

Towards an Integrated Graduate Student (Training Program)

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Abstract: This chapter argues that teaching writing helps graduate students become better writers. Every year, more than 100 graduate students from more than 30 departments participate in one of two required six-week training courses offered through Cornell's John S. Knight Institute for Writing in the Disciplines. This chapter describes specific features of the training curricula that help graduate students learn to write as academic professionals. Primary source material is drawn from graduate writing produced for course evaluations, assignments, or in response to surveys sent to current and former graduate students. Graduate student observations that figure prominently in this article include a focus on writing process, the connection between teaching writing and learning writing, the value of reflection, and the efficacy of building communities where writers read each other's work.

Keywords: Teaching Writing, Enculturation, WAC/WID, Coursework, Writing Process

Reflection and Methods: Integration, Enculturation, and Genres of Data

The chapters that appear on either side of this one—"Graduate Student Perspectives: Career Development Through Serving as Writing-Intensive GTAs" and "The Space Between: MA Students Enculturate to Graduate Reading and Writing"—underline the importance of two areas of concern that were buried in the version of this chapter that appeared in *Across the Disciplines* (ATD). Reading the chapters that bracket mine has pushed me to address these two concerns directly.

This reflective introduction is followed by four sections and a postscript. The first section, "When Teaching 'Teaching Writing' means Teaching Writing," lays out the chapter's claims and methodology. "Writing and the Writing in the Disciplines Curriculum" describes foundational principles of the Knight Institute and features of the training programs that have had an impact on our graduate students' development as writers. Although the voices of graduate writers appear throughout the chapter, "Voices from the Field," is structured by observations about writing made by graduate student writers who have participated in one or more of the

Knight Institute's training programs. "Learning Something Practical" makes concluding observations about the critical importance of being a flexible and agile learner, one of the findings about graduate writing and graduate education that this material repeatedly reinforces.

One issue brought to light by my essay's placement within this collection concerns genres of data that deal with writing and writing programs. By definition and design, quantitative data is impersonal. Collecting data points that can be efficiently recorded, sorted, and reported on may involve suppressing individuals' voices. In suppressing voice, data collection can steamroll the very features of writing that make writing *writing*. Qualitative data can provide counterweight. The study designed by the University of Missouri (UM)'s writing program—discussed by Lannin and Townsend (this collection)—demonstrates how quantitative and qualitative data can work together to tell a compelling story. A key question in the UM study elicits quantitative *and* qualitative data by asking students to rate their agreement with the following statement: "Working as a WI [writing-intensive] TA helped me better understand the writing I was doing in my graduate studies. Why do you say so?" Tallying responses to the agree/disagree statement revealed an agreement rate of 49 percent. But, as Lannin and Townsend note, the qualitative data is ultimately "more revealing" because responses to follow-up questions, like the one quoted above, "represent voices" (this collection).

I have generally operated with a strong bias in favor of qualitative data, which includes graduate writing. However, my experience setting up, running, and reporting on a program largely independent of Cornell's writing program taught me how hard it can be to work with qualitative data on any scale. Voiced narratives do not translate easily into data points. A handful of compelling anecdotes represents a limited sample size. Just as important, narratives take longer to read and digest than a snappy chart: a key point when addressing audiences that include university administrators. More anecdotes increase sample size but also increase reading time. These inherent shortcomings reduce the persuasive power of qualitative data.

For this article, I relied heavily on qualitative data drawn from graduate students who have participated in one or more of my program's six-week training courses, required for First-Year Writing Seminar instructors or Writing in the Majors TAs. With IRB approval, I reviewed course evaluations and wrote to current and former graduate students—particularly those who had participated in more than one sub-program under the Knight Institute umbrella. (For example: some graduate students took both courses; some took one course and served as writing tutors. Every year we hire TAs as co-facilitators to co-teach our training courses.) I also asked graduate students for permission to quote from writing samples written for the classes I teach, notably informal responses written during each class session. Students in my courses have the option to sign release forms authorizing

me to quote from writing assignments—including informal in-class writing—for teaching and research purposes. For this article, I sometimes asked for permission to quote from a specific piece of writing.¹

My chapter, built around a relatively small sample of qualitative data, would be less compelling if I did not also have access to the self-study conducted by Cornell's Anthropology department, generously shared with me when I was working on this article. Anthropology's survey of alumni generated a combination of qualitative and quantitative data that (happily) reinforced much of what my smaller-scale operation had revealed.² In addition, Lannin and Townsend's substantial study—focused on graduate TAs in Writing-Intensive (WI) classes, taught in a broad range of disciplines—provides compelling evidence that the training and experience that come with working as a TA in a writing program can shape graduate careers in ways that go beyond the goals of a particular course. I hope (and believe) that the placement of these two chapters next to each other, with findings that reinforce each other, will serve to strengthen the arguments presented in each chapter, for audiences within our respective institutions and outside them.

