Using Systems Thinking to Transform Writing Programs

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Abstract

Building on Porter et al.'s call for institutional theorizing and critique at the system level, in this article I argue that Critical Systems Thinking (CST) is a useful methodology to understand, critique, and transform campus writing programs. CST focuses on changing the structures and ideologies of an entire system through locating points of leverage where even small changes will affect the entire system, moving it from isolation to liberation. I use the example of transformations to the campus writing program at my institution to illustrate the systems methodology, and I end the article with advice for applying CST to campus writing programs across institutional contexts.

For decades, the campus writing program at my institution was a system that perpetuated an outdated and ineffective model of literacy—a system whose problems will be familiar to many WPAs working to reform writing at their institutions. A one-shot timed writing test placed half of the first-year students in non-credit-bearing "remedial" courses, and a similar rising junior exam placed a quarter of our student population into the same type of remedial coursework. This remedial work was done partly in the English department and partly in the learning skills department, which was separated from the composition program both physically and ideologically. Faculty across disciplines placed the responsibility for teaching academic writing squarely on the shoulders of the English department and the learning skills department, but many of the instructors in the composition program who had been trained primarily in literature as graduate students taught our composition courses with literary texts and themes. The only nod to a responsibility for teaching writing beyond the composition program was a single writing intensive course requirement that students often took outside their major in their search for the "easiest" class. The campus writing program as a system reinforced a deficit model of student writing

and structured behavior that led to inevitable conflicts among the learning skills department, the English department, students, and faculty across disciplines. What was needed was structural change: the transformation of the entire bureaucratic system as well as the model of literacy that both shaped the system and that the system reinforced. The question for the WPAs at my institution was how to make this kind of structural change given the restraints of the system and the rigid ideology it had perpetuated for decades.

In "Institutional Critique: A Rhetorical Methodology for Change," Porter et al. encourage WPAs to focus more attention on theorizing and critiquing academic institutions as a means to counter oppressive bureaucratic structures. Porter et al. argue that when faced with systemic oppression, compositionists have focused on theorizing the classroom and the department of English rather than focusing on the larger system of the institution. Porter et al. feel that institutional critique should focus on the bureaucratic structures of our institutions, since "understanding the power and operation of such structures is important to developing strategies for changing them" (626). They argue that because we have focused on the classroom without adequately theorizing the institution, we have made it seem as though institutions are "beyond an individual's power for change," or at best we have relied on the "enlightened, active individual" to make change (617).

Building on Porter et al.'s call for institutional critique at the systems level, in this article I argue that systems thinking is a useful methodology to understand, critique, and transform campus writing programs. Educational theorist and systems thinker Bela Banathy says

> having a systems view of education [. . .] means that we can think about education as a system, we can understand and describe it as a system, we can design education so that it manifests systems behavior, and we can engage in educational inquiry by using approaches and methods of systems practice. (*Concepts and Principles* vii)

Because systems thinking as a methodology focuses on changing the structures and perceptions of an entire system, it can serve as a valuable framework for WPAs who wish to play a role in transforming not just a course or a department but their entire campus writing program, as well as the ideologies that inform the program. At the same time, systems thinking makes the daunting task of changing an entire system more manageable because it emphasizes locating points of leverage where even small changes will affect the entire system.

A systems approach can help WPAs move beyond blaming students or individual faculty and administrators when problems occur, and instead can refocus WPAs' energy on analyzing how systems structure behaviors and how we can move from isolation towards liberation in the ways academic bureaucracies function. As evidence of the usefulness of systems thinking, I will discuss the example of the application of systems thinking in the transformation of my own institution, where the WPAs have collaborated to make significant changes to both the conceptual model of literacy that informs the system of the campus writing program and the bureaucratic structures that reinforce that model. After discussing the application of a systems methodology in transforming my own institution, I will end the article with some advice for applying systems thinking that I hope will be useful across institutional contexts.

Systems Thinking: An Overview

In *Systems Thinking, Systems Practice*, Peter Checkland explains that systems thinking emerged in the 1940s in the fields of biology and engineering as a method for understanding the complexities of natural and engineered systems in ways that the reductionist and fragmented approach of classical science could not adequately address. Systems thinking encourages us to approach complex natural and human systems by focusing on patterns of relationships and by "using the concept of wholeness to order our thoughts" (Checkland 4). Like Checkland, Banathy encourages educational researchers and administrators to "consider the complex interactions and systematic connectedness of the various components that integrate into the whole" (*Concepts and Principles* 8). Banathy argues that "considering a part out of the context of the total system, dealing with one thing at a time, isolating variables, and dividing up the system" are not effective approaches, and that we should instead focus on "the wholeness of the system" (*Concepts and Principles* 93).

Banathy explains that part of seeing the "total system" is understanding how a system interacts with "suprasystems"—systems that are beyond a particular system's boundary but that affect the system. These suprasystems may have the effect of reinforcing the ideological rigidity of a system or may be used to create positive changes to a system. Systems thinkers must be aware of the possible negative influences of suprasystems and must also be thoughtful about ways to use suprasystems to make positive changes to their campus writing program.

