The Pittsburgh Study of Writing

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Abstract: This essay presents results from a comprehensive study of writing in the undergraduate curriculum at the University of Pittsburgh. It is in two sections. The first section reports on interviews with faculty from across the disciplines in the School of Arts and Sciences; the second reports finding from student focus groups and from an extensive student survey.

In Spring 2009 we presented the *Pittsburgh Study of Writing* to the faculty at the University of Pittsburgh. This was a study of writing in the undergraduate curriculum on our campus and, in particular, in the School of Arts and Sciences. The project began in 2003; we learned much along the way—much about undergraduate writing on our campus and much about the pleasures and pitfalls of a campus-wide research project. And there is much in what we learned, we believe, that may be useful to faculty, students, and program directors on other campuses. With that goal in mind, we have prepared two sections of the report for *Across the Disciplines*—a section based on faculty interviews and a section based on student surveys and focus groups. (The full report can be found at http://www.academic.pitt.edu/assessment/pdf/Pitt-writing-study.pdf.)

What follows is not the kind of research article usually found in *Across the Disciplines*.[1] It is different, for example, from the essays presented in the special issue, *Writing Across the Curriculum and Assessment: Activities, Programs, and Insights at the Intersection* (*Across the Disciplines*, Vol 6, 2009). We are presenting the results of an assessment project rather than an account of how it was done or an argument for its methods. Although this was a local study, prepared for a local audience, we believe that it can be generally useful for the following reasons:

- It provides a closely textured look at a program with some national recognition.
- It can serve as a model for anyone interested in a similar assessment project—ethnographic rather than outcomes based.
- It can be useful in faculty workshops. The framing in the report provides an everyday, practice-based theoretical language that can advance discussion.[2] And, because readers hear faculty colleagues speaking in the report, it can create additional space for faculty colleagues to speak in turn.[3]
- It can be useful in undergraduate and graduate seminars, where it is always difficult to find materials to represent individual writing programs.[4]

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Background

This project began several years ago, in Fall 2003, before our campus had fully committed to outcomes assessment, but when assessment was much in the air. Our Vice Provost called the English department chair (Bartholomae) to say that while the Provost knew we had a strong and highly regarded writing program, he wondered what measures we had to test and to demonstrate its effectiveness. And, he asked, "was I at all interested in an assessment project?" The Vice Provost, Jack Daniel, was an old friend and made it clear that this was a loaded question, that a wise chair would say "yes, of course," that an assessment of student "outcomes" was on its way, and that my department had a chance to get out ahead of this juggernaut as it made its way to our campus.

I said that I was and I wasn't interested in an assessment project. I said that in the Arts and Sciences we had developed a curriculum that promoted student writing across the four years of undergraduate study. The curriculum produced these outcomes—students were writing regularly and with close instruction in a first year writing course and then in two writing intensive courses, one of them in the major. This writing would not necessarily be produced otherwise, and certainly not in the forms that had been developed through our WID program (which made revision the primary point of instruction and sequencing the basic format for a writing course). Outcomes assessment, then, could be descriptive.

I said that we would not learn much from an SAT-like test of general writing ability, an instrument that was being peddled across the nation at the time; I said that what we needed was detailed knowledge of what was happening on the ground. We needed something like an ethnographic study of the "culture of writing" on our campus. I said, "I have been a member of this faculty for 30 years and for 30 years directly engaged with student writing, and yet (with a few exceptions) I could not provide a detailed, documented, or comprehensive account of what goes on in the courses taught outside the English department—in History or Economics or Chemistry." Nor did I know in detail what the faculty, in general, think about these courses or their students or their students' writing. And so, with Beth Matway, who leads our WID program, we proposed a study designed to learn what we could about the culture of writing in the undergraduate curriculum. To make this manageable, we decided to focus for the time being on undergraduate writing in the School of Arts and Sciences. Our Dean, John Cooper, agreed to the plan and we were off and running. (I should quickly add that we were fortunate to have a Dean who understood the importance of writing as a part of intellectual work at any level, and who was truly interested in a detailed account of writing in Arts and Sciences.)

In announcing the project, the Vice-Provost said that the study should document the "core values and practices associated with writing at Pitt." Our goal was to bring forward the experiences and expectations of students and faculty, to hear what they had to say in their own terms and their own voices. And this, we believe, was the great strength and pleasure of the report. It included, verbatim, comments from a wide variety of students—some pleased with their courses, some not so pleased. Their comments were pointed, thoughtful, eloquent, sometimes critical, always useful. The report also included, verbatim, comments from faculty colleagues across the disciplines, who provided detailed accounts of their courses—their writing assignments; their methods for responding to student writing; their expectations; their frank assessments of what their students do with ease and

where they struggle. We had said at the outset that one goal of the study was to give voice to students and to faculty and to make their daily practice as writers and teachers visible.

And so we were pleased to see that, once the report was released, what travelled most widely and most quickly were particular statements by students and their teachers. Actually there were two areas of the report that travelled widely and quickly across campus: these statements by students and faculty, but also lists of faculty members and their courses. The project included a survey, and in this survey we asked students to list the courses that had been most useful to them as writers and to list faculty who had made a difference. We organized both lists by department, and these were quickly picked up by department chairs (and by the Dean), slipped under doors and passed from hand to hand as colleagues looked to see how they and their departments fared in comparison with others.

But we are getting ahead of ourselves. Let us briefly describe the project. Then we will present some selected findings.

The Design of the Study

The study had four primary areas of inquiry, each with its own instruments.[5]

We did an inventory of existing courses and requirements. From the record of course descriptions across Arts and Sciences, we wanted to learn what we could about writing beyond the two required writing intensive courses (w-courses). We also wanted to look closely at the existing writing intensive courses, to document the various ways departments made sense of the requirement by developing w-courses as part of advanced study in their disciplines. We summarized other assessments of writing at Pitt.[6]

We conducted a series of focus group meetings with students drawn from upper-division, writing intensive courses. We asked the participants what they had learned, as writers, in their courses at Pitt; how their writing had changed; how they understood faculty expectations; we asked about their best and worst experiences. We learned a lot. And we used what we learned to design a survey.

We designed and administered an on-line survey in the Spring Term, 2005. (For this, we relied on substantial support from our University Center for Social and Urban Research.) 1000 juniors and 1000 seniors were invited to take part. The response rate was 32%, a relatively high rate of response for surveys of this type. We had representative participation across the three primary areas in the Arts and Sciences: Humanities, Social Sciences, Natural Sciences. The survey was designed to give us a detailed account of the genres of academic writing in use on campus, and of the ways our students' understood and valued these genres.[7]We gathered information about writing and teaching both in and out of writing intensive courses. And we asked students, in general, about the importance of writing to their education and future careers. 90% said that writing was important, very important or extremely important to their education at the University of Pittsburgh; over 1/3 said it was extremely important.

We also had a section of open ended questions. In the report, for example, we provided a list of courses and teachers that students said "made a significant difference" to their education as writers. And we asked, in more general terms, for comment on the courses they had taken or for advice they would offer the faculty--and the report features what we heard. (One student said, "You should have asked us if we thought long papers due at the end of the semester are useful—they aren't!!") These student comments were thoughtful, interesting and useful. We were impressed with the time they took to tell us what was on their minds.

