster their own resilience and that of the academic ecosystems of which they are a part, administrators of PTW programs can enact Fiksel's recommendations for sustainable development, which, as Fiksel argues, can be employed at any point in a system's development to alter its course (5334). In the remainder of this chapter, we will demonstrate how Fiksel's critical actions for designing a resilient system and sustainable growth, combined with the ten principles of smart growth from the Sustainable Communities Network offers strategies for building successful PTW programs that flourish within the departmental and university ecosystems where they have taken root.

IDENTIFYING SYSTEM FUNCTION AND BOUNDARIES

As a PTW program begins to grow, it is inevitable and essential to hold discussions about the direction and amount of sustainable growth possible in light of current resources and other institutional constraints. In order to lead and initiate such discussions, we felt that it would be essential to have one designated program coordinator who could be the official spokesperson of the program in discussions and negotiations with other faculty and administrators. One of our early successes was to get departmental approval and chair support for the position of coordinator of professional writing, which came with a list of duties, including permanent membership on the departmental steering committee, as well as a course release. Until we earned tenure, we shared the position, alternating years, in order to allow both of us to gain formal administrative experience central to developing sustainable programmatic growth.

In some cases, successful undergraduate programs, in particular, face departmental and administrative pressure to grow beyond capacity in order to attract more majors, serve growing numbers of interested students, and even create bridges between the community and private industry, something that

administrators may uncritically see as the role of PTW programs. In order to handle growth, negotiate external pressures, and design a program that serves the entire university, reflection about the function of the program, including its goals and strengths, is essential and can help program administrators argue successfully for holding expansion and development to manageable levels.

In setting boundaries for a program to avoid taking on too much too soon, program administrators may draw upon smart growth principles six and ten, which advise: "Take advantage of compact building design" and "Mix land uses." The former recommends that development be compact, make efficient use of space and resources, build upon a strong foundation, and keep growth under control in order to avoid overtaxing resources. Likewise, the latter principle of "Mix land uses" highlights the importance of integrating the use of resources by commingling different populations in the same environment and maximizing the populations who benefit from the available services and resources that they need.

In practical terms, by thinking of PTW programs as part of the departmental and university landscape, program administrators can "Take advantage of compact building design" by directing growth in service of the stated goals of the program and of the department as a whole. For programs with few faculty that, like ours, are housed within an English department, the programmatic and departmental goals should be integrated and reconciled so that the PTW program can take advantage of the department's course offerings. Courses in rhetorical theory, essay writing, or journalism, for example, might be outside the strictest province of professional and technical writing, but can help students to build strong writing and rhetorical skills and supplement the more specialized knowledge in PTW that only a few faculty can provide. By taking fullest advantage of existing departmental course offerings, a sufficient number of courses can be offered within human resource constraints. Overall we have been quite successful in actively recruiting faculty outside of professional writing to teach such courses and to develop special topics courses related to writing and rhetoric, some of which, like Writing about Film, have become regular courses that appeal to our students as well as students in our university's burgeoning film studies program. However, we must acknowledge that a very small number of faculty who are skeptical about how our program fits within the humanities mission of the English Department refuse to teach courses that are within their areas of expertise because they are listed as professional writing courses. Nonetheless, over the past two to three years, we believe that we have effectively enlisted existing departmental personnel to offer a wide range of courses for our students and, simultaneously, to gain more support and understanding from other departmental faculty for our programmatic mission.

Programs can also efficiently use resources and shore up their foundations by avoiding taking on too much and focusing their programs around the specialties and backgrounds of existing personnel rather than trying to accomplish theoretical goals based on ideals gleaned from scholarship or past experience. For example, our program incorporates some journalism-oriented courses into the base requirements for our major. We have a number of talented part-time faculty to teach those courses who are trained and experienced journalists and no other department on campus teaches print journalism, so there is a significant student demand. Furthermore, the university has recently created an interdisciplinary minor in journalism that we can support and participate in. We include journalism in the professional writing curriculum despite the fact that none of the tenure-track faculty in PTW were trained in programs with such a focus, and it violates our instincts and strict understandings of our field to some extent. However, to attempt to build a program around only specialized courses, like Writing for the Computer Industry, would be currently spreading ourselves too thin, weakening our foundation and increasing our horizontal rather than vertical growth, making us less able to offer our students the ability to pursue some subjects in depth through a range of upper-level courses. Additionally we would be resisting the interests of our students, many of whom are interested in studying journalism and working as writers for local and national publications.