Although systems thinking focuses on the wholeness of systems and their connections to suprasystems, Banathy argues that large, open, and

complex systems like schools have a natural tendency toward independence, and that this independence "moves the system's components toward progressive segregation and isolation and eventually toward the dissolution or termination of the system" (*Developing* 24). Understanding relationships among components of the system is key to a systems view, but as Banathy points out, all too often relationships at educational institutions can become "rigid and static" (*Developing* 29). A systems thinker would argue that looking at the whole of the system is the most effective way to work against this isolation and rigidity, rather than merely "tinkering with parts" (*Concepts and Principles* 8).

A systems thinker's attention is on the ways the structure of a system will construct behavior. Peter Senge, in *The Fifth Discipline: The Art and Practice of the Learning Organization,* emphasizes a key concept in the systems view: "Different people in the same structure tend to produce qualitatively similar results" (40). Because of this, Senge and other systems thinkers feel, "We must look beyond personalities and events. We must look into the underlying structures which shape individual actions and create the conditions where types of events become likely" (Senge 43). A key part of the underlying structure of a system is what Senge refers to as the "mental models" that the system operates under—what Banathy and Checkland call the "conceptual models." Conceptual models are assumptions that underlie the system, whether these assumptions are explicit or implicit. The conceptual models dictate the way the system operates, but at the same time the way the system is structured reinforces the conceptual models.

The systems thinking framework involves a recursive process that begins with actors in the system painting a rich picture of the system. This process involves an extensive discussion of how structures and processes relate to each other within the system. These actors also create a conceptual model that defines their ideal of the system, and the ideal is compared with the structures, processes, and results of the actual system. Other possible models of the system are then considered, including the probable benefits and restraints of these alternative models. A key part of the systems thinking process is looking at underlying structures and finding the points in the system that will provide the most leverage for change. These points of leverage are typically points in the system that have a high level of connection to multiple actors in the system, so that any change in the leverage point would affect many actors and have long-term ramifications for the entire system. Recognizing points of leverage requires moving beyond "parochial boundaries" (or "turf" in the language of the academy) and finding the places in the system where "actions and changes in structures can lead to significant, enduring improvements" (Senge 114). In the next section of this

essay I will make this methodology more concrete by discussing how the WPAs at my institution approached the problem of a dysfunctional campus writing program in a systems way, but to provide a visual representation of the systems thinking process I've included a diagram of the process in Figure 1.
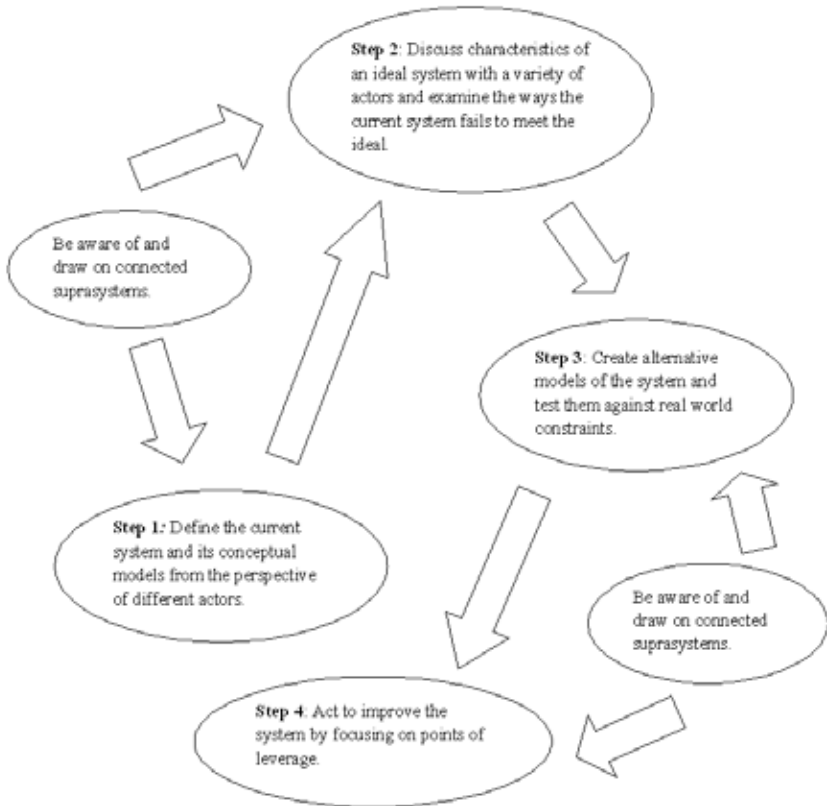

Figure 1 The Systems Thinking Process

The most current evolution of systems thinking, Critical Systems Thinking (CST), differs from traditional systems thinking in that its advocates claim that traditional systems thinking does not take a critical enough stance on inequalities of race, class, and gender in its push for the wholeness of systems and reconciliation of social orders. CST theorists such Robert Flood, Michael Jackson, and Gerald Midgley argue that traditional systems thinking, as outlined by Checkland, fails to consider the historical/social conditions that have given rise to the system. CST theorists believe that in the quest for traditional systems theory to create more efficient and balanced systems, this theory may ensure the survival of those

already in power. The goal of CST is not balance but emancipation and the exposure of inequalities and conflicts: CST works toward liberation rather than equilibrium. CST theorists such as Flood draw on Foucault, with his focus on how power determines what counts for knowledge in social systems, to argue for a critical systems approach that emphasizes "recognition of subjugation" and "the bringing about of…liberation" (Flood 51). Flood argues that historically in systems thinking the ideological is too often not acknowledged. With CST, "the ideology is declared at the outset" (Flood 69). Throughout the CST methodological process, the ideologies of the stakeholders and the ideologies reinscribed by the current system are made explicit, from understanding the positions of all the actors in the system to creating a model of the system as it currently exists to imagining other possible models of the system. It is possible that the ideologies that underlie the system would be implicitly considered in the traditional systems thinking process, but the interrogation of the system's ideologies is central and explicit in the CST process.