And we interviewed 27 members of the faculty, nine from each of the three divisions: Humanities, Social Sciences and Natural Sciences. We developed the pool by writing to Department Chairs and asking for a list of faculty from across the ranks whose courses included writing and/or who thought of themselves as particularly interested in or concerned about student writing.[8] The report summarizes the interviews by highlighting common themes or issues. Our report, then, provided a rich menu of best practices from our colleagues across the disciplines.

Below, we will provide a more detailed account of what we learned from the student focus groups, from the student survey, and from the faculty interviews. These are excerpts from our report to the campus community.

Part One. The Faculty Interviews

In Fall 2004 we wrote to department chairs in A&S asking them to identify up to 5 members of their faculty from across the ranks (including Lecturer) whose courses included writing (in whatever forms). We were looking for people who thought of themselves as writing teachers. From this list we created a pool of candidates representing departments across the disciplines. We planned for 30 and we completed interviews with 27 members of the faculty equally distributed across the three areas: Humanities, Social Sciences, Natural Sciences. 24 of the 27 were tenure track faculty (some very prominent professionally and on campus); the other three were lecturers, one in each of the three divisions.

Although we had a core set of questions, the interviews took their own shape and direction; they lasted from 30 minutes to 90 minutes. The interviewers had course materials on hand. We wrote up each individual interview and returned the transcript to the faculty colleague for comments or corrections. As we began to think about the full range of interviews, the study became a study of key words, and so we then organized our findings according to the primary themes or concerns that emerged across the group, and we created subdivisions as they seemed useful and/or appropriate. We will list those, with commentary, below. The text is drawn from the final report. The language we use, and the key terms, all came to us from the interviews themselves. We used colleagues' names, of course, when we released the report on campus. We were eager to identify best practices across departments. Here we use initials.

Negotiating Academic Writing

1. Writing Beyond the First Year

Most instructors we interviewed agreed that the quality of student writing, and the quality of students' preparation for a course with writing, have improved over the last decade. Most felt that A&S students came to their advanced courses with appropriate skills, while acknowledging that students come (as people come) with a range of abilities, some writing with apparent ease and others struggling. A. O. (Religious Studies) reflected on this range in remarking that with some "naturally gifted" writers, he can work on "subtle improvements in style," while with others he teaches at a "more basic level." In general, however, faculty members agreed that most students in advanced courses are ready to make progress in their writing. With faculty support, students can move beyond prepared forms (such as, they said, the 5-paragraph theme, the Term Paper, the Report, the 5-page critical essay), and overcome common bad habits (such as "empty prose" or the broad generalization that "supports all claims and requires no evidence").

Some teachers spoke about the necessity of requiring students to attend to the details of proofreading and correction. M. G. (History) proposed an "institutional policy promoting the use of Standard English."

2. Clarity and Coherence

Almost everyone we interviewed mentioned "clarity" and "coherence" as important qualities in student writing, and almost everyone said that these qualities were often lacking. Thinking about what students need to learn, K. S. (History of Art and Architecture) remarked, "I find that they're not writing as precisely as they need to be." Several faculty members noted that students struggle to accurately describe and represent what they see, study or read. They have not, that is, yet learned to use the lenses or optics of a particular discipline; they work, rather, through a more general cognitive/intellectual lens–often "describing" in terms of expectation, habit or cliché.

- P. S. (Chemistry) notes that "teaching writing in the sciences poses special challenges" because science is "thing-centered and number-centered" and most students have more experience writing about beliefs and opinions than about things.
- J. N. (History & Philosophy of Science) gives the following advice on working with primary historical materials: "Many of you mixed modern day judgments of the science in with the historical narrative. While these judgments are certainly important, they must not be allowed to take over the narrative. Our goal is to understand an historical episode in its own terms …."
- F. G. (Economics) is particularly concerned about training students to use charts and graphs to represent data. "Students have to be able to describe what is really out there in order to theorize or to explain the forces and consequences of economic adjustments in the steel industry."

Many faculty members saw the lack of clarity and coherence in student writing as an intellectual problem: students, they say, need to learn how to "focus." Faculty commented that students do not get to the point; they have too many ideas working at one time; they are overwhelmed by all that they have read or learned; they do not know how to eliminate extraneous information. They need to learn to choose and select and focus on a single issue or question. They need to frame a problem, to summarize and to justify their findings. And they need to do this economically–that is, they need to know what can be left out.

- I. F. (Psychology) says, "Students have difficulty limiting the information they provide to only that which is relevant to their hypotheses."
- K. M. (East Asian Languages and Literatures) feels that she is working against the current trends in her discipline. In her view, much "successful writing" in film analysis tends to be obscure, complicated, and filled with jargon; she also, however, says that she teaches her students to write clearly, simply, and without jargon.

Faculty members used a variety of phrases to describe what constitutes coherence in student writing. They spoke of the need for students in their discipline to "construct an argument" or "develop a narrative," to "organize" or "structure" a whole piece of writing, or to move from beginning to end in a "logical" manner. It appears that although faculty colleagues agree on the value of coherence, it takes different forms in different disciplines. In the context of advanced courses and the intellectual demands they make on students, the virtues of clarity and coherence do not travel well; they are not easily portable or generalizable. For example, a "clear and coherent" narrative in a history class is

different from a "clear and coherent" account of an experiment or a "clear and coherent" analysis of a set of readings in political theory. What was most often represented in faculty concern for "clarity" and for "coherence" was the desire to see students master specific materials and represent those materials appropriately within the expectations of the field.

- S. C. (Economics) believes that her students' difficulties with structuring an argument correspond to their difficulties in knowing how to analyze economic information. "The lack of structure is as related to not quite understanding analysis as it is to not knowing how to get it [the analysis] on paper."

As students work with complex materials in advanced courses, the lack of clarity and/or coherence in their writing may represent an uncertainty about disciplinary methods and expectations. It is also evidence of students struggling to get intellectual purchase on complicated material.

3. Complexity

Alongside their concern for clarity and coherence, some faculty asserted the value of complexity in student writing. They want students to develop the ability to handle multiple sources, ideas, or points of view in a single piece of writing. Perhaps the most difficult task for student writers is to negotiate what appear to be competing demands for "clarity" and "control" on the one hand, and "complexity" and "exploration" on the other. As they move beyond the simpler texts they have learned to control, they find themselves struggling to manage complexity.

- S. D. (German) sees complexity as a key goal—the ability to view an issue as not simply a pro/con debate or as right/wrong, but in multiple shadings. She asks students to write on controversial topics, "issues of their heart," where they must learn to negotiate competing arguments and persuade readers by their ability to work through multiple positions.
- J. G. (History) expects students to manage lots of detail and "nitty-gritty data" in their writing; she expects a clarity that is not synonymous with "simple mindedness."

Additional faculty responses are available in Appendix A.

Engaging Students as Writers and Thinkers: Writing Assignments

Making Writing Matter

A common thread across the interviews was a concern to make writing matter, to make it more than a routine and predictable classroom exercise, to present a writing assignment as something other than one more hoop to jump through en route to graduation.