Keeping growth compact and focused further helps in the efficient use of resources, both human and technological. Concentrating on specific goals can make best use of both tenure track and part-time faculty by allowing them to concentrate on teaching classes in their specialties, which prevents them from becoming fragmented and overworked by continually having to learn new subject matter. Additionally, limited resources for acquiring technologies such as software can be spent in targeted ways rather than be used to acquire the latest tools in areas far afield of the central goals of the program. Finally, the goal of compactness may extend to considerations over the types of degrees and other credentials the program can award. Successful undergraduate programs such as ours, which attract many majors, may be pressured to expand to the M.A. level or offer courses to private industry before they are ready for this sort of expansion. Until additional qualified faculty and other resources make meeting the needs of undergraduate majors less of a struggle, referring to the benefits of compactness and a solid foundation highlighted by this smart growth principle can help program administrators to articulate resistance to premature growth.

Within a focused and targeted PTW program, administrators can be guided by the smart growth principle which advises "Mix land uses" by making the program appealing to a diverse population of students. This can be accomplished by providing ways for students with different majors to incor-

porate aspects of PTW into their programs of study. For example, English majors can obtain their degree in the forty-two-semester-hour major in the Professional Writing track, while students majoring in science or business can pursue a twenty-one-semester-hour Certificate in Professional Writing. Both the track in the major and the certificate require only a limited number of specific courses (two named courses and two from small groupings of courses for the major and three named courses and one from a small group for the certificate), allowing students with specific interests to select courses that relate to their own academic and career goals. This flexibility appeals to many students in and outside of English studies who are interested in writing and wish to add a formalized writing credential to their academic profiles and this appeal is supported in part by our growth in majors, up from 50-60 at the start of the program to 112 as of December 2005. Because we attract students from a variety of backgrounds in our courses, including our Introduction to Technical Writing, Writing about Science, and Writing and Technology, we provide an interdisciplinary learning experience including a diversity of perspectives and talents in the classroom.

In order to make the program accessible and palatable to a range of students, including non-traditional students, choices about the scope and direction of the program and courses have to be made with a number of often conflicting audiences in mind. For example, we require an internship for our certificate program but not for the major, as the internship may pose an obstacle for some students who want to pursue the PTW major. In addition to the minimum grade average required for an internship (which helps to ensure that only our strongest students are representing the university in this way), some non-traditional students, students with children, and students who already work full-time jobs may have logistical difficulties completing this requirement, so we incorporated it into only the optional certificate. Many of our PTW majors obtain the certificate as well, but occasionally we have students who are unable to do so due to work or family pressures. Additionally, many students in Communication Studies also pursue our Professional Writing Certificate or even double major in Professional Writing to hone their writing skills and help them further their career goals, particularly in print journalism.

ESTABLISHING REQUIREMENTS

In order to prepare the PTW program for growth, it is important to understand the program's current status and what would be required for growth, where opportunities exist for development, and what sorts of additions would

most benefit students. Prior to planning for growth, including adding new courses and hiring new permanent faculty, program administrators need to understand and analyze the present level of resources and direct growth in sustainable directions.