In this way CST is aligned with the view of writing programs as ideological entities, as Jeanne Gunner argues in "Ideology, Theory, and the Genre of Writing Programs." Gunner believes that writing programs are "ideological entities" that "embody, enact, and reproduce a set of beliefs that take discursive and material form at sites of cultural power" (7-8). Gunner argues that writing programs reproduce ideological values; thus a critical approach aimed at change is necessary. Aligned with Gunner's critical approach, Porter et al. argue for a rhetoric of institutional critique with the "aim to change the practices of institutional representatives and to improve the conditions of those affected by and served by institutions" (611).

CST provides a useful methodology for the kind of changes in practice that Gunner and Porter et al. argue for. CST methodology includes critical awareness, exposing dominant voices, and freedom from restrictive power relations (Flood and Raam; Midgley). CST aims to include equally the voices of all stakeholders in the system and expose oppressive power relations through explicit models of the current system and alternative models of more liberatory systems. One of the goals of the WPAs at my institution was to analyze the system in order to expose subjugation and coercion. We wanted to create a new model based on a conceptual framework of liberatory pedagogy rather than a deficit model of student literacies. The principles of CST have helped us as we have worked toward that goal, as I explain in the next section.

Applying the Critical Systems Thinking Methodology: An Example

The institution where I coordinate the writing across the curriculum (WAC) program is a large, comprehensive state university located on the West Coast of the United States. The institution is one branch of a large state university system, with each branch connected to the others through a system-wide chancellor's office, but each branch functioning as a mostly autonomous university. Most of our faculty have been teaching at this institution since the 1970s, and in terms of bureaucratic structures, little has changed since the 1970s. When there is a change to the system, the faculty senate is typically the catalyst, and as a result of a 2005 senate retreat focused on improving the campus writing program, the senate reading and writing subcommittee was charged with making a proposal to improve the sequencing of the campus writing program, improve the graduation writing assessment requirement (a state-mandated upper-division assessment of student writing), and infuse writing more broadly across the curriculum.

The campus WPAs are all on the subcommittee: as WAC coordinator, I chair the subcommittee, and the graduation writing assessment coordinator and English department writing programs coordinator are members. The chair of the learning skills department joined the subcommittee as a guest during our discussion of the campus writing program. A representative from each college and the associate dean of undergraduate studies are also members. See Figure 2 for the subcommittee membership.

Faculty Senate Reading and Writing Subcommittee Membership

- Writing Across the Curriculum Coordinator, chair
- Graduation Writing Assessment Coordinator, member
- English Department Writing Programs Coordinator, member
- College of Arts and Letter representative, member
- College of Social Sciences and Interdisciplinary Studies representative, member
- College of Engineering and Computer Sciences representative, member
- College of Business representative, member
- College of Natural Sciences and Mathematics representative, member
- Associate Dean of Undergraduate Studies, ex-officio
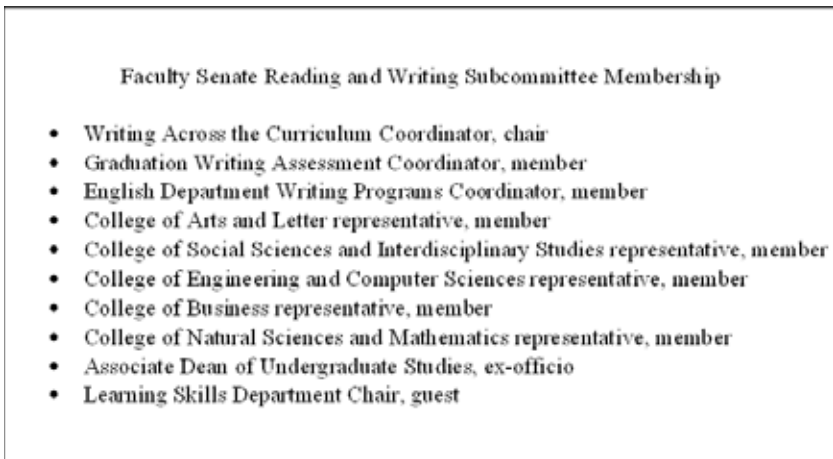- Learning Skills Department Chair, guest

Figure 2 Faculty Senate Reading and Writing Subcommittee Membership

At the time the subcommittee was charged with rethinking the campus writing program, I had been reading systems thinking scholarship and I was interested in using the systems approach. My fellow WPAs were not explicitly looking to apply a systems thinking methodology, but like me they were focused on ways to transform the campus writing program at the system level. Because the reading and writing subcommittee membership included all of the campus WPAs, representatives from each college, and a representative from the administration, from a systems view it was well positioned to be the instrument of change. In addition to including so many "agents" within the system, it was connected to the senate and to various other senate committees, which meant it had strong leverage within the system.