- L. P. (Anthropology) works to convince students that good writing requires more than "meeting the conventions of spelling, grammar,

and punctuation." He has students working on a semester-long project. He wants to convince them that this project is not just "another Mickey Mouse exercise in pretend work." He organizes his course so that students carry out an independent, ethnographic research project. He says that those who struggle are those who are unaccustomed to directing themselves. They come to him to ask, "what do you want?" as if they are ready to do whatever necessary to accommodate to the instructor's demands and idiosyncratic taste. He says, "Despite experience and frequent pessimism, I try breaking that frame of enslavement." He thinks that students have been conditioned to regard class assignments as "make-believe." "As students often choose a topic they think will be acceptable because it is timely. . . or academic. . . , I urge them to trust their intelligence and intuition to choose a topic that appeals, however narrow or simple it may seem. I stress that research is not required to prove something. The object of research is to learn what was not previously known."

- L. A. (Hispanic Languages & Literatures) wants her students to understand that "writing gives a space for reflection." Through writing, students come to view themselves as scholars, and have the opportunity to make sense of their "investment of time in college." She wants to convince them that the way they speak and write "has an impact." Writing enables them to "adopt a position, vis-a-vis the set of ideas in question, with proper backing and argumentation."

Additional faculty responses are available in Appendix B.

Taking the Next (Disciplinary) Step

Many we interviewed use writing as a way to compel students to extend their thinking. Short paper assignments may ask students to prepare an argument or develop a thesis not explicitly developed in class; to articulate what "they think" about a particular argument or issue; to apply a theory taught in class to materials that have not been discussed; or, as P.W. (French and Italian) puts it, "to enter into a dialogue with the text they are reading."

Often, in senior seminars or advanced courses, assignments are designed to help students move from one level of thinking to another—to take the next step necessitated by (and valued by) the discipline. These assignments move students from description to analysis, for example, from summary to interpretation or from report to theory.

- M. G. (Political Science) says that students generally enter his classes able to summarize and able to compose a basic 5-paragraph essay. He also notes that most (but not all) have reasonable mechanics. What they tend not to be able to do is "interpolate." They seldom know how to build toward a conclusion via a presentation of sequential steps. They have trouble discussing strategic logic or consequences, or differentiating between proof and surmise. M. G. uses short assignments that prompt students to practice "specific analytical and expository skills" beyond the basic essay.
- D. F. (Music) has designed the writing assignments in his course to lead students from "description" to "criticism." His students work on the intellectual challenges of describing music in prose and then of moving from description to something else–interpretation or criticism. A sequence of short papers moves from the description of a score to a re-writing of that description in service of a larger, more general critical project.

- F. G. (Economics) has created a set of 6 assignments to prepare students for the step from "description" to "explanation." Students must learn to describe and present data visually and mathematically; they also have to learn how to pay attention to the literature–they need to know what to notice, what counts, what matters. In this course students are preparing descriptions on the basis of interviews and reading as well as formal economic analysis. It takes effort to train students to see what is there and to report on it accurately and clearly. Students also need to know how to process the information or data they have described. In the assigned readings, F.G. asks them to pay attention to how a scholar arrived at the findings—to notice the "analytical bridges" that moved from description to explanation so that they can replicate this process in their own writing.

Additional faculty responses are available in Appendix C.

Writing in the Disciplines/ Writing as a Professional

For some of the faculty we interviewed, the long paper assignment models the process of writing an article for a professional journal. In J. N.'s Senior Seminar in History and Philosophy of Science, for example, students are writing articles directed toward the journal, *Philosophy of Science*. This practice was most common, however, in the Natural Sciences.

- W. C. (Biology). In the "Forest Ecology Writing Practicum," his students are prepared to write a "scientific paper"—that is, something appropriate for a journal—appropriate format, appropriate documentation, "graphs, statistics, everything." The first paper is a kind of trial run, in which students write from data that is provided. W. C. says he wants to "keep the science simple" because writing is the hardest part for them. They also prepare a paper with their research team. The faculty member pushes hard. Sometimes, he says, an A paper or a publishable paper is 10 drafts away. If the student will do the work, he will provide the direction and the motivation and this collaboration may go on well after the course is done. Three of his students, in fact, have published their work with him in the last three years, in some cases with the student listed as primary author.
- L. R. (Neuroscience). In Neuroscience, the "Writing Practicum" draws primarily on the laboratory research, although students are reading in the appropriate neuroscience journals as well. Students work in teams, discussing the readings and the research. The research project, in other words, is carried out as both a lab project and a writing project. With the instructor's oversight, students prepare a paper suitable (ideally) for publication in a journal in the field. L. R. receives a draft of the articles and reads for ideas, for the science, and for organization. She meets individually with students and if there are sentence level problems, she points them out. Students must fix errors in the prose. Students revise with the sense of perfecting their work. In some cases, work prepared by faculty and student teams has been published.

For other faculty, the senior seminar (or writing practicum) is conceived as an introduction to writing in professional business or industrial settings.

- F. (Psychology). For her course, "Psychological Aspects of Human Sexuality," the research project, staged out over the semester, is designed, as she says, "to provide the student with firsthand experience in doing professional writing and research on a topic relating to the

psychological aspects of human sexuality." The students write a two-part paper on some aspect of sex education. Her instructions tell them:

> In order to make this project similar to the type of professional writing and research a college graduate might be expected to do, each student should imagine that he or she is working for a company that markets sex education materials or a government agency that will be implementing a program for sex education. Develop a research question that might be of interest to this company or agency.

- G. N. (Computer Science). In a proposed course, "Project Design and Implementation," students work on a real project with an industry partner, where they are responsible for writing not only proposals and reports (including oral presentation) but also routine correspondence.
- F. G. (Economics). F. G.'s Proseminar is designed to prepare students to do economic analysis, but also to carry out the kind of projects they are likely to encounter in their careers. The final assignment in the course has students preparing an analysis and report as though for a local firm. The "genres" they practice include report, memo and oral presentation; the skills include summary, analysis and the visual presentation of data.

Many instructors include some form of oral presentation in their courses, to give students practice in a kind of writing they will use in their professions: "Being able to give a talk is almost more important" in Physics than being able to write a report. Faculty also regard oral presentations as opportunities for students to learn to prepare abstracts or short-forms of longer written work, or as occasions for students to feel the pressure of audience and the demand for clear organization.

Brief, Informal Writing Assignments

Most of the faculty we interviewed have students writing short (1-3 page) papers, often informally (that is, without grades or commentary). These serve a variety of functions. They are designed to exercise particular skills (often without concern for evaluation)—preparing graphs and charts, writing an introduction or conclusion, writing a summary or précis, generating ideas from data sets. In large lecture courses, short informal assignments are used to engage students but also to assess what they know.

R. L. (Political Science) has created a useful taxonomy for the short assignments in his courses.

In class writing assignments, at least one a week, sometimes several a week. These are short and directive; some are unsigned, not all are graded. They are designed to assess prior knowledge; identify prior assumptions; summarize key points in the readings or lectures (one-minute papers); and help students identify key differences in time periods, approaches or concepts ("structured matrix comparisons").

Out of class writing assignments (four per semester, two of them using draft and revision). These are linked so they build toward a medium length paper. Students are encouraged (but not required) to choose a subject they can pursue through the four short papers. The assignments represent different genres, each providing students with a critical perspective on a text or topic: WDWWWWHW (Who Does/Did What to Whom, When, Where, How, Why?); assessment of a news source (comparing the treatment of a single topic across media, according to criteria provided to by the instructor); book review; and analytic paper.

K. S. (History of Art & Architecture) assigns six low-stakes informal writing exercises in his introductory courses, each designed to help students generate and develop ideas. He wants his students to learn that "writing is a tool for them, rather than purely performance—it can help focus their minds and clarify their thoughts."