The second buried concern deals with what Fredrick, Stravalli, May, and Brookman-Smith (this collection) call enculturation, a central concern of their chapter and of Fredrick's teaching. Enculturation is closely related to integration—a central concern of my chapter and my teaching. In this chapter, I describe certain features of an integrated graduate program. I also discuss the structural obstacles that make such a program difficult to imagine at the research university where I teach. I say little about social integration into a graduate program. "The Space Between" is more directly concerned with intellectual and disciplinary enculturation; I would consider social integration another element of graduate student enculturation.

The reflections of the graduate co-authors of "The Space Between" demonstrate how powerful personal narrative can be. The texture of these narratives could not be represented in quantitative terms. These reflections demonstrate the possibilities of qualitative data, of voice. Together, this bloc of chapters helps demonstrate how different genres of data reinforce one another. Neither qualitative nor quantitative data can do as much alone as they can do together.

This selection of chapters also engages with questions of professionalization

1 All comments on teaching, training, and writing submitted by graduate students who took Writing 7100 or Writing 7101—whether from class-related assignments or in response to specific queries—are published with written permission from the student quoted. These and other data are part of the ongoing "Study of the Impact of Knight Institute Training Programs on Participating Graduate Student Instructors and Teaching Assistants," IRB protocol #1307003989, for which I am the lead researcher.

2 *A Survey of Cornell Anthropology Majors and Cornell Ph.D.s After Graduation, 1990-2013* was shared by the study's lead researcher with permission of the department chair. Anonymous samples of raw data were shared by the lead researcher. The study was conducted with IRB approval.

and attrition. Not everyone who enters a graduate program will complete it. But greater attention to enculturation and professional development, along with increased institutional commitment to integrating both sets of concerns into the curriculum, can make the path smoother.

In my original chapter, I say little about the idea of an integrated graduate student. The narratives of Fredrick, Stravalli, May, and Brookman-Smith reminded me how painful graduate school can be, for reasons that may be hard to recognize (or remember), even for those of us who serve as teachers and/or mentors. I remember times when I felt as if I were being pulled apart or as if some parts of me were being pressed or squeezed. (Recognizing how many people around the world are subject to actual torture, I hasten to add that these feelings were psychological.) Michel Foucault (1975/1995) reminds us that the language of discipline is rooted in things done to the body. Graduate students are integrated into disciplines by being disciplined. Those who are not disciplined, for any reason, do not continue.

When Teaching “Teaching Writing” Means Teaching Writing

Every year, more than 100 graduate students from more than 30 departments participate in one of two six-week training courses offered through Cornell’s John S. Knight Institute for Writing in the Disciplines. Writing 7100: Teaching Writing prepares Ph.D. students to teach in the First-Year Writing Seminar program (FWS). Writing 7101: Writing in the Majors Seminar prepares Ph.D. students to work as teaching assistants in Writing in the Majors (WIM) classes. The Knight Institute’s funding structure ensures that all graduate students who teach first-year writing seminars or TA in Writing in the Majors classes are required to take the course aimed at these particular teaching responsibilities.

While these classes focus on teaching, our not-so-hidden curriculum supports professional development for TAs and graduate instructors, most of whom will (we hope) follow short teaching careers at Cornell with long, productive careers elsewhere.

This chapter describes some of what we have learned from these students about graduate student writing and some of the strategies we use (within institutional constraints) to address an often-neglected aspect of graduate education: learning to write as an academic professional. Teaching people about *teaching writing* means teaching people about *writing*. In both 7100 and 7101, we try to demystify the practices and processes by which writing is produced, not just for undergraduates, but for apprentice professionals who are in the process of defining themselves relative to a discipline, an identity shaped above all else by how and what they write.

Teaching as Research

Tenure expectations at the research universities that train graduate students promote a narrow vision of what it means to be an academic professional. At research universities, professors are hired and promoted based on research: everything else is secondary. This incentive system pushes people to focus their limited energy and time on developing one aspect of a professional persona while neglecting others. Ironically, even though the primacy of research overshadows other aspects of academic work, the medium through which research is produced, presented, and evaluated—writing—is often assumed to be something smart graduate students just learn to do. One graduate student notes: “. . . graduate school does not necessarily encourage students to devote much time to thinking about how we write.” A recent Ph.D. writes, “I was one of those students in the sciences who must have been expected to learn to write by osmosis.”³

A truly integrated graduate training program would prepare graduate students to become colleagues who could fully integrate into all aspects of academic life: writing, research, teaching, and service.⁴ The department-centered character of graduate education at my university ensures that our stand-alone writing program cannot aspire to be part of a fully integrated program. However, as we help graduate students prepare for their immediate assignments as writing teachers and teaching assistants, we can also help them prepare for careers as professional academic writers.

This chapter takes as a central premise the idea that teaching can be research into how students learn (this includes graduate students).⁵ The chapters on either side of this one provide evidence to support this claim. Two different approaches are represented in these chapters: the large-scale self-study undertaken by University of Missouri’s writing program and the intimate conversation between faculty and graduate students from Eastern and Illinois University in “The Space Between.”