The smart growth principle seven, "Preserve open space, farmland, natural beauty, and critical environmental areas," is relevant in determining what is present and what will be required in order to grow the program in productive and useful ways that capitalize on the strengths and address the gaps in the current curriculum and structure. Based on this principle, growth should preserve open space or flexibility, be redirected to existing communities, and help in removing development pressure. In planning new hires, should lines become available, candidates should be sought who both complement what is currently working and provide additional expertise related to targeted growth areas. For example, we recently hired a fourth specialist in professional writing who specializes in science and medical writing, which can help us to serve and speak to the large number of biology and marine biology students and growing numbers of nursing students, by state mandate, at our institution. Furthermore, although the fit is outside of strict definitions of PTW, we have agreed to assist the department in pursuing a future hire in journalism to serve the large numbers of students interested in that area in our program as well as our institution's new interdisciplinary minor. Preserving what is unique about our institution's offerings is, in this instance, more critical than delineating a textbook PTW program.

Preservation also extends from the program to the departmental level. The PTW program should be flexible enough to help to bolster what is good and useful in the department outside of the program and in related departments so as to integrate PTW and other areas. For example, our PTW program requires a significant number of courses from literature (nine to twelve semester hours) and allows students to take related courses in the creative writing department and count them toward the program. Such crossover preserves what is useful in the established programs in English—while simultaneously making it possible for our literature colleagues to continue to teach upper-level classes in their fields despite growing enrollment in PTW—and creative writing by drawing students to those courses while decreasing our development pressure, providing our students with more options and depth without overtaxing our permanent and part-time faculty in PTW. While some may question the relationship between other fields, such as creative writing, and PTW, at our specific institution the creative writing program is extremely popular and nationally renowned and, thus, working with them benefits us both. Another way to preserve open space is to build in enough elective credits that allow the program to easily adapt if curricular

requirements in the department or university change in the future and allow for developments in the field to become new courses.

To "Create a range of housing opportunities and choices," as smart growth advocates advise, parallels the guideline of "Mix land uses." The requirements for the PTW program should provide a variety of ways for students to live in or inhabit the program. A range of different types of students can be accommodated, including students who transfer into the university or come to the program late in their careers, students for whom PTW is a secondary interest, students who have already obtained a degree but return to the university to take advantage of the program, and students with interests in a number of subfields of PTW that the program can offer while guarding against attempting to cover too much (a constant struggle, we readily admit). While a program cannot satisfy the needs of every potential student, identifying alternate means of approaching PTW and alternate goals for students seeking this instruction will help a program to grow in a manner that maintains flexibility in requirements and maximizes the program's potential.

SELECTING APPROPRIATE TECHNOLOGIES

In selecting appropriate technologies for a system, Fiksel emphasizes that the most recently developed technologies are not always the best and most effective ones and may actually affect the environment in more negative ways than do older technologies. For Fiksel, the best technologies increase the efficiency of the system but also make it more flexible and adaptable. With that in mind, the selection of technologies can also be productively informed by smart growth principles two and six: "Create walkable neighborhoods" and "Mix land uses." Walkable neighborhoods are those that provide safe and easy access to needed goods and services while promoting a sense of community. These sorts of neighborhoods are developed through mixing land uses, incorporating residential, commercial, retail and open spaces into one area. Applying these principles to program growth and development entails selecting a range of technologies to incorporate into PTW courses that both prepare students for work in organizational contexts and foster community, accomplishing multiple goals at once. For example, our program recently purchased on-screen video development software[3] so that students can create software training videos, a skill which is in some demand by private industry in our area. This software can also be used to create a sense of community by

enabling students to develop a bank of training videos about how to use other software, such as web page editors and publication design software[4], that can be used for instructional purposes by students in other classes. Participating in producing programmatic resources helps students to feel a sense of accomplishment and belonging, particularly if their contributions are recognized in other venues or courses. Our program is also using technology in the form of an email discussion list to maintain connections with and community among our alumni.