Sequencing the Task

Many faculty members we interviewed organize their students' writing through a sequence of smaller assignments that lead to a larger project.

- K. S. (History of Art & Architecture) says, "The goal is clear in my mind—it's true at every level: you need to break down the larger product into a sequenced set of smaller assignments. Sequencing is not just a tool for introductory writers but also for accomplished writers." He believes that the extended work in the preliminary assignments allows students to find a "voice" for the larger paper.
- J. N.'s "Junior/Senior Seminar," with a one credit Writing Workshop attached (History & Philosophy of Science) provides a compelling example of sequencing. The goal of the course is to give students the "direct experience of how someone with a background in the History and Philosophy of Science synthesizes their history of science and their philosophy of science." The course assumes that students can do each of the individual tasks but have not yet learned to synthesize. J. N.'s sequence moves from a "Short History of Science Paper" to a "Long History of Science Paper." The work on the original and the revision focus attention on problems in writing history (and point toward the larger project down the line). These two papers are followed by a "Short Philosophy of Science Paper," one that focuses on the treatment of induction and confirmation (processes that can be applied to the historical materials from the first section of the course). And this leads to a first draft of the term paper, which is meant to be written in the style of the journal, *Philosophy of Science*. The draft is read and edited by students in the course (as well as by the instructor). Students prepare a seminar presentation on their project and a final version of the paper.
- F. G. (Economics) also has a tightly ordered sequence of assignments. The assignments are organized into two parts. "Part I is based on a series of exercises that are completed on an individual basis by each student, culminating in a research report concerning economic adjustment in a steel-producing region." The exercises are written and organized to lead students through a set of lessons that will "have practical value" for them, including practice in the visual representation of quantitative data. "Part II is comprised of three exercises that are completed and graded on a team basis. The team project is comprised of secondary data collection/presentation, primary data collection/presentation, and a brief oral report related to steel industry suppliers in the Pittsburgh region."

Additional faculty responses are available in Appendix D.

Engaging Students as Writers and Thinkers: Working with Student Writing

Responding to Student Writing

The faculty colleagues we interviewed all provide extensive written commentary in response to the student writing they receive. Many also meet with students in individual conferences. Most assert the importance of providing not only evaluation, but also instruction—in forms of feedback that are directed toward the next piece of writing. "In the next assignment (in the next draft), here is what you need to work on…."

- R. L. (Political Science) reads student writing on-line. He makes sentence level editorial changes on the texts, marks sections and inserts comments using MS word reviewing tools. In addition to these marginal comments, he prepares quite extensive written summary statements for each student. These will characteristically direct students to areas where they can improve presentation or improve the research behind the presentation. He speaks as a scholar to young scholars. For example: "You need to spend more time on the main subject of the paper. To do that, you need to broaden your sources. What you have now is mostly a restatement of Swain and Swain and of Sharman. You need more specialized sources . . , including those I suggested to you in my earlier note." Or, "you switch back and forth from analytic tone to a historical narrative tone, which is fine, but the reader needs to be clearly alerted when you do that."
- P. W. (French and Italian) explains that "the important thing is for students to learn to read themselves, or teach themselves—to see the difference between a good title and a blah title, the difference between an argument that works and one that doesn't."

Additional faculty responses are available in Appendix E.

Revision

All of the faculty we interviewed spoke about organizing their courses so that revision becomes part of the required work and one of the crucial methods students are given for working on their writing. (All officially certified writing intensive courses on our campus are expected to make revision part of the required work of the course.) Some described revision as a way of cleaning up or tightening up a draft. In many courses, however, instructors use the revision process to open a first draft up to question, to provide the context for additional research and new lines of argument, to raise the problem of alternative points of view, to provide the occasion for attention to audience.

- K. C. (Biological Sciences) is concerned about the way students procrastinate on a writing project precisely because rushing through the writing leaves no time for revision. "Students write their way to an argument and main idea through drafts," she says. She requires students to revise so that they have the time to develop more sophisticated arguments.

- S. C. (English) uses revision as a way of teaching students the dangers and limits of the tightly-controlled argument. Students collaborate through a series of drafts and revisions to work their way toward a more expansive, contradictory and demanding form of critical writing.

Writing Guides, Handouts, and Supplementary Materials

Most of the faculty we interviewed provide task or assignment-specific handouts (or on-line guides)—detailed supports that anticipate problems students might encounter in their writing.

M. G. (History) provides students with a packet of writing materials, including a carefully elaborated set of guidelines on writing "argument-driven essays." She outlines a sequence of procedures students may follow to develop a paper based on "well-honed middle-range conceptualizations that can be supported or refuted with evidence" rather than inflated generalizations.

J. N. (History & Philosophy of Science) provides a rich set of on-line materials that offer pointed advice about problems particular to writing (and power-point presentation) in his field. Here, for example, is what he says about Voice:

> Voice. In both textbooks and research articles, scientists are encouraged to write in a passive anonymous voice. The fiction is of disembodied scientific consciousness that is the repository of scientific knowledge. "It was known that . . . ." New discoveries are stripped as much as possible of human form and motivation. "It was observed that . . . ." This locution suppresses the human beings who made the discoveries, where and when they were done, the reasons they thought to observe where they did, their passions and aversions, the rivalries and feuds and the many dead ends. Writing in this style makes it very hard to pay proper attention to context.

D. F. (Music) sent his senior seminar students additional instructions by email when they were struggling to move from description (of a musical work) to criticism. In his message, he tries to find another language (different from that in the writing assignment he had prepared for them), a language that might connect with the students, and at the same time he strives to represent the project as a writing project—something to be done in sentences and paragraphs. Here are sections of the e-mail:

> 1. Take the harmonic analysis you have already completed and try to chart it out or summarize it in broad terms: where do the major changes of key or major shifts in the harmonic progression take place? How do these shifts or changes relate to the placement of text in the passage?
>
> 2. After getting this broad overview of the harmonic motion of the passage, then think about how the other elements we discussed in class can be related to it. In short, how does the entire "constellation" of musical procedures combine to create an overall musical-expressive effect that relates to or portrays the text?
>
> 3. In a few sentences or paragraphs, summarize what you perceive to be this overall musical-expressive quality and the primary means by which it is achieved. Send that statement on to me whenever you have written it. I then can react quickly to your thesis (or hypothesis) before you proceed to write up a draft of your paper.

Use of Models

Many of those we interviewed use models in their teaching—either examples of student papers or examples of professional writing—in order to give students a point of reference for genre, format, and style. With models, students learn that writing comes from within a community rather than out of the blue (or through divine inspiration). In some cases, the models are provided only to those students who are struggling, who don't have a sense of what is expected of them or who need help in imagining "good" writing.

The use of published models also prepares students to read the professional literature—not simply for information but as a demonstration of thought and method.

- K. C. (Biological Sciences) has students read a typical journal article. As part of the writing instruction, she has them read only the first paragraph, the first and last sentences of the succeeding paragraphs, and the last paragraph. This exercise gets student to think about how those particular sentences function in the article, thereby directing their attention to formal structures. "When you provide a structure—not a template—you get more orderly writing."
- L. R. (Neuroscience) believes students need to learn to read the professional literature. She has students read articles from the journals—first "as science" and then as writing, in order to think about presentation.
- J. N. (History & Philosophy of Science) and W. C. (Biological Sciences) have students writing articles as though for particular professional journals, and therefore have them reading regularly from the journals.
- S. C. (Economics) says, "One of the most instructive things I do is to use a journal in Economics that publishes student papers. I have my students read one and write a review." This process helps students get an idea of how an economic argument can be structured.