Cornell’s training programs provide self-refreshing sources of information about

3 With two exceptions, all quotations from current or former graduate students are anonymous.

4 I make this argument at greater length in “Survival and Failure, Adaptation and Acceptance” (2008). I use integration in two ways here: to describe a program’s relationship with other institutions that shape graduate education and to describe the different aspects of professional life that graduate students aspire to learn. I do not explicitly refer to a third relevant meaning of the term. In her work on graduate student attrition, Barbara Lovitts writes about the importance of *social integration* for graduate students. She writes, “the better integrated students are into their programs, the better their cognitive maps will be because they are in closer and more frequent contact with people who can help them develop the understanding necessary for degree completion” (2004, p. 117-118).

5 I owe this insight to Katherine Gottschalk and Keith Hjortshøj’s invaluable book, *The Elements of Teaching Writing* (2004). They write, “You can think of teaching as research into the ways in which students actually learn the material. You can think of your course, therefore, as an ongoing experiment” (p. 24).

how graduate students learn, think, and write. To call these sources of information repositories would be inaccurate. Repository suggests something static, an archive into which information is deposited. In fact, the process is dynamic: participating students learn from each other, even as we learn from them.⁶ When graduate students teach us something, we don't have to wait until the next course or the next year to apply it: it can become part of the teaching and learning dialectic immediately.⁷ The primary goal of this research into graduate student learning is not to pile up stuff in archives, or to pile up publications (although both are valuable), but to improve the support we provide to our students. Certain challenges and opportunities are unique to Cornell, but much of the information this process yields may be relevant to graduate students and graduate programs across the country and/or across the world.

This chapter draws substantially on locally-produced material on the teaching of writing, including work published by long-time teachers and administrators in our program, some of which has been integrated into the curriculum of our graduate training courses. Primary source material is drawn from writing produced by graduate students: some in course evaluations, some in assignments, and some in response to surveys sent to current and former graduate students.

This chapter is intended to reflect the dynamic, collaborative culture of teaching and learning we try to foster in the Knight Institute. We strive to help graduate students teach each other. This goal is front and center in the course rationale for Writing 7100: Teaching Writing, which (in a recent iteration) includes the following statement:

Writing Seminars succeed when they help build communities of writers. We hope this course will help build communities of teachers. Sharing assignments with other teachers and, we hope, learning from the work colleagues produce will be among the central tasks of Writing 7100.

The importance of learning from one another is evident in the many comments graduate students make about the value of sharing their work. One recent graduate student, who took Writing 7100 and worked as a graduate student co-facilitator for the class, writes:

7100 emphasizes collaboration and sharing of teaching materials, and at a certain point I began to wonder why the graduate

6 For evidence of the ways that local knowledge travels from students to instructors and back, one need look no further than some of the publications that have emerged from these collaborations. Notable examples cited in this article include *The Elements of Teaching Writing*, *The Transition to College Writing*, and *Writing from A to B*.

7 For instance, after reading a draft of this article, my colleague, David Faulkner, said he would discuss some of the issues examined here in the section of Writing 7100 he was teaching at the time.

community doesn't practice this more often and more broadly. I think it's incredibly logical and so clearly beneficial, it's almost comical how we (grad students) never share our writing with each other. . . . So, I've been actively encouraging my peers to share their work with me, and bugging them to read my work.⁸

Having benefited deeply from these collaborations, I am committed to representing not only what my colleagues and I have taught to our graduate students, but what we have learned from them.

Writing and the Writing in the Disciplines Curriculum

The writing in the disciplines model enshrined in our program's full name, Cornell's John S. Knight Institute for Writing in the Disciplines, is founded on one central premise: writing expertise cannot be fully separated from disciplinary knowledge. When one writes in the university one writes for an audience, on an occasion, within a context. Whether a piece of writing is produced for a class or for presentation or publication, context, occasion, and audience are determined by the practices and conventions of an academic field.

The small staff of the Knight Institute teaches only a handful of courses. The vast majority of the more than 300 first-year writing seminars offered at Cornell every year are taught by faculty and graduate students in approximately 30 departments. All of the 40 Writing in the Majors (WIM) courses offered each year are taught by faculty in approximately 20 departments, with significant roles played by graduate TAs. The Knight Institute provides TA funding for graduate instructors of first-year writing and for WIM TAs, in addition to the 7100 and 7101 required training courses for graduate students.

The Institute's greatest impact on the teaching of writing is, therefore, indirect. While Knight Institute faculty teach a small percentage of Cornell's undergraduates, we train dozens of their teachers every year. Moreover, our training courses play significant roles in the careers of more than 100 graduate students each year, albeit a role that may not be widely acknowledged as a feature of graduate education at Cornell.

When these courses are recognized as a feature of graduate education, they are typically praised as teacher training. Two examples illustrate this. A music professor who has taught several Writing in the Majors courses says the following about the training course for WIM TAs: "I consider this a key component of grad students' training as they prepare for their academic careers. . . . grad students also value this

⁸ Each section of Writing 7100 is led by a member of the Knight Institute faculty and assisted by a graduate student who has taken 7100 and taught one or more first-year writing seminars. Graduate students apply for co-facilitator positions and receive a stipend for their six weeks of work.

training, even when their research topics are distantly- or unrelated to the . . . topic [of the course they TA].” A recent self-study conducted by the Department of Anthropology, which included surveys sent to the program’s graduate alumni, included the following summary comments: “recent alumni uniformly praised as necessary, important and excellent the training received through the Knight Program for Freshman Writing Seminars. Often it was the only intense and focused training in pedagogy they ever received at Cornell, and was seen as still valuable years after leaving Cornell” (Greenwood, Carrico, & White, 2013, p. 32).