  The smart growth principles emphasize that mixing land uses is key to fostering the walkable neighborhoods, spaces that are safe and reasonable to negotiate. To accomplish this, the technologies employed and used within the program should be targeted and overlapping across campus, so that students can feel a sense of building a knowledge base and avoid fragmentation. To this end, faculty within and across programs can hold discussions about the various technologies that they employ and make an effort to learn about and use some common technologies so that students do not have to relearn how to negotiate each course as a foreign land. This sort of faculty sharing may have the happy byproduct of creating a greater sense of community among the often diverse group of part-time and permanent faculty who teach in the program. Because resources for purchasing technologies for computer classrooms are often sparse, it may be necessary to agree as a faculty which applications are key to the program and would benefit the largest number of courses and students and focus efforts in obtaining those. Such programmatic consensus can reduce waste and help make all participants more flexible as teachers and willing to learn new ways to accomplish tasks that focus on helping students learn particular skill sets and critical analysis strategies. We have been more successful at achieving such consensus and sharing such information within our department and program than across departments, partially due to differing goals and resource allocation. For example, we want to begin an electronic portfolio initiative within our program. Upon discovering that the School of Education already had an electronic portfolio requirement for all students, our coordinator met with the chair of that department to investigate sharing expertise and technological resources. While we gained valuable advice as a result of this meeting, we did not choose to employ the technology that the education faculty used largely because it required that each student pay $25 per semester for its use. We did not wish to place such a burden on our students when perfectly viable open source alternatives are available[5]. Ideally, students could rely on the same technology campus-wide to meet portfolio requirements.

DEVELOPING A SYSTEM DESIGN

The design of a resilient system entails the integration of aspects of the system discussed above, including the goals, requirements, technologies, resources, and constraints, to create a viable and navigable system. As Fiksel emphasizes, "Sometimes the greatest resilience is achieved through design simplicity, which reduces the chances of unexpected failure or disruption" (5336). A simple program design would be straightforward, transparent to participants, consistent with previous decisions, and reflective of the faculty and student populations involved. In prompting the system to thrive and then to grow, administrators will do well to follow smart growth principles three, eight, and four: "Encourage community and stakeholder collaboration," "Provide a variety of transportation choices," and "Foster distinctive, attractive communities with a strong sense of place."

"Encourag[ing] community and stakeholder collaboration" is one of the most important smart growth principles and possibly the most difficult principle to apply to program development and growth. As the Sustainable Growth Network indicates, "Citizen participation can be time-consuming, frustrating and expensive, but encouraging community and stakeholder collaboration can lead to creative, speedy resolution of development issues and greater community understanding of the importance of good planning and investment" ("Encourage"). Regarding PTW programs, stakeholders include the program administrators, faculty, and even some university administrators, while other faculty and students make up the community. Collaborating with students may be in some ways easier than collaborating with faculty members in the departmental community for a variety of reasons. The majority of students involved with the PTW writing program beyond the introductory course elected that involvement, have an interest in the program's goals and subject matter, and can provide input and feedback through their courses and through brief, online surveys; in contrast, faculty in the department outside of the program may know very little about PTW, may have no interest in it, or may even believe that it should not be part of their department. This smart growth principle reminds us of the importance of attempting to reach out to the community as a whole and to make a special effort to inform, educate, and enlist the support of even the most resistant colleagues.

Such outreach to colleagues can be accomplished through special means, such as making presentations to the faculty and holding information sessions for faculty and students, and routine means, including talking about the contributions and issues of the program at department and committee meetings and educating colleagues during peer observations of teaching or meetings of de-

partmental reading groups, if those exist. Additionally, qualified colleagues with talents in adjacent subject matter, such as activist writing, travel writing, policy or grant writing, memoirs, and literature of the environment, can be recruited to teach courses that count towards the PTW major requirements. Involving these colleagues as teachers accomplishes two things, both of which could lead to greater long-term investment in the PTW program: 1) these faculty become, for that semester, part of the program, 2) these faculty become familiar with our students and more aware of their accomplishments and the concepts they are learning in other courses in the major.

Another way to keep a broad range of the community informed and active in the PTW program is to seek as diverse an advisory committee as possible by recruiting one or two members from clearly non-PTW fields, so that other voices can speak for the program during department discussions, particularly those concerning resources and hiring. Furthermore, students can also be asked to serve on the PTW advisory committee as can a few providers of internship experiences or local alumni. These individuals may be ex-officio members, and they may not need to attend every meeting or have a voice in every decision, but their presence can improve the diversity and cohesion of the program.