For some of the faculty we interviewed, using journal articles as a model for student writing was a new idea. Some expressed an interest in having their students read scholars' work as a model of writing within the discipline. Others prefer that students not read the professional literature. One colleague (Anthropology) said that he wants to demystify research and believes that journal articles would make that task difficult, by distracting students from their own decisions about substance and method. Another (History) avoids professional models so that students will attend to primary materials and work from "inside" the problem of narrating a particular history.

A number of faculty members use student writing as models—in addition to, or instead of, professional writing.

- M. G. (History) conducts workshops in class as students are working on a particular project. For example, she might duplicate the first paragraphs of six different papers so that the class can discuss effective introductions.
- S. D. (German) discusses sample papers with her classes using an overhead projector. She asks students to identify "what is good, not so good," and then to merge parts of one paper with parts of another to compose a collective response.

- L. P. (Anthropology) distributes copies of term papers from previous classes to "serve as examples of research topics, how reports have been organized, different acceptable formats, the optional use of tables and figures, and the manner by which papers are critiqued."

Working with Sources

Most of the faculty members we interviewed provide handouts or lessons on the use of sources. Their particular concerns go beyond students' understanding of plagiarism. Students need to learn to evaluate sources, to read them critically and to use the material as the basis for their own thinking and argument (rather than stringing together quotations in lieu of thought or argument). Students have to find a way of using the material and they have to find a position from which to speak, as writers and thinkers, in relation to the experts or the professionals. They need to learn to understand what is new and ground-breaking, what is controversial, and even how to identify a fact or a conclusion.

In several of the courses discussed in the interviews, faculty restrict the range of materials students can work with as they write—often limiting "research" to materials in a course-pack. Instructors gave several reasons for this restriction. Much time is taken, and much back-tracking is required, when students head off to the library to try to find appropriate sources. A limited set of sources and a limited topic is also a hedge against plagiarism. Limiting the source materials also allows for comparisons across a class and increased attention to the intellectual or academic task—that is, what students can make from the materials at hand.

Essay Exams

In the survey and in the focus groups, students expressed a variety of concerns about essay exams. The History Department faculty we interviewed, however, were the only ones to focus attention on this genre of academic writing. So much rests on these exams, they noted, and yet students are often unprepared for the task.

- One colleague noted that this difficulty arises not so much because of student deficiencies but because the approach is foreign to them—reading difficult texts and organizing critical answers to complex questions. She provides written comments on the "content" of essay exams but also on the writing. Students can request conferences to discuss the writing in the exam and they can bring in outlines or drafts for comments in advance of a test.
- Another said that if students have never written a "history" essay exam, she invites them to come to see her. She provides a sample exam, which she will read and comment on. Students tend to take her up on this after the midterm! She does not provide models of previous student essay exams because the key, she says, is for students to learn how to engage the material, to work on the problem from the inside. Students must learn that you don't fully know what you want to say until you begin writing.

Part Two: From our Students. Focus Groups and Survey

Student Focus Groups

We organized eight focus groups with a total of 33 participants, mostly juniors and seniors. Participants were mainly drawn from upper-level writing intensive courses. This was a select group, largely representing majors in the Humanities and Social Sciences, but they were interested in the study and eager to talk about student writing on our campus. Our experience with the first three sessions helped to shape the undergraduate student survey instrument and to refine our questions for the later focus groups. The questions were:

- In what ways would you say your own writing has changed in the time you have been studying at Pitt?
- What are the most valuable lessons you have learned for writing in your major? How did you learn these lessons?
- In your major, what do you think your professors value most in students' writing? What seems to frustrate them the most?
- In what courses have you done your best work as a writer? What were you working on? What do you think enabled you to do good work?
- What was your worst writing experience–the least useful or the least satisfying? What made it so unsatisfying? Please do not use the names of instructors in your response.
- What can professors do to enable students to successfully complete their writing assignments?
- What questions haven't we asked you? What more would you like to tell us about your experience of writing at the University of Pittsburgh?

We had tapes and notes from the focus group sessions, and as we reviewed them we organized our report according to the primary themes, topics, and concerns that emerged in the conversations. In our report, we were also careful to use student language as much as possible. For the survey, we needed a vocabulary that would be current and recognizable, and we wanted our colleagues to hear how writing was talked about in the hallways, the bars, and the dorms.

In the report, we organized the discussion by the general categories in our questioning.

What Do Professors Want?

Thought.

Students were divided in their perceptions of their professors' expectations. Some felt that professors mainly want "certain answers, their answers," a view perhaps related to the belief that what professors require is simply written evidence that the student thoroughly understands the course material.

On the other hand, one student summarized a commonly stated view when she said her professors want to see students "putting thought into [their] writing." Others agreed that professors expect students to formulate their own theses, or make interesting and novel claims. In one group, when a

participant declared that his professors value "content," others rapidly modified the statement in a string of responses: "accurate content," "supported content," "arguable content," and their discussion of these modifiers indicated the importance of the student's own thinking in the presentation of "content" to the instructor.

Organization.

While students disagreed about the extent to which their teachers value independent thinking, they were quite consistent in their belief that professors expect "organization" in student writing. A logical order, a well-constructed argument, good reasoning, sound structure, and coherence were frequently mentioned, and tended to elicit nods all round the table. Students who directly commented on what most frustrates their professors mentioned lack of organization more than anything else—sometimes describing the problem as "rambling." A few students mourned that adhering to this expectation led them to write standard, formulaic papers, but most seemed to see their mastery of organization as an achievement. They spoke with pride about the way they had learned to compose a coherent and logical paper, in which their claims were "linked" and orderly, and they seemed to see this accomplishment as evidence that they had become better thinkers than they had been when they entered college.

Clarity and conciseness.

The other quality of writing that students consistently said their professors value is "clarity and conciseness." When they were describing the kind of writing valued in their majors, as well as when they were discussing the most important lessons they had learned about writing in the major, students talked about clarity: "economy of expression," "direct and to the point," "no fluff," "precise word choice." Balancing this expectation is their sense that too much conciseness is a liability. They see a double bind here—writing needs to be efficient and to the point, and yet instructors also expect students to "follow through" on an idea, to elaborate or "explore every avenue" in their writing.

Something deeper, something more, something beyond the obvious.[9]

When they spoke about how their writing has changed during their years at Pitt, students frequently described their ability to organize a paper and to make it more concise and clear. Some spoke about how their own "writing process" has changed, especially to note that they now start a project earlier and take more time to complete it.

Perhaps most striking, however, is the students' repeated assertion that a significant change in their thinking has accompanied the development of their writing. While a few students described academic writing as a requirement that "fences you in," most volunteered their belief that learning to write has "expanded" the way they think. "Most of my progress is not in practical aspects," one student explained, "but more in the way of my thinking." Others described "new ways to approach texts," increased confidence in their own informed opinions, the ability to "synthesize" material, or readiness for a "probing application of theory." In many cases, the students initiated conversations about reading when asked about their writing, asserting the importance of "learning to read critically" or to "look for [another] writer's subjectivity and bias" because "so much of writing is based on reading." One group discussed the way writing in their majors had taught them to go beyond their immediate reactions to texts or ideas. To simply "agree or disagree" with another writer, or to pronounce an idea "correct or incorrect," now seems "too easy" or even "rash" to these students. Instead, they now believe that writing a paper requires them to "understand where [other writers] come from, why they would write this, and if it has application to today." In the end, these particular students articulated a balance they strive for as writers, between keeping "an open mind" and developing their own "convictions."