The First Stage: Creating a Model of the System and Its Underlying Ideologies

As outlined in Figure 1, in the initial stages of systems thinking, actors in the system engage in a discussion of how structures and processes relate to each other within the system in order to paint a rich picture of the system. Ideally this picture is mapped out in a visual representation of the system. In the case of the campus writing program, we already had this kind of visual representation of the system: a flowchart that we gave faculty and students. Even a quick glance at the flowchart in Figure 3 reveals the many problems with the processes and relationships of the system.

In the perceptions of the WPAs, the system had two essential problems: an outdated conceptual model that saw students as "deficient" and a rigid and convoluted sequence of testing and remediation based on this deficiency model. In a CST approach, the description of the system should focus on revealing systemic oppression, and the testing and remediation conceptual model that informed our institution's entire system is evident in the flowchart in Figure 3. The English placement test, a timed standardized test mandated by the state chancellor's office (a closely related suprasystem), placed nearly half of our students in a variety of non-credit-bearing courses, beginning in the learning skills department and continuing to a "remedial" course in the English department. Another timed test was administered during the junior year, the writing proficiency exam. This test, which certified the chancellor's office mandated graduation writing assessment requirement, could be taken twice. Students who failed both times needed to then pass another non-credit-bearing course at the junior level, ENGL109. A number of students who scored low enough on the rising junior test were placed into LS86, the same remedial course many first-year students were

placed into by the English placement test. Ideally students would meet their writing intensive requirement after taking the second required composition course (English 20) and the writing proficiency exam. But students often postponed taking English 20 and the writing proficiency exam until they were in their final semester, a situation that was possible due to a lack of sequencing and oversight within the system.
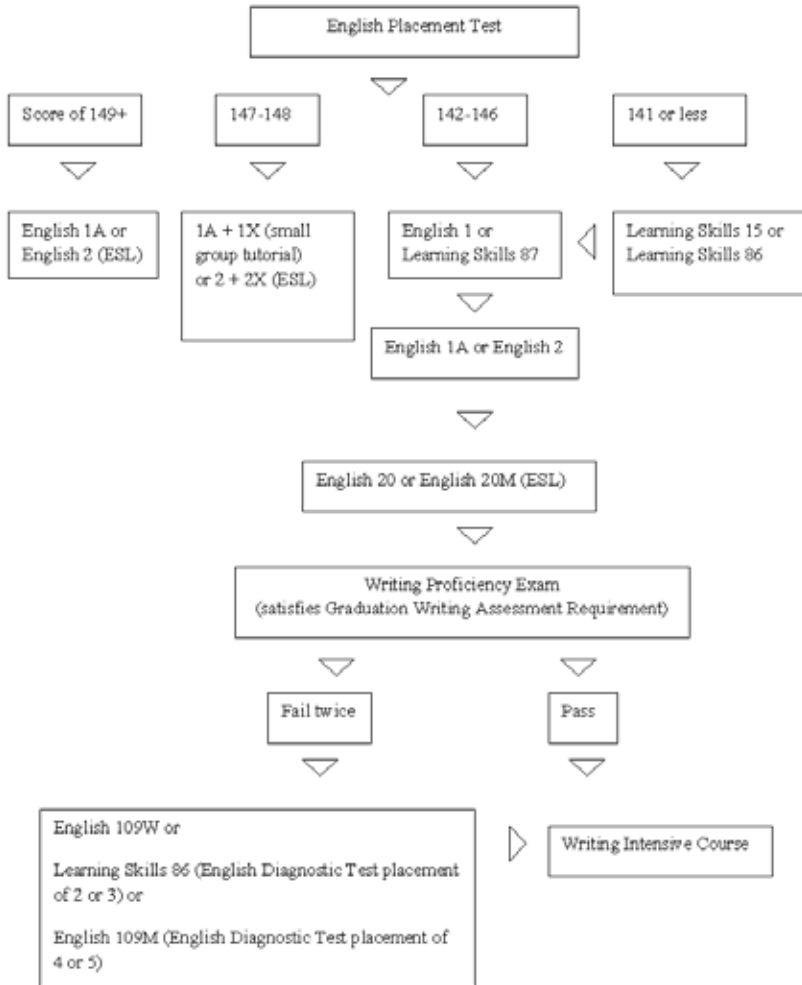

Figure 3. Campus Writing Program Flowchart

The campus writing program was built on what Senge would label negative "reinforcing processes." Senge defines "reinforcing processes" as processes in a system that continuously reinforce each other, creating a cycle that can be either positive or negative. The reinforcing process began with

students being labeled deficient by a standardized test and placed into non-credit-bearing courses, which in turn reinforced their own lack of confidence in their abilities and caused teachers to believe that these students didn't belong in college, which led to lowered expectations for students and teachers. This negative reinforcing process was repeated again in the junior year. The system forced a handful of writing specialists to be held responsible for "remediating" underprepared students, and removed instructors in the disciplines from any substantial involvement or investment in the campus writing program. This allowed instructors in the disciplines to simply blame the English department when their students struggled with writing, a reinforcing process that would never end since the system was not built to adequately support students in their writing across the curriculum.