The data generated by the anthropology study provides evidence for two unsurprising findings: First, many graduate students receive little, if any, formal training as teachers. Second, good teacher training can play a pivotal role in their careers. As this article argues, good training can also help prepare graduate students not just to teach writing, but to write.

Who We Teach

To understand the Knight Institute’s training mission, it helps to know how many people take our courses each year and how many disciplines they represent. The combined enrollment for all sections of 7100: Teaching Writing and 7101: Writing in the Majors Seminar in 2013-14 amounted to 111 graduate students from 34 departments and programs. Tables 5.1 and 5.2 show the departments these graduate students represented during the 2013-14 academic year.

Table 5.1. Departments represented in Writing 7100: Teaching Writing, Summer 2013/Fall 2013 (25 total departments)

American Indian Studies	Anthropology
Art History	Asian Studies
Astronomy	City and Regional Planning
Classics	Comparative Literature
Development Sociology	English
French (Romance Studies)	German Studies
Government	History
Horticulture	Italian (Romance Studies)
Linguistics	Medieval Studies
Music	Neurobiology and Behavior
Performing and Media Arts	Philosophy
Psychology	Science and Technology Studies
Spanish (Romance Studies)	

Table 5.2. Departments represented in Writing 7101: Writing in the Majors Seminar, Fall 2013/Spring 2014 (21 total departments)

Anthropology	Applied Economics and Management
Asian Studies	Astronomy
Cognitive Studies	Communications
Development Sociology	Ecology and Evolutionary Biology
Entomology	Government
History	Human Development
Medieval Studies	Molecular Biology and Genetics
Music	Neurobiology and Behavior
Performing and Media Arts	Physics
Psychology	Science and Technology Studies
Sociology	

While these numbers vary from year to year, they are reasonable indicators of the number and range of departments whose graduate students participate in the FWS and WIM programs.

The Rhetoric of Teaching

During the years I've been positioned to shape the curricula of 7100: Teaching Writing and 7101: Teaching in the Major Seminar, I have learned to see these courses not just as modes of content delivery but also as laboratories for teachers, and as research in learning. More surprisingly, I've learned to see these courses as arguments. These courses argue for themselves as professional development. Explaining this rhetorical function requires discussing some features of research institutions that will likely be news to no one reading this article. I frame my remarks primarily with a discussion about Writing 7100.⁹

Cornell's first-year writing seminar instructors, whether graduate students or faculty, must follow certain guidelines.¹⁰ Within these parameters, instructors have considerable freedom to design discipline-based courses on topics of their choice.

9 I focus on 7100: Teaching Writing for four reasons. First, I began teaching 7100 nine years before I started teaching 7101. Second, I assumed administrative and curricular responsibilities for 7100 long before I assumed similar responsibilities for 7101. Third, my work with 7100, starting my first year at Cornell, has shaped everything I have done since. Finally, the FWS program, and the training program that supports it, is both larger and more visible than is Writing in the Majors.

10 The basic parameters of all Cornell first-year writing seminars are posted on the program's website and described in the "Indispensable Reference for Teachers of First-Year Writing Seminars," a pamphlet updated annually and distributed each year to FWS instructors.

These parameters structure the Writing 7100 curriculum. The central task of 7100, and the task with the greatest immediate value, is described in the course rationale: “. . . we want you to leave the course with an advanced draft of a syllabus and a selection of assignments you can use in your First-Year Writing Seminar.” This task is one of three course goals laid out in the rationale incorporated into the syllabus when I began administering the course. The other two goals are as follows: “we want to introduce you to the challenges of teaching Writing Seminars with a disciplinary focus” and “we hope this seminar will be a laboratory in learning and teaching.”

In addition to explaining why we ask students to do certain kinds of work, this rationale is intended to defuse resistance to the course. The first few times I taught Writing 7100 it was impossible to miss the resentful attitudes many students brought to the class. True, many came to the course with an open mind. The course won over some skeptics. But, graduate student discourse in general circulation sometimes disparaged Teaching Writing as a waste of time; this discourse shaped student perceptions of the course before they ever enrolled.