What Enables You to Do Your Best Work?

Heart and soul.

When describing the courses that had enabled their "best work" as writers, students spoke both about assignments and about instructional practices. Over and over, they recalled assignments that had allowed them to write about something they cared about. As one student put it, she did her best work when "I put my heart and soul into it." Another defined the difference between "heartfelt papers" and papers written "just to get the grade." The students' discussions did not make it clear whether this "caring" must precede the course or can be engendered by it, but in any case it appears that the students we interviewed believe rather firmly that they write best when they care about their topics.

This fundamental belief leads to the question of how much choice students want in an assignment. While some students advocated open assignments that give them complete control over their topics (a condition described as "freedom"), most seemed to prefer a range of choices within a field carefully delimited by the instructor. Students on both sides of this divide felt strongly about the issue. Those who favored open-ended assignments sometimes criticized their peers, claiming that professors are forced to provide paper topics only because students "can't think for themselves." On the other hand, some students who sought clear direction from their instructors labeled as "lazy" those professors who leave an assignment "too open-ended."

New ways of thinking.

Beyond the question of choice, students often described assignments that "pushed" them to do new thinking as those that enabled their best work. "I like to write in a way I feel I can grow," one student explained. One group (consisting mostly of History majors) had an animated discussion of an assignment that had asked them to work with primary sources and come to their own conclusions, rather than "making conclusions based on what other people have already concluded." Others spoke favorably of long assignments that allowed them to "dig deep" and to "tie together in my own mind" the themes of a course. They valued longer projects, they said, that asked them to write from "my own research and my own ideas," to draw on learning from other courses, to refute another writer's arguments, or to synthesize the work they had done in earlier, shorter assignments in the course. (Many mentioned their ability to write longer papers when asked how their writing had changed.) A number of students also said that they appreciated assignments that gave them "creative" opportunities or allowed them to depart from common academic format.

Making connections.

When describing their worst writing experiences, focus group participants did complain about writing assignments they were "not excited about," but they objected even more vehemently to assignments that appeared "disconnected" from the rest of the course work. In contrast, when describing to each other the writing assignments that had enabled their best work, the students often talked about how an assignment had helped them forge connections between different aspects of the course, or between that course and other work they had done in the major. When they perceived that a writing assignment was "not related to what we were doing in class," or was "coming out of left field," students said they felt very uncertain about what to do, or why they ought to do it. Their discussions of this issue indicated that they prefer to have an explicit understanding of how a writing assignment relates to the other goals and activities of the course, and of how their other work in the class should prepare them for the writing; they are quite aware of the occasions when these relationships are not made clear.

What Can Professors Do to Help?

When they mentioned instructional practices that had enabled them to do their best work, students recalled receiving feedback on drafts of a long project. In speaking of their worst writing experiences, they repeatedly asserted the difficulty of writing "with no feedback and no guidelines." And when explicitly asked what professors might do "to enable students to successfully complete their writing assignments", the students again asked for clear assignment guidelines and feedback on drafts. The students themselves raised these terms, and their appearance—so consistently across the groups and in answer to so many different questions—deserves some emphasis.

Provide guidelines.

Students agreed that they have trouble tackling an assignment that asks for a particular type of writing but offers no instruction in how to do it. More generally, they find it difficult to succeed in a class with writing assignments but "not much talk about writing." They advise professors to "be specific about what you want" by providing clear statements about what is expected in style, format, depth of research, and so on. Some students suggested that instructors could provide models, or examples of "good papers from last semester." They also made it clear, however, that instructions for a writing assignment can be too rigid, especially if they consist of a long series of specific questions that all must be answered in the paper. As one student put it, "Instead of telling them what to think, help them learn how to think."

Provide opportunities for feedback and revision.

Once they have started writing for a particular professor, students hope for useful feedback (as opposed to a simple grade or a series of "illegible scribbles") in response to their efforts. Many students expressed their wish that professors would give feedback on a draft so that they could revise it before turning it in as a finished product. "I prefer when the teacher requires a draft," was a typical remark. One self-described "fan" of "drafts and revision" explained that this process gives "first work another chance" and enables her to develop "new thoughts." When not given the opportunity to revise, students value extensive comments on an early paper. Their responses indicated that they want comments both about what they call their "writing" (form) and about what they call their "thoughts" or "ideas" (content).

In our conversations about feedback, students often voiced the questions they would have liked to ask after receiving a sparsely-marked paper. "I see what I did wrong, but what should I do?" And, for successful papers: "What did I do well? Why did I get a 95?" The discussion of this issue made it clear that the students were seeking instruction, not just affirmation, in their professor's comments; they wanted to know what to keep doing in their next papers as well as what to do differently. Perhaps even more important, they wanted to hear a response to their thinking. Students receiving good grades described their dismay when an instructor's comments were limited to something like "great job!" They ask, rather passionately, that professors offer "comments on my thoughts" to let the student writer know "if my ideas were good."

Pay attention to timing and to schedules.

One other instructional practice was mentioned often enough to be noted here: the careful scheduling and timely introduction of writing assignments. Students frequently asserted that they want sufficient time to complete an assignment while keeping up with their other classes. They ask professors to "be mindful that their class is not our only class." For these focus group participants, "sufficient time" seems to mean more than a week.

Take care.

Along with descriptions of instructional practices, the focus group questions elicited a surprising number of comments about the teacher-student relationship and its effect on student writing. Students said that they produce better writing when they have instructors who command respect and trust; in this atmosphere, students feel more likely to "find a connection between myself and the material." They also appreciate teachers who are "accessible" or "approachable"—that is, willing to discuss the student's writing in person. One participant asked professors not to be "just a voice behind a desk" but rather to "create compassion between student and teacher." The student accompanied this comment with a gesture: "a teacher-student relationship," he explained (with hands held side by side), "not a teacher-student relationship" (with one hand held high above the other). The compassionate teacher seems to be one who takes students' writing and their thinking seriously, and therefore engages students in serious conversation about their work—"talking to you, not at you," as the student put it. In this relationship, the instructor supports students in developing their own thinking, rather than "telling them what to think." These supportive instructors are apparently the same ones who make it clear that students should be "putting thought into [their] writing" rather than merely reiterating "certain answers" provided in advance by the instructor. The image of the caring teacher seems to mirror students' sense that teachers, too, value "students who care" about their writing and learning.

A "Gap" in the Curriculum

At various times in our focus group conversations, students commented on the "gap" they perceived between their introductory composition course and their w-courses, usually taken late in their college experience. One senior enrolled in a w-course in her major said, for example, "I took [the first year composition course] and made a lot of progress and then didn't work on my writing at all until this year. I wish I had taken [another w-course] earlier." Many participants were enthusiastic, however, about their upper-level instructors; they remarked on the intensity of writing instruction in the w-courses in their majors, indicating that their professors not only demanded a lot but also offered substantial and significant feedback.