Of course, not all of the actors in the system agreed with the WPAs' perceptions of the campus writing program. Some subcommittee members felt, for example, that the long sequence of "remediation" was necessary, and that the timed writing tests were useful ways of sorting and certifying. Checkland warns that in the initial stages of systems thinking it's important to imagine the best possible conceptual models for the system and to avoid lapsing into describing the system that is already in place (170), and this is especially true at academic institutions that have entrenched structures, where faculty may have difficulty imagining other possibilities for teaching and assessing writing. Checkland argues that using key verbs is an effective way to begin to define an ideal of the system. In order to describe the ideal system using key verbs, the subcommittee began the second stage of the systems thinking process, defining an alternative model of the system, by creating a list of what we wanted from students and faculty in our ideal campus writing program.

The Second Stage: Recognizing Ideological Differences and Defining an Alternative Model of the System

Defining an alternative model of the system is a key stage in the systems thinking process, and to help us create a list of characteristics of our ideal campus writing program I asked the subcommittee to draw on a number of important suprasystems: Council of Writing Program Administrators (CWPA), Conference on College Composition and Communication (CCCC), and National Council of Teachers of English (NCTE). These organizations' position statements, and a previous site visit by a CWPA consultant-evaluator, were critical in persuading the faculty across disciplines on the subcommittee that our institution was working under outdated conceptual models of literacy, and that there were disciplinary best

practices that we could look to as we rethought our model. The position statements from professional organizations and the recommendations of the site visit were used again when we presented the proposal to the faculty senate.

The subcommittee took a number of meetings to reach consensus on the following characteristics of our ideal campus writing program:

- Students will write in a variety of rhetorical situations: for a variety of audiences and purposes in a variety of genres, both print and multimedia.
- Students will use writing to learn: to invent, draft, and revise; to explore their own ideas and experiences; and to discover what they have to say in both formal and informal exploratory writing assignments.
- Students will engage in writing as a process that includes invention, revision, and editing, and will receive feedback from peers and instructors throughout the writing process.
- Students will learn to use a variety of reading strategies, read a variety of print and electronic texts, and use writing to analyze, evaluate, and reflect upon what they have read.
- Students will engage in extended research and will learn to enter into the discourse communities of their disciplines: to cite, synthesize, and evaluate multiple sources.
- Students will write and will read frequently at all stages of their writing career in a sequence that begins with composition courses and moves toward writing in the major.
- Students will understand that writing is a critical tool for learning content knowledge as well as an important ability for their careers beyond the university.
- Faculty will view the responsibility for teaching writing as campuswide and will appreciate the value of using writing to initiate students to the ways of thinking of their discipline.
- Faculty will feel invested in the campus writing program and will play a greater role in the campus-wide teaching and assessment of writing.
- Faculty will be given the support needed to help improve student literacy across disciplines and will be rewarded for integrating more reading and writing in their courses.

It is important to highlight that these characteristics of an alternative system describe actions of both students *and* faculty. Had there not been tension at our university between faculty and administration, ideally this list

of characteristics of an ideal campus writing program would have more explicitly described actions of administrators as well. In systems thinking, as many stakeholders as possible should be represented in discussions of the current system and in models of alternative systems.

The "critical" in "Critical Systems Thinking" was key in these early stages, since the WPAs had to make our ideologies explicit to the subcommittee and argue that the sequence of testing and remediation acted to oppress students based on race and class. Checkland emphasizes that it is important for the actors in the system to engage in extensive debate as they define the system and consider what the system's goals should be, and for CST theorists this debate should also involve interrogating ideologies. We could have started our subcommittee meetings with concrete ideas for tweaking the campus writing program, but instead we spent multiple meetings debating over our ideological differences and shaping learning goals. Some subcommittee members were impatient at first and wanted us to start talking "nuts and bolts," but it was critical that we engaged in these first stages of CST rather than charging ahead without examining and critiquing the ideologies that informed the system.

The Third Stage: Finding Points of Leverage to Change the System

Senge argues that the most enduring and effective changes to a system occur when we find the critical points of leverage, where the least amount of effort can enact the most amount of change. For CST, this change needs to involve not only a less segregated system but also one that moves toward liberation for oppressed groups. Once we had developed a revised conceptual model of the campus writing program, the subcommittee began to brainstorm a variety of changes we might make. Some proposed changes fit our conceptual model but would have required such a dramatic change to the system that they would not have provided us with any leverage. As Banathy argues, all systems have restraints, and we need to be realistic about the nature of change in the face of a complex, open system like a campus writing program. For example, the WPAs on the subcommittee proposed a longitudinal portfolio to replace the rising junior timed writing exam. The learning skills coordinator, who oversaw a curriculum focused on timed writing exams, argued that this would lead to plagiarism. Her argument, along with concerns by the faculty on the subcommittee about a workload increase due to scoring portfolios as compared with the efficiency of the timed exam, was enough to persuade a majority of the subcommittee to vote against the portfolio option. The WPAs would have also liked to

replace the remediation sequence with a two-semester cohort-based stretch composition course in the English department. This would have had the effect of removing the remedial stigma from composition courses, as well as giving students baccalaureate credit for whichever composition course they were placed into. However, this change would have also meant an abrupt dismantling of the learning skills department, which was an established department, and the coordinator of the learning skills department argued vehemently against a stretch course and persuaded the subcommittee to vote against it. The implementation of a stretch composition course, like the creation of a portfolio assessment, was not something the system was ready to accept.