Negative attitudes are to be expected whenever you impose a requirement on anyone, and 7100 and 7101 are taught as requirements for our TA positions. Add to that an attitude towards teaching, itself, that can border on disdain. The position of some research faculty—learned and imitated by some graduate students—can be summarized as follows: Teaching is a necessary and sometimes pleasurable part of our job, but it is a distraction from the real work of research. Time spent teaching is time taken away from higher priority activities. Teacher training is an even lower priority: first, because faculty and graduate students should be able to translate their own intelligence and experience into their teaching; second, because too much devotion to teaching can be interpreted as a lack of commitment to research. One respondent to the anthropology study wrote, “Let’s be honest, too much time spent developing one’s teaching can be detrimental to one’s career in academe.”¹¹

When I began directing Writing 7100, I initiated curricular changes intended to foreground the value of the course to the people who were required to take it. I hope this value is now apparent—not when the course ends, or years later, after they have enough teaching experience to value the experience—but before students walk into the first session on the first day. One significant change involved making graduate student writing an explicit element of the course, particularly through the first writing assignment.¹² During the time I have taught 7100 and 7101, I have

11 Citation information for the complete report is included in the references page and cited within the text as necessary. Some quotations are taken from the raw data, which the department shared in a form that protected respondents’ anonymity.

12 While this was not an explicit focus of Writing 7100 before I began directing the course, it has long been a significant element of Writing 7101.

learned that attention to graduate writing can help foreground the value of these courses. Since graduate students have to write their way *out* of graduate school, and (hopefully) into jobs, a course that helps them develop as writers, even if that is not its primary function, has real and lasting value.

After six weeks, students should leave each course with a toolkit they can use in their own classes. Students should also leave with a clearer sense of themselves as writers, and a clearer sense of their position as writers relative to the undergraduates they teach (who they once were) and the faculty who teach them (who they hope to become). By focusing attention on the immediate value of these required courses (the toolkit) and the long-term value (professional development as teachers and writers), I hope we are able to build a more receptive audience for these courses. A receptive audience makes for an improved learning environment.

Anatomy of the Writing Process

One of the first Writing 7100 assignments (due before the first class meeting) asks students to reflect on themselves as writers. To a significant degree, I can trace my interest in the subject matter of this chapter to the fascinating responses to this assignment I have read while teaching both Writing 7100 and Writing 7101. Called “Anatomy of the Writing Process,” a recent version of the assignment includes the following guidelines:

Choose a specific piece of academic writing you’ve produced during your time at Cornell. . . . Write a short essay in which you narrate the process of writing it . . .

You may want to address some of the following questions: what sequence of steps did you follow as you produced this piece? Was this sequence typical for you? How many distinct drafts did you write? What made them different? What texts or data did you engage with as you wrote? How does this piece participate in the discourse of your discipline? What observations can you make about language and style in your writing? What did you learn in the course of writing this piece? As noted in the learning outcome above, writing about your own work should advance your capacity to participate in reflective discussions on theories and practices of teaching and writing.

Completing this assignment, reading the submissions of their classmates, and discussing them in class should make clear to our graduate students how important we think it is that *they* help *their* students become more aware and self-reflective as writers. When it works, the impact is substantial, as is clear from the comments

made by a current graduate student who has taken both Writing 7101 and Writing 7100, and has worked as a co-facilitator for Writing 7100:

Preparing for Knight Center courses, working with students as a co-facilitator, and preparing my own first year writing seminars have all made me much more cognizant of my own writing process. . . . Having to articulate the anatomy of my own writing method helped to formalize, in my mind, the steps I need to take with each piece of writing I commence. . . . In many ways, the classes I have taken with the Knight Center have offered the first serious critique of my writing technique, rather than the sole merits of my argument, since high school.

Both 7100 and 7101 offer participants focused discussions on teaching and writing among people working in a broad range of fields. For many graduate students, these cross-disciplinary conversations represent significant learning opportunities. Engagement with field-specific writing practices is of evident interest to those graduate students who take advantage of professional development opportunities beyond the required training courses. The observations below were written by a graduate student who has taken 7101 and 7100, worked as a co-facilitator in 7100, and (when this was written), was working as a writing tutor for undergraduates and graduate students.

Working with other graduate students as a writing consultant has been, I believe, even more valuable to me as a writer because it let me see what graduate writing looks like across the disciplines and at different stages of the Ph.D.. Looking at writing in unfamiliar subjects made it easier for me to see the rhetorical moves that writers—and writing—at different stages of development looks like. As I learned to see the ways in which other writers introduced an argument, contextualized a citation, or summed up a point, I became more sensitive to when and how I did these things in my own writing.

For this student, engaging with the writing of others teaches her about her own writing practices; greater understanding of unfamiliar disciplinary practices helps her locate herself within her own discipline. In a different context, a current graduate student succinctly describes the impact of teaching writing on the teacher as a writer:

I have become almost hyperaware of the skills I teach my students when editing my own writing. As my students learn about constructing arguments, my own arguments become more cohe-

sive. When I teach my students the merits of concise writing, my own sentences become clearer.

Voices from the Field

As previously stated, this section is structured around observations about writing from graduate student writers who have participated in one or more of the Knight Institute's training programs.

The Backbone: Writing Process

Describing the process through which he produces writing, a graduate student in the sciences describes a crucial phase of his writing process as follows:

Before I even start writing the outline or even thinking about the paper, I just spend a few days going through my sources and notebooks and I write down anything that I feel should be a part of the paper, from numbers, to references, words, sentences, or just ideas. . . . When sorting my words and ideas into categories . . . I start recognizing the few that will eventually become the backbone of the paper. . . . Then, within each paragraph I condense every idea or group of ideas into one sentence. . . .