Community participation can also be extended past the confines of the university through internship requirements and with service learning or community-based learning initiatives to strengthen and polish students' educational experience while developing the university/community relationship. In our program, for example, our introductory courses require a service learning project in order to provide students with an opportunity to experience an organic, complex writing situation and to develop a sense of civic responsibility. Through this project, students also discover that they have much to offer the community, and successful projects provide good public relations for the university and the PTW program in the community and on campus. Service learning initiatives also allow us to reach out to stakeholders at the level of university administrators. One of our university's strategic goals includes service learning and community involvement, and making our initiatives known to upper administration helps to demonstrate the contributions of our program to university-wide goals. Furthermore, our university and our college more specifically have a goal of reducing reliance on part-time faculty. Our chair was able to secure our most recent PTW faculty hire by demonstrating how adding this position to our department would allow us lower our reliance on part-time faculty by covering certain courses that part-time faculty commonly teach. We will likely secure our next hire using similar arguments.

The smart growth principle "Provide a variety of transportation choices" serves as a reminder to provide options for system navigation and design

to reduce congestion. The flexibility built into the program's design through mixing land use can provide a basis for making it easy to navigate. If the program is configured to facilitate and support double majors, it will be easier to develop routine ways to handle the rules and requirements so that those double majors can progress smoothly. For example, administrators should try to anticipate some of the exceptions to the rules necessitated by the diverse student populations that the program is designed to attract, such as students who complete an internship in another program/department and ask for dual credit, students with below-minimum grades who want to be allowed to continue in the program, students who want a certificate as soon as they complete requirements but before they actually graduate for use in obtaining employment, and students who are less prepared or adept technologically. While it may be impossible to invent specific policies in advance that will cover every potential situation, the program can institute processes to handle situations as they arise, such as course substitution criteria and procedures, and empower a number of faculty in the program to handle these situations so that there is usually someone present to fill out paperwork and give information to students. One way to institute such processes is to draw up charts to represent the delegation of responsibilities among those who will share the tasks of running the program and advising students and discuss these at regular meetings of program faculty. Program administrators can also chart the flow of information that will get students through the program and provide that information in a variety of places, such as on departmental websites and bulletin boards, and to a variety of people, including faculty from outside of the program who are teaching related courses or advising PTW students.

Congestion in the system in the form of inadequate courses to meet students' needs and demands in a particular semester can result from inadequate planning and program oversight. Developing "a variety of transportation choices" in the form of an adequate and diverse number of sections of a required course in each semester, such as a senior capstone seminar, can help to reduce this congestion and avoid trapping students in school for one more semester in order to obtain the courses required for graduation. While our program has been aware of these congestion issues resulting from the rapid growth of our fledging track in the major, we found that without a designated program director, we were less able to coordinate the courses and adequately document the problems faced by students in scheduling classes and graduating on schedule. The need to make long-term plans for the program and designate a faculty member who would be responsible for planning, troubleshooting, and problem-solving gave us part of the justification we required to request a formal coordinator position for our program. While planning does not have to be hierarchical, it does

require some degree of coordination and a central person around whom change revolves.

<div align="center">**EVALUATING ANTICIPATED PERFORMANCE**</div>

Fiksel emphasizes that the evaluation of resilient systems should go beyond outcomes or performance assessment and use predictive measures that help to anticipate the degree to which change and growth in particular directions can be sustained. Some elements involved in such an analysis, which is commonly done through modeling, include economic factors such as operating costs and customer retention, environmental factors such as power use and product reliability, and societal factors such as knowledge enhancement and community trust (Fiksel 5337). As mentioned in the previous section, a clearly identified coordinator and a high level of cooperation between stakeholders and the community are required in order to conduct effective predictive planning as well as outcomes assessment.