Other proposed changes would have merely tweaked the current system but would have provided little leverage for enduring and systemic change—for example, the learning skills coordinator's desire to have learning skills composition courses count for baccalaureate credit, which would have done little to end the conflict between the learning skills department and the English department or to end the segregation of multilingual students into a "basic skills" curriculum. What were needed were smaller changes that were possible within the current system but worked toward a different mental model. We needed changes that would lay the foundation for further reforms once the revised system began to structure different behaviors. As much as the WPAs would have liked to make rapid and dramatic changes to the system, as Senge argues, "Faster is slower" (62). Any dramatic changes would have risked being voted down by the senate, or implemented by the senate but without the necessary support from the campus.

The English department writing programs coordinator was the one who found the ideal point of leverage within the system. She suggested a change that appeared slight but actually helped us challenge the ideology of the old system and rethink the entire sequence of the system. She proposed changing the chancellor's office mandated upper-division graduation writing assessment requirement from a passing score on the rising junior timed writing test to a grade of C- or better in the writing intensive course. She was aware that the campus was not yet ready to abandon the test altogether, and so she suggested changing the rising junior exam to a placement test that could be taken only after students had completed the second composition course, English 20. She also suggested providing students the option of bypassing the test altogether by self-placing into a junior-level writing course taught in the English department, English 109, a course that students would take before their writing intensive course. This was the course most students had to take when they failed the rising junior exam twice in the old system.

This seemingly small change wound up influencing the entire system of the campus writing program. It was the point of leverage we were looking for in order to make significant structural and ideological change. The change in the rising-junior assessment shifted the conceptual model from testing to placement and teaching: from a one-shot timed test as measuring and certifying writing ability to a course, the writing intensive course. It made the writing intensive course the centerpiece of the campus writing program—the certification moment—and thus raised its visibility and its importance. With the writing intensive course as the graduation writing certification, a large part of the responsibility for teaching writing was moved from English to the entire campus: from a test administered by the English department to courses taught by faculty across disciplines.

The change to the rising junior exam (which we are now calling the "writing placement for juniors") also put pressure for change on other parts of the system. Because the exam would become a placement for the writing intensive course, and the writing intensive course would certify the graduation writing assessment requirement, students would be more likely to take writing courses in a more logical sequence. If they couldn't take the exam until after they had completed English 20, the second composition course, then students would be far less likely to put off that course until they were graduating seniors, and in turn less likely to put off taking the writing placement for juniors, since they needed a placement on the exam to register for a writing intensive course.

This sequence created a closer connection between English 20 and the writing intensive courses, and that connection provided a rationale for the English department writing programs coordinator to include in our proposal to the senate a change in the English 20 curriculum from an instructor's choice theme course—often based on a literary novel—to a course focused on introducing students to writing across disciplines. Similarly, under the improved sequence English 109—the junior-level academic writing course—would now be a stepping stone to the writing intensive course, and because of this change the graduation writing assessment coordinator had leverage to propose a revision to the English 109 curriculum, from a generic academic argument course to a "writing in the major" course in which students rhetorically analyze the reading, writing, and researching conventions in their major. The seemingly minor change in a single test helped completely transform curriculum in two essential writing courses.

Another effect of the change was to introduce the concept of self-placement, and the word "placement" replaced the words "exam" and "proficient"—a new vocabulary that reflected a new conceptual model and, in the context of CST, served as an ideological shift toward liberation and

away from the oppression of timed tests. "Interdependence" is a key concept in systems thinking, and by finding the right point of leverage in the system we were able to put pressure on the entire system to change due to the interdependent nature of systems. We were creating a new and positive reinforcing process: a small change that could build and build on itself, reinforcing different kinds of behaviors among participants in the system.

The System Transformed: Positive Reinforcing Processes

The reading and writing subcommittee's proposed changes to the campus writing program were approved by the faculty senate in 2006. Since that time, the WPAs at my institution have seen the power of reinforcing processes take effect. One example is the writing intensive requirement. With the writing intensive course now certifying both a general education requirement and the graduation writing assessment requirement, there has been a renewed interest on campus in the writing intensive course. The WPAs have worked in focus groups with writing intensive teachers to create shared learning outcomes and develop the course criteria to make writing intensive courses more academically rigorous, and the university assessment coordinator is focusing on the writing intensive requirement as a place for university-wide assessment. A senate class size task force included the writing intensive course in its report, recommending that the course be capped at thirty. The graduation writing assessment coordinator is currently working on a proposal that we hope will lead the campus to re-envision the writing intensive requirement, moving away from the single-course model to the certification of writing intensive majors. This would involve the reading and writing subcommittee certifying required sequences of courses within departments as satisfying the graduation writing assessment requirement, so that any student who completes the certified major would meet the writing assessment requirement. The leverage of the change that made the writing intensive course satisfy the graduation writing assessment requirement rather than a timed test created a reinforcing process that inevitably led to renewed emphasis on the writing intensive requirement within the system. All of the actors in the system remained the same, but the new system structured new behaviors.