For this student, a significant portion of the work of writing a scientific paper involves turning groups of ideas into 10 or 12 tightly-packed sentences which contain "all the relevant information."

. . . once this is achieved it really feels like the paper is written. After days of sorting and condensing and struggling to strip every sentence of all non-necessary words, the reverse process is easy enough! Turning sentences into paragraphs is much easier than turning paragraphs into sentences.

This student's sequence of writing activities—sort, compress, outline, expand—closely resembles an approach recommended by George Whitesides (2004), an extraordinarily prolific chemist whose essay on "Writing a Paper" provides guidelines for the collaborative production of scientific articles. Writing to the graduate students and post-docs in his lab, Whitesides emphasizes the critical importance of an outline as a way to organize a paper and as a way to organize the *production* of a paper. He writes:

An outline is a written plan of the organization of a paper,

including the data on which it rests. . . . think of an outline as a carefully organized and presented set of data, with attendant objectives, hypotheses, and conclusions, rather than an outline of text. (p. 1375) [italics in original]

According to Whitesides, successful researchers write and revise as they experiment, to understand the data they are collecting and why it matters. His definition of a paper makes it clear that writing is integral to planning and executing research: “A paper is not just an archival device for storing a completed research program; it is also a structure for *planning* your research in progress” (p. 1375; emphasis in original).

As a humanities-trained writing teacher, I have long been comfortable with the idea that the writing process is part of the thinking process. My own ideas come into focus as I write and change as I revise. Years of working closely with individual writers as a teacher and tutor have confirmed and reinforced this lesson. When I work with writers at any level, I feel comfortable telling them that writing is not about putting fully-formed ideas on paper. Learning happens through writing. (This should be a recipe for helping writers relax.)

As my work has increasingly brought me into contact with graduate students and faculty in the social, natural, and physical sciences, I have tried to learn more about writing practices characteristic of academic fields that are rhetorically and methodologically distant from my own. I first read the Whitesides article because a graduate student gave me a copy. (In this instance, as in many others, the teaching flows both ways.) When I meet a graduate student, like the one quoted above, who has already figured out that his job includes building a compressed outline of each paper, I feel confident that this student is establishing writing habits and practices that will serve him well.

Unnecessarily Raising the Stakes

. . . As a graduate student I have learned to write in a way that assumes that someone is going to argue every point that I make — I am intentional in every word choice I make, anticipating potential areas where people will take issue. [written by a current Ph.D. student before a class on writing]

This was one of the most useful classes I’ve taken since starting graduate school because we talked about issues I am currently facing in my own writing. . . . Because I write defensively, I often feel that I often have too many subsections, breaking down my rationale for using my particular analytical frameworks and in doing

so, show my hand — aka my lack of confidence about the subject
I'm trying to engage. [written by the same student after class]¹³

Writing to new undergraduates about the writing they should be doing as college students, Keith Hjortshoj (2001) states: “Although there are many variations of form and style in academic writing, almost all of these variations occur within a consistent range of style and tone of voice: a tone of rational *explanation and discussion*” (p. 82). Though directed at undergraduate writers, this advice is far from irrelevant to graduate students. There may be many reasons why a piece of writing produced by a savvy, motivated graduate student may fail to exhibit a calm tone of rational explanation. As the comments quoted above suggest, confidence can play a significant factor. When I picture a writer who believes every sentence will be challenged, I picture someone in a defensive crouch. Defensive writing is likely to be what Hjortshoj calls “gripped.”

This graduate student’s defensiveness may be well-founded. Perhaps graduate classes have been contentious. Perhaps she has received negative feedback from professors. Perhaps this is just part of being a graduate student.¹⁴ Even if the student’s advisors and colleagues have been supportive and the feedback has been helpful and encouraging, the graduate student is right to recognize the limits of what she can express in her own work. She writes elsewhere, “My writing is supposed to push on the boundaries of knowledge . . .” This is a tall order for someone who is learning where the boundaries are.

The official curriculum (should) help graduate students map the field and then help them identify questions which will “push the boundaries.” The unofficial writing curriculum for WIM TAs and FWS instructors can help students build confidence, partly by stimulating greater awareness about what it takes to produce writing in a field. Our defensive writer has the following to say about the unofficial curriculum:

. . . graduate school does not necessarily encourage students to devote much time to thinking about how we write. . . . In 7101 we broke down the different stages of writing, the things that make us comfortable when we write, and the things we want to change . . .

One of the most meaningful experiences that impacted my

13 The before and after comments quoted at the beginning of this section are excerpted from in-class reflective assignments, produced on the same day, and used by permission.

14 The conversations in “The Space Between,” in which graduate students respond to the experiences of other graduate students, in addition to narrating their own, serve as reminders that almost any comment can feel like an attack. What looks like a supportive response to one person can feel, to another, like kneecapping.

development as a writer surrounded our discussion regarding the importance of having a separate set of eyes read over my writing. I have always worked very privately but I realized that for the past year and a half I had been unnecessarily raising the stakes on each paper by having the first pair of eyes besides mine to look at the paper be those of my evaluator. It sounds like a simple enough idea, but as a graduate student I had become used to operating solo and my sense is that this is the case for many of my peers.