Smart growth principles including "Mak[ing] development decisions predictable, fair, and cost effective" and "Foster[ing] distinctive, attractive communities with a strong sense of place" can offer useful guidance in determining criteria for assessing program growth and planning further development. Fair and cost-effective development decisions are those that benefit all participants and community members and expend resources in a just and equitable manner, avoiding short-changing any facets of the community. Likewise, developing a distinctive and attractive community with a strong sense of place involves understanding the goals and values of the community and viewing development as a long-term, iterative process.

Addressing these smart growth principles in program development involves reflecting on and revising the long-term development plans in light of both predictive and performance-based assessments. Program administrators can accomplish predictive growth assessments in a number of ways, such as studying enrollment numbers to judge areas of demand within the program and directing resources there, talking to representatives from other departments about their plans to require PTW courses or even certification for their students, and watching the growth of industries in the region that may employ PTW students upon graduation and determining what skills and experiences might best prepare students for employment therein. Furthermore, administrators should not ignore the desire of some students to go on to graduate school, and the program should be designed to satisfy their needs as well. While specializing may benefit faculty in terms of research, becoming too specialized may not serve the

diverse student populations within the PTW program as well as a broad foundation might.

While predictive evaluations can assist in identifying the best areas for sustainable growth, performance assessments can provide useful information regarding the success of current initiatives and provide data to support continuing or intervening in a course sequence, faculty instruction, or technology use. Many universities, including our own, are pushing for outcomes assessment and starting such an initiative can raise the profile of the PTW program on campus. Using a process-oriented assessment tool, such as electronic portfolios of materials collected over time and accompanied by reflective statements, can help administrators to spread the responsibility for teaching students to develop materials over the whole of the program; help students demonstrate the development of their skills, knowledge, and analytical acumen over time; and allow students to see and experience revision on a long-term basis. More importantly, the development of a portfolio requirement prompts a program to codify its goals and values in order to design criteria to use to assess the portfolios and guide their composition, thus perhaps facilitating the emergence of a programmatic identity. As Fiksel and smart growth proponents note, however, this identity is most sustainable when it helps the program to fit well in its environment; therefore, programmatic goals and identity construction should be done with the goals and identity of the department and university communities in mind. For example, if the university values outreach and community involvement, incorporating those into the goals for the program might be useful. Likewise, if the program is housed in a department that values activist or environmental concerns, programmatic goals can also touch on these areas and involvement in or understanding of them might be sought in graduating students' portfolio materials. Smart growth principles emphasize that even outcomes assessment cannot work in a programmatic vacuum; successful and resilient programs reflect university community as well as local programmatic values.

DEVISING A PRACTICAL MEANS FOR SYSTEM DEVELOPMENT

In this phase of development planning, system designers focus on implementing their new developments. As Fiksel explains, stakeholder and community involvement is especially important in this part of the process. As smart growth principle nine admonishes, "Strengthen and direct developments towards existing communities." New initiatives cannot just envision an ideal com-

munity population but must measure their effects on existing populations and serve their needs as well. For example, at the start of our PTW program, which is a track in the English major, we accommodated many students who were in the middle of pursuing a degree in English literature. These students often did not take the prerequisite courses, such as the introductory technical writing course, with someone trained in PTW and therefore often required instruction in the basics of writing as a social act or in the use of computer applications that were new to them. Our position as part of the English department requires us to meet the needs of such crossover students in order to make the transition to our new program possible and foster its growth.

Focusing on existing communities also emphasizes building on what is strong in the preexisting environment. For example, as noted above, we as the first two tenure-track PTW specialists arrived in our program to find a strong interest in journalism among students and talented faculty available to teach those courses. Although this focus conflicted with our previous conceptions of what PTW is or should be due to our graduate school preparation, we recognized the importance of developing this aspect of our program because it provides a good foundation and student base for our program, and we both developed courses related to it. Additionally, building on such preexisting strengths helps us to avoid sprawl by trying to take the program in other directions too soon, thereby diluting already sparse human and technological resources.