A number of suprasystems have recently intervened to change the first-year assessment and coursework in our campus writing program at a more rapid pace than the WPAs had imagined. Both the board of trustees and chancellor's office were threatening to outsource developmental writing programs, and at the same time an English council made up of a group of English faculty from across the branches of our state university was devel-

oping position statements against the deficit model of remediation and in favor of directed self-placement and two-semester stretch courses. Our provost asked us to pilot a credit-bearing stretch course that would include students who would have normally been placed into non-credit-bearing "remedial" courses. The two-semester, cohort-based stretch course expanded rapidly: the learning skills faculty has been folded into the English department and there are no more "remedial" composition courses. Along with the stretch course, we are developing directed self-placement for incoming first-year students, a move that might not have been possible without the 2006 campus shift in the conceptual model of students having to pass a rising junior test to students having the option of self-placement into the junior-level writing course. Figure 4 is a flowchart of the new version of the campus writing program as we expect it to look in the next few years.

Advice for Applying Critical Systems Thinking Principles

I will end this article with some general advice for applying the CST methodology that I hope will be useful to WPAs across institutional contexts. Each systems problem is an "unstructured problem" and one that is context-specific, but some general principles of systems thinking can be applied in a broad way to almost any institutional context.

Work for change at the systems level rather than tinkering with an isolated course, program, or department by finding points of leverage within the system. In their argument for institutional critique, Porter et al. advise WPAs to "look for gaps or fissures, places where resistance and change are possible" (631). In a systems view, these places of change involve points in the system where conceptual models can be changed, and where a negative reinforcing process can be turned into a positive reinforcing process. At our institution, changing a single test from a certification of writing ability to a placement instrument and moving the certification to the writing intensive course had the effect of forcing us to rethink the sequence of our entire campus writing program, encouraging us to change curriculum in multiple courses and causing the rest of the campus to rethink the use of a timed writing test as a certification of writing ability. Because the rising junior test had relationships with many different parts of the system and many actors within the system, it was a strong point of leverage for making systemic change.

Directed self-placement

One-semester composition course

Two-semester stretch composition course

English 20 sophomore composition course

Prerequisite: 30 units

Upper-division placement

Students may choose either:

English 109

Three-unit course which ends with portfolio placement into one of the following:

Writing placement for juniors

Placement exam which gives one of the following placements:

3 units: Upper-division writing intensive course or writing intensive major

4 units: Upper-division writing intensive course or writing intensive major + 109X small-group tutorial

6 units: English 109 then upper-division writing intensive course or writing intensive major
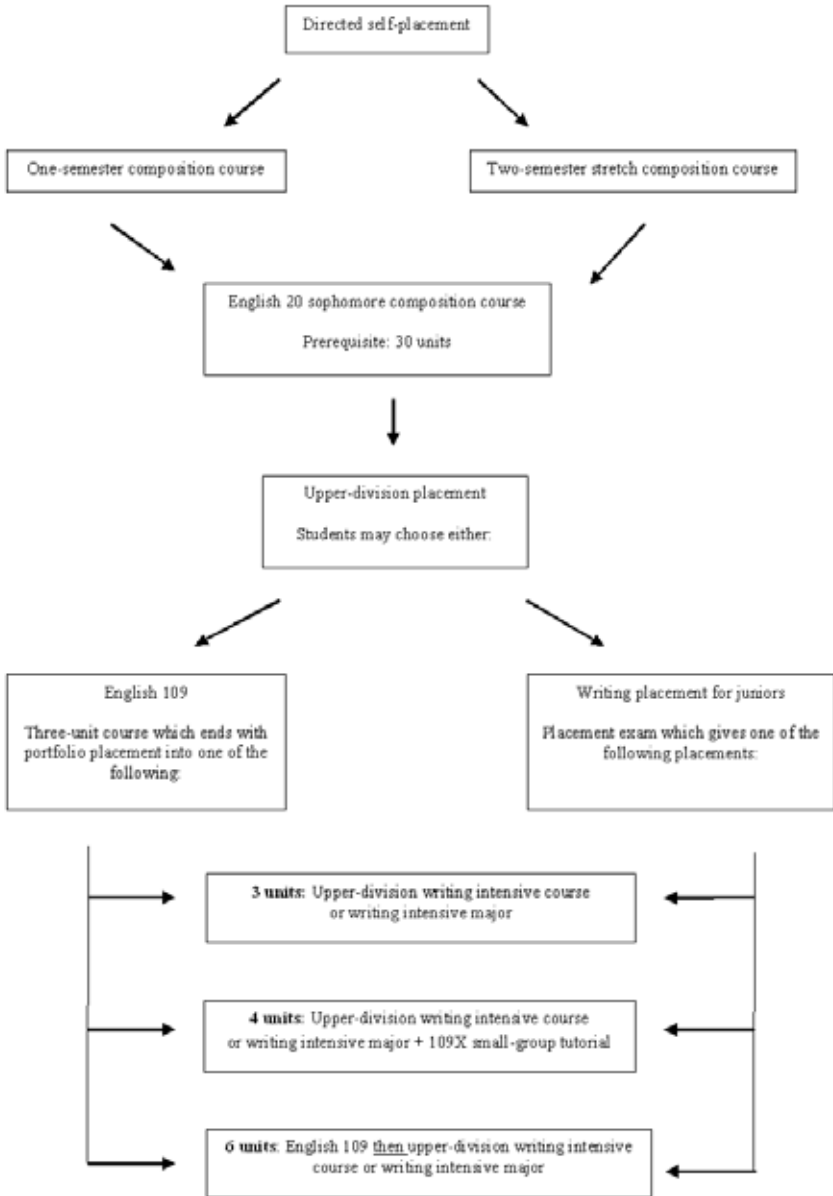
Figure 4 Future Campus Writing Program Flowchart