I suggested above that this graduate student's defensiveness might have something to do with the challenges inherent in building what Lovitts (2004) calls a "cognitive map" of her program (p. 120-124). The student's follow-up comments suggest that the official curriculum may play a role, although not necessarily because her department has failed her in some way. Graduate students thrive when they develop writing practices that include drafting, revising, and informal peer review. Graduate students who write in public tend to complete their programs more quickly than do students who are isolated when they write, particularly during the long haul of dissertation writing.¹⁵ Graduate students can, and do, build writing communities on their own. But graduate programs could do more to foster these communities, and to make them part of the curriculum, rather than an informal feature of graduate life.¹⁶

The graduate student quoted above wrote about how valuable it has been to share her work with peers. One striking fact about this observation—echoed in many other comments—is the path the realization travels. In 7100 and 7101, we discuss modes of informal peer review and their value in undergraduate writing classes. But the writing graduate students share with each other in class would not typically "count" as academic writing. Asked to name genres of academic writing, most people would probably include the following: articles, conference papers and posters, dissertations, books, book chapters. But few current or aspiring scholars would classify course materials—or a reflective essay about writing—as examples of academic writing.

Reading graduate student comments on Writing 7100 and 7101, I realized that graduate students discovered the value of sharing their work with others because

15 Hjortshoj (2010) notes that, "Research on doctoral programs indicates...that isolation is a fundamental cause of difficulty and delay in the completion of Ph.D.s" (p. 34). Lovitts (2004) has explored the issues of social integration that have an impact on degree completion. One striking finding from her research into graduate student attrition is the fact that, "completers were almost twice as likely as non-completers to have shared an office" with another graduate student (p. 125).

16 In "Demystifying the Dissertation" Karen Cardozo (2006) outlines strategies for building into graduate programs support for graduate student writers.

of an essential feature of both courses: people read each other's work every week. However, the work typically consists of things like assignment sequences and in-class writing exercises. In the introduction, I quoted one student on this topic: "7100 emphasizes collaboration and sharing of teaching materials, and at a certain point I began to wonder why the graduate community doesn't practice this more often and more broadly. I think it's incredibly logical and so clearly beneficial. . . ." What is significant, for this student and others, is that she made the connection between the value of sharing teaching materials—which figures prominently in our training courses—and the value of sharing her scholarly work.

Practicing peer review is practice for the profession. While collaborative authorship of scholarly material is routine in some fields (such as biology) and relatively rare in others (such as English), academic life is built on other forms of collaboration, including the systems of peer review that govern academic publication. Even in fields where scholarship is typically produced by individual authors, other kinds of professional writing are produced collaboratively: job descriptions, committee reports, departmental review documents. Gateway decisions such as hiring and promotion include review of candidates by peers, often working in teams. Informal peer review is routine for most scholars: few would send an article to a journal that has not been read by at least one colleague. While the sharing of work is deeply embedded in academic culture, even the savviest graduate students will not necessarily learn this from coursework or department colloquia. Some learn it in a seminar officially devoted to something else.

"Writing Is a Process Which at Times Will Be Messy."

This section quotes Lindsay Cummings and Sarah Senk, two tenure-track professors who earned Cornell Ph.D.s. They describe lessons they learned about writing as process through their multiple modes of participation with Knight Institute programs. Both took Writing 7100 early in their graduate careers and taught several first-year writing seminars. Both participated in the peer collaboration program; both won teaching prizes. Senk worked as a writing tutor and served several times as a graduate co-facilitator in Writing 7100. Cummings received a one-year teaching post-doc in the Writing Workshop and co-facilitated Writing 7101.

Writing about writing as process, Senk and Cummings describe issues ranging from the utilitarian (time management) to the epistemological. Their discussions of process move beyond the fact that writing proceeds through steps and stages, especially when the product under construction is a long-term project like a dissertation. Both attribute what they learned about writing process largely to their work with the Knight Institute. Cummings describes the ways teaching writing reinforces good writing practices:

. . . the Knight Institute really reinforces the idea that writing is a process which at times will be messy. This keeps you writing. . . . When you keep the overall writing and thinking process in mind, there is less stress placed on a single day's output . . . it also keeps you from worrying too much about a single sentence. It's hard to be too much in love with your own language after you spend a half an hour in a conference with a student convincing them to cut through the meaningless rhetorical flourishes. . . . Teaching that lesson reinforces it for the teacher.

Senk writes about how thinking and writing are intertwined:

I think that I never really internalized the idea that writing was an epistemic process. In college I always thought that one should formulate an idea and then transparently translate it into an essay; in grad school I learned (partly through course work but mostly through teaching and training) to think of thought as something that came into being through writing, and to think of thought itself as something mutable.

As contributions to the academic study of writing, Cummings' and Senk's insights into writing process are hardly earth-shaking. Indeed, much of what they say follows from texts we read in Writing 7100 and 7101. What is potentially earth-shaking *for these two writers*, is that—largely through their work as writing teachers—they were able to transition from successful careers as undergraduate writers to successful careers as graduate writers who produced dissertations and landed tenure-track jobs. Both describe the training they received and their experience as writing teachers as crucial to their ability to make these transitions.