Summary

In all the focus groups, talking about their writing led students to talk about their thinking and learning. For students, it seems, learning to write and writing to learn are inextricably linked. The writing assignments they value are those that push them to think further and learn more. They also value writing instruction that helps them develop the skills of organization, clarity, and conciseness.

According to students in the focus groups:

- What professors value in student writing
    - Correct answers
    - Understanding of course material
    - Organization
    - Clarity and conciseness
    - Student thinking—critical, creative, complex
- What students value in writing assignments
    - The opportunity to write about something that matters to them
    - The opportunity for new thinking and learning
    - The opportunity to dig deeply and make connections
    - Explicit understanding of the assignment's relation to the course material
- Useful support for student writers
    - Specific and explicit guidelines for an assignment
    - Feedback on a draft, with opportunity to revise
    - Extensive comments on papers, comments that can help students recognize what works as well as what could be improved
    - Response to thoughts and ideas as well as to a paper's form or style
    - Sufficient time to complete an assignment
    - Classroom attention to writing and thinking in the discipline

Student Survey

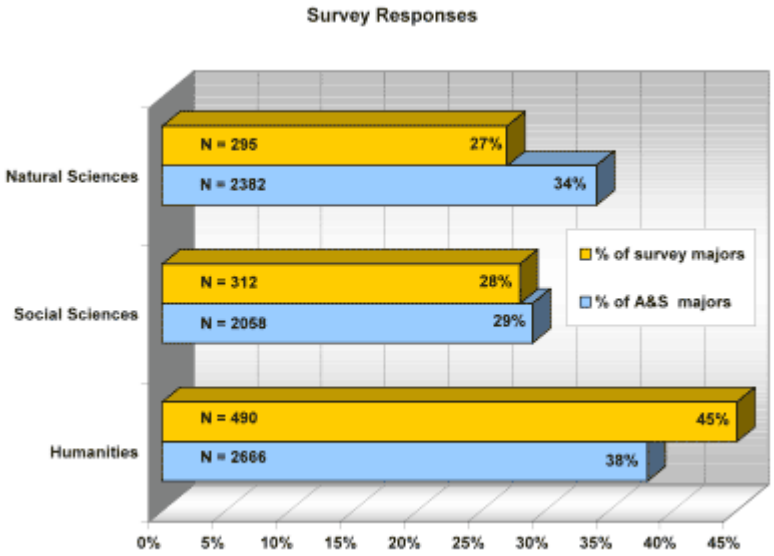
The Sample

In the Spring Term, 2005, 1000 juniors and 1000 seniors were invited to participate. The response rate was 32% (256 juniors and 389 seniors), a relatively high rate of response for surveys of this type.

Who Responded to the Survey?

Students were randomly selected and contacted via e-mail. Students in the Humanities (and with majors in English) were the most likely to respond. There was, however, a reasonable distribution of students with majors across the academic disciplines and the disproportions are not large, as shown in Figure 1.

Figure 1: Survey Responses by Area of Study



Students in the Humanities (in particular English Writing majors and Communication majors) were more likely to respond. Students in the Social Sciences responded proportionally (with more Political Science majors responding and fewer majors in Economics or History). Students in the Natural Sciences (in particular, students in Computer Science and Psychology) were least likely to respond.

The Timing of the Required Courses: Seminar in Composition (First Year Writing) and Two W-Courses

We asked students when they took their required courses:

- First Year Writing: 88% took this in the Freshman Year.
- W-designated courses (2 are required): 70% took these in the Junior and/or Senior Year.

We asked students what year was most important to their development as writers: the freshman, sophomore, junior or senior years?

- Both juniors and seniors were in agreement: the junior year was the most important. (This was the same response received in the studies at Harvard and Stanford.[10])

The Presence of Writing in the A&S Curriculum

On average, undergraduates in the Arts and Sciences took 4-6 courses that required substantial writing, most often a long term or research paper.

Students reported that in both the junior and in the senior years, they write on average 7 papers of more than 5 pages:

- Junior Year (mean = 6.9 papers); the range for the majority was 1-10 papers.
- Senior Year (mean = 7.4 papers); the range for the majority was 0-10 papers.

The Genres of Academic Writing

The focus groups helped us to identify and to name the genres of academic writing in courses in A&S. The survey allowed us to draw conclusions about the frequency of the genres and to elicit students' assessments of their usefulness in learning to write and in mastering course content.

The frequency of assignment genres

- The most common:
  - Short response papers
  - In class essay exams
  - Reports (on readings or research)
  - Research (term) papers (using sources or data)
  - Persuasive papers (opinion papers, argument papers, position papers)
- Those in mid range:
  - Personal essays
  - Take home essay exams
  - In-class writing (not an exam)
  - Journals or Reflective Writing
  - Literature reviews, Research reviews
- The least common:
  - Lab reports*
  - "Creative" assignments (such as poetry, short stories, plays)
  - Articles for academic journals (for submission or in imitation)

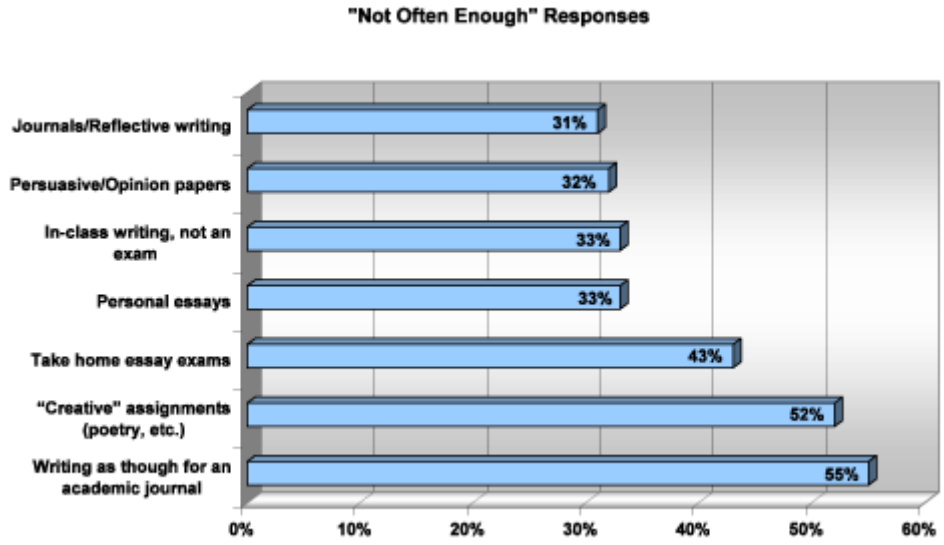
**Note: The low frequency of lab reports is most likely due to the percentage of students in the pool with majors in the Natural Sciences.*

Students' assessments of the desirability of the genres

We asked: "How often do you think you received assignments for [this genre]: not often enough, often enough, too often."

There was no clear statement about assignment genres that were too frequent or too common. The most commonly assigned genres (opinion papers, response papers, research reports, for example), had, according to our students, an appropriate circulation in the curriculum. The most interesting responses came to the question about genres students would like to see more often, as shown in Figure 2.

Figure 2: Not Enough Writing Assignments, by Genre



Specific response percentages are available as a list in a pop-up window.