Perhaps even more importantly than merely following smart growth principle two, "Making development decisions predictable, fair, and cost-effective," in the deployment of programmatic change and growth strategies, is informing stakeholders and community members that you are doing so through documentation of those efforts. Once a program coordinator position has been approved and one has been appointed, it is important for that person to record all administrative duties in order to provide a record and develop data for use in making arguments in favor of creating new positions or acquiring other resources. Some of the activities that might be logged include student contacts; formal and informal meetings with committee members, administrators, and prospective students; time spent in hiring and other staff decisions; completion of requirement checks for certificate students; creation of new courses; and attendance at conferences and workshops to keep skills current. The program administrators should also record the minutes of all committee meetings and post them on the department website or through another semi-public venue in order to create transparency and keep all parties informed of programmatic concerns, developments, and decisions. In addition to record-keeping, it may be useful to hold open meetings of the advisory committee, advertise those meetings, and encourage input from any interested parties. A transparent system, to

most onlookers, is a trustworthy one and the more the program wins the trust and cultivates the interest of the community, the more sustainable and resilient it will become.

CONCLUSION

The creation and maintenance of a resilient and sustainable professional and technical writing program asks for a particular emphasis on cooperation and interaction among stakeholders and community members. In addition to this priority, PTW program administrators often face the additional challenge of fostering an inclusive atmosphere in an indifferent or even hostile departmental environment. While professional and technical writing programs seek to find their places within their universities' various departments and structures, we as program administrators can find within systems thinking strategies for linking our work to our larger communities and linking our larger communities to our work. Systems thinkers, stressing the crucial attributes of diversity, efficiency, adaptability, and cohesion, offer us a methodology for building and maintaining stronger programs that serve our constituencies in more and better ways. By "identifying system function and boundaries, establishing requirements, selecting appropriate technologies, developing a system design, evaluating anticipated performance, and devising a practical means for system development" (Fiksel 5330), professional and technical writing program administrators can systematically develop better programs and find new ways to conceptualize problems inherent in existing program structures. In addition, systems thinking privileges the relationships inherent in organizations and environments, the very relationships that can determine whether goals are reached, resources allocated, and initiatives approved.

Using a methodology from systems thinking, we have applied the principles of smart growth urban planning to PTW program administration. Considering programs and their environments as landscapes affords us a way to create and sustain diverse, efficient, adaptable, and cohesive programs. These principles are broad-based and inclusive, fostering collective understanding and cooperation from stakeholders and communities. In addition, smart growth principles, translated for program administration, can help us answer or even avoid altogether the accusation that professional and technical writing programs are the academic equivalent of urban sprawl. Tighter, stronger programs with transparent administration might even mean never again having to hear a long-time colleague ask, "What exactly *is* professional writing, anyway?" And if, by chance, the question were to arise again, smart growth principles and systems

thinking strategies would allow us to respond by inviting that colleague to participate in specific ways in our open, inclusive, and mutually beneficial academic community.

NOTES

[1] As of December 2005, the breakdown of English majors was as follows: 112 in professional writing, 91 in literature, 50 in teacher licensure, and 54 undeclared (email from the department chair, December 13, 2005).

[2] Smart Growth America lists the same principles, although in a different order, on their website ("How is Smart Growth Achieved?," 2004).

[3] We first purchased Techsmith's Camtasia, which allows students to make videos of what appears on the computer screen that incorporate sound and other graphic elements. More recently we purchased Macromedia Director for our computer classroom. This software allows students to develop interactive multimedia movies that include other film clips, graphics and audio. We were only able to afford ten copies for classes of twenty, but such sharing can be viewed as a positive way to foster collaboration among students.

[4] We currently use Macromedia Dreamweaver for web design and Adobe InDesign for producing publications.

[5] Drawing upon advice from professional writing faculty at other universities, we are currently investigating the use of the Open Source Portfolio Initiative application, which we will have to house on off-campus server space, as our university's IT department refuses to support installing open source applications on university servers.

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