In describing the survival skills mastered by these talented and accomplished scholars, I make no attempt to control for other features of training or temperament that made their interests compatible with the Knight Institute's philosophy. Before we met them, their talents were recognized by the small, highly selective graduate programs that admitted them: Comparative Literature for Senk, Performing and Media Arts for Cummings. They would probably have been successful without the training and support they received from the Knight Institute and the community of teachers they chose to join. I would argue, however, that their success can be attributed, in part, to their willingness to take advantage of the opportunities presented to them, and their ability to adapt to the new circumstances they have faced as students, instructors, and, now, professors. The practice of graduate education need not be premised on admitting talented students and seeing how much they can accomplish on their own. Programs could admit talented students and provide them with the tools they need to succeed.

Learning Something Practical

This section begins with stories from four Anthropology Ph.D.s who responded to their department's alumni survey and noted learning something they could take with them. The survey included questions about training they received as teachers and TAs while in graduate school. The quotations below are responses to questions about Writing 7100 and Writing 7101:

Amazing! I cannot say enough about this course. . . . It made me prepared, and more confident, to teach on my own. Teaching a Writing Seminar meant that I had a course ready to go when I got a teaching postdoc and later an assistant professor position.

Very important to me. Improved my teaching, and changed my scholarly orientation. Became more interested in helping others articulate their ideas.

A wonderful class that I got a lot out of and still use in terms of how I teach composition courses in my current job. This was a fabulous class which I still draw on for inspiration in my teaching.

I thought this class was very good, because it was the first time I really felt I was learning something PRACTICAL. . . . To this day, I still feel that, although I do not teach, the clear steps and structure associated with what I learned in that class continue to influence how I approach the actual work that I do.

I have written elsewhere about survival and adaptation in the academic world (Shapiro, 2008). In the comments above, I am reminded of the range of cognitive transitions graduate students must confront, the number of times they must adapt to new circumstances if they are to survive in their chosen fields. For the first student, teacher training was preparation for a teaching post-doc, then for a job. The training course shifted the scholarly interests of the second respondent. The third has a job which includes teaching composition. The fourth has found that teacher training informs professional experiences outside academia.

Although they are frequently taught separately (if at all), and valued along different matrices, teaching, writing, research, and service can be mutually reinforcing. Graduate education at my institution is likely to continue to be fragmentary: students who succeed will continue to make use of the tools they can find, sometimes in unexpected places. Until such time as truly integrated graduate programs take root, programs like ours are likely to continue providing graduate students with access to tools they may not find anywhere else.

Postscript

A version of this chapter originally appeared in an issue of *ATD* devoted to Graduate Writing (2015, August). While revising our contributions for this collection, we were asked to provide updates on the programs and studies discussed in our respective chapters. One striking feature of the programs described in my chapter is how little has changed.

For example, the tables included above in “Writing and the Writing in the Disciplines Curriculum” provide data from 2013-14: hardly cutting edge by the time this book goes to press. However, if I were to replace these tables with data from a more recent year, the numbers would be largely the same: a similar number of TAs trained, a similar number of departments represented, a similar range of departments represented in the FWS and WIM programs.

Our writing program’s stability is one of our greatest assets. As priorities shift, both within the university and within the College of Arts and Sciences (which houses the Knight Institute), support for Cornell’s writing in the disciplines program has remained widespread. Indeed, recent curricular reviews have, by some measures, reinforced the central place occupied by the writing program.

I do not consider it cynical to hypothesize that the investment many departments share in the program’s continued strength is connected to our program’s reach. The place of the writing program in the lives of our undergraduates is obvious: each of Cornell’s seven undergraduate colleges mandates that their undergraduates take at least one first-year writing seminar (most require two). Faculty can (and do) complain that students don’t come out of these classes knowing how to do everything they wish our students knew how to do. But these complaints often crumble in the face of evidence, or when alternatives are considered.

This chapter underlines the less obvious, but equally important impact of this program on the academic lives of graduate students from approximately 40 departments in five colleges. Major upheaval might result in painful consequences for the graduate programs with which we collaborate. Contractors who do business with the federal government figured out long ago that, when contracts are distributed across a range of states and congressional districts, legislators from many parts of the country have a stake in seeing projects funded. My program’s commitment to working with a range of departments has less Machiavellian motives. Our commitment to breadth represents an essential component of our program’s mission. If writing is embedded in the work of disciplines, this work should happen in as many departments as are willing to participate. In this case, utopian motives may have realpolitik consequences.

While no program is ever completely secure, we have, on the credit side, 50 years of history, a generous endowment, and strong relationships with faculty and departments across the university. Maintaining these interlocking relationships

involves a healthy dose of mutual self-interest. Sometimes, maintenance includes advertising the value of our program's services for the departments we work with. Conducting the research embedded in this article, and sharing it with the wider world, may provide, when needed, evidence to support our continued value to the institution we are a part of.

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