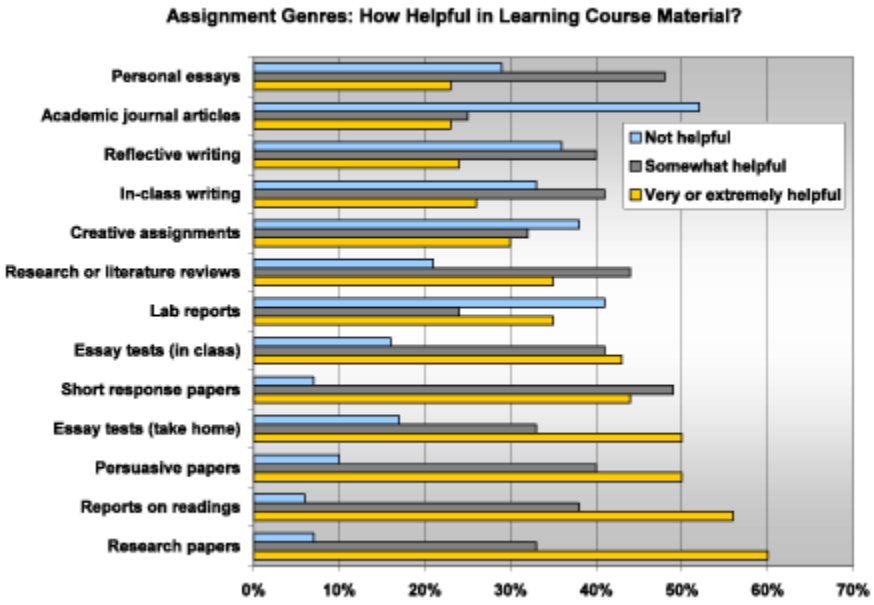
Students' assessments of the usefulness of the genres in learning course material and in learning to write

We asked students two questions about genre. How useful was the genre in *learning to write*, and how useful was the genre in *learning the course material*?

There was not much difference in the responses and, in retrospect, this makes sense. As students are doing the work of a course, particularly an advanced course, writing papers and working on a subject are pretty much the same thing. Writing is part of the way a student learns to master the subject; attention to writing as something separate from developing an idea or an argument (attention, for example, to questions of style in revision) is often seen as a luxury or a distraction from the task at hand.

Students did, however, find essay exams, lab reports, and informal writing to be more useful in learning subject matter than in learning to write. See Figures 3 and 4.

Figure 3: Usefulness of Genres in Learning Course Material

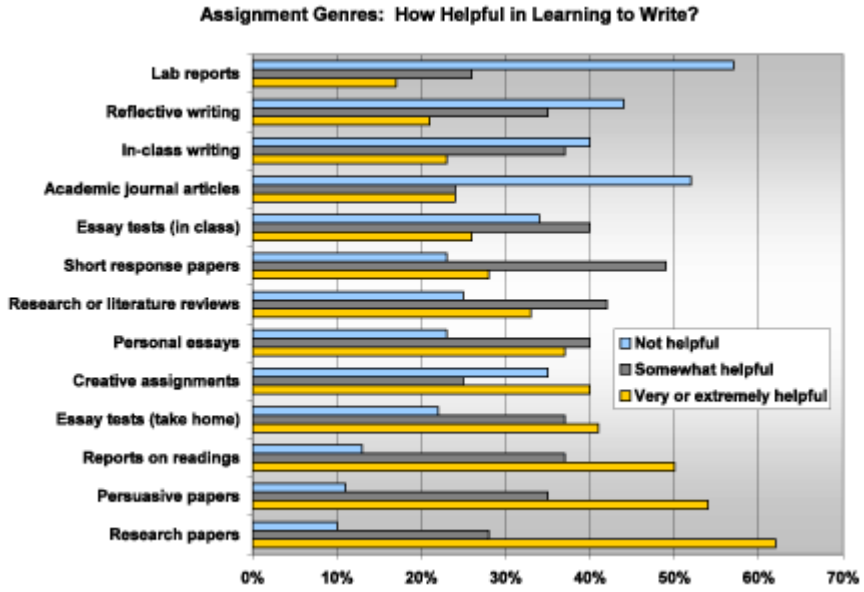


*Note: About 61% of students reported that they had never received this type of assignment, which may account for its low rating here.

**Note: The rating of lab reports may be related to the relatively low percentage of students with majors in the Natural Sciences.

Specific response percentages are available in a pop-up window.

Figure 4: Usefulness of Genres in Learning to Write



*Note: About 61% of students reported that they had never received this type of assignment, which may account for its low rating here.

**Note: The rating of lab reports may be related to the relatively low percentage of students with majors in the Natural Sciences.

Specific response percentages are available in a pop-up window.

Writing as Intellectual Work

We attempted to measure students' sense of writing instruction as instruction in thinking or in performing specific academic tasks. In order to name these, we used phrases that were common in the focus groups: *regurgitation*, *summary*, *analysis*, *interpretation*, *developing one's own ideas*, *working with a thesis*, *writing persuasively*, *reflecting*. We asked about the relative frequency of each in the curriculum. From the results, it appears they are all present to about the same degree. There were not significant differences to report here.

Students' assessments of the desirability of the academic tasks

We asked: "How much of this kind of writing have you done: not enough, about right, too much?"

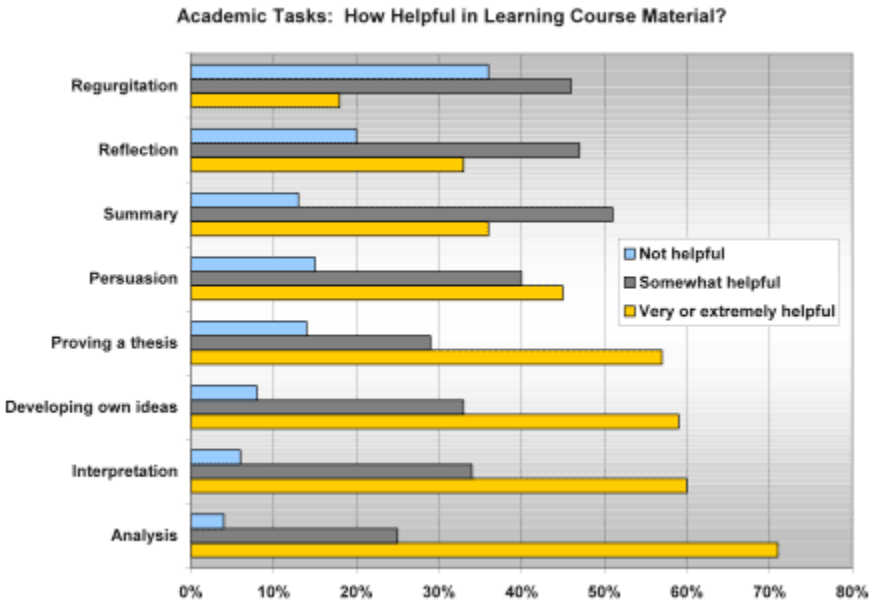
- Students said they had about the right amount of:
  - Summary
  - Analysis
  - Interpretation
- Students said they would prefer more opportunities to:
  - Develop their own ideas
  - Prove a thesis
  - Write persuasively
- And students said they had too many assignments that asked for:
  - Regurgitation

Students' assessments of the usefulness of this writing in learning course material and in learning to write

As in the case above, we asked students to make a distinction between the usefulness of these academic tasks in "learning the course material" and in "learning to write." Here, too, the distinction did not produce strikingly different responses. From students' perspective, the intellectual work and the work of writing appear to be pretty much the same thing.