The WPAs could have spent much energy trying to reform the sophomore composition course or working on getting students academic credit for learning skills courses, and those efforts might have brought about a short-

term change, but they would not have had a sweeping transformation since neither of those elements of the system had a high level of interaction with other parts of the system.

Create structures for making change at the systems level. Without the faculty senate reading and writing subcommittee, the WPAs at my institution would have had difficulty proposing changes to the entire system. It would have been equally difficult for us to involve actors from so many parts of the system in the process of making change. The subcommittee was a point of leverage in the system, since it was composed of numerous actors in the system (WPAs, faculty across disciplines, the learning skills department, the administration), and it frequently interacted with other high-leverage components of the system (other faculty senate committees and the senate as a whole). WPAs who are at institutions that do not have a senate committee devoted to writing should work to form such a committee in order to gain better leverage within the bureaucratic system.

Look beyond individual actors within the system and focus on the ways the system structures behavior. When a department chair protects turf at the expense of what is best for students or a Dean undermines our efforts at reform, it is natural to become frustrated by the behavior of individuals. But as Senge points out, "Systems cause their own crises" (40). In the case of our writing program, individual actors who sought to protect their remediation programs or their share of the general education pie were to a large degree behaving in ways that were reinforced by the structure of the system.

Focus on systemic oppression and its relation to the conceptual model that underlies the system and that the system normalizes. Our approach to transforming our campus writing program rested on two underlying CST principles: that all systems operate from ideologies, and that these ideologies become normalized and go unchallenged as the system grows more and more rigid. Exposing race and class biases in remediation programs and timed writing assessments may be difficult and uncomfortable for WPAs, but connecting to suprasystems such as CWPA, CCCC, and NCTE can assist in framing our ideological critiques in the context of national best practices. In addition to students, writing instructors are often the victims of oppression due to conceptual models that view composition as non-disciplinary. Although in making changes to our campus writing program we did not address the oppression of writing instructors at our institution in the form of contingent labor and increasing workload, this is another area where CST can be effective. Another application of CST that we did not address in making

changes at our institution is the oppression the composition program itself faced. Had we focused on this aspect of the system, CST would have helped us to recognize the ways that lack of respect for WPA disciplinary expertise and the politics of being a minority group within a literature-dominant English department (as opposed to an independent writing unit) could be interrogated at the systems level.

Do not expect rapid changes in a complex, open system like a campus writing program. Banathy says, "Remembering that all systems have constraints can make you more realistic about the nature of change" (*Developing* 2). Campus writing programs are simply too complex, and their boundaries too open, to change rapidly. The WPAs at my institution would have liked to have seen a quick end to timed writing tests and basic skills remedial courses, and the immediate implementation of a longitudinal portfolio, but trying to force changes that are not yet possible due to the constraints of the system can lead to both frustration and a loss of political capital. Some of our frustration as WPAs comes from unrealistic expectations about how rapidly ideologies and the institutional structures that are shaped by and continuously reinforce these ideologies can be changed. Transforming both the system of our institutions and the conceptual models those systems operate under can take decades of hard work.

Embrace the idea of perpetual change. Perpetual change is an inherent part of CST, since it is natural that routine, rigidity, and isolation will develop in any system. The conceptual model at my institution that was effective in the 1970s is no longer effective, and the model we are working toward now will most likely no longer be useful a decade from now. WPAs who are systems thinkers must embrace the idea that we are on a perpetual quest to transform our institution as a system and set it on a course towards wholeness and positive change.

This advice regarding the application of CST to campus writing programs, and the experiences of using CST to transform the campus writing program at my institution described in this article, have broader implications for college writing. CST speaks to the need to remove timed writing tests from our campus writing programs, both as placement and assessment tools, since these tests create oppressive reinforcing processes for students and limit faculty members' conceptual models of academic literacy. CST supports the argument against "remedial" or "basic" or "developmental" writing courses, since these courses create mental models of students as inherently deficient that become self-perpetuating because they reinforce

negative behaviors in teachers and students. CST provides further evidence of the need for a longitudinal, writing across the curriculum approach to college literacy, since the isolation of writing in only one part of the system will lead to a breakdown in the teaching of literacy in the entire system. Even though CST supports a WAC/WID approach, it also provides a strong argument for the value of the first-year writing requirement. If the current emphasis on testing and tracking in high school persists, then the composition course is the point of leverage in the system that can work against the conceptual model being imposed on the suprasystem of K-12 education. CST can help us rethink aspects of the system of postsecondary writing even as it provides us as WPAs with a methodological tool to find the points of leverage in our campus writing programs that can slowly move them from isolation to liberation.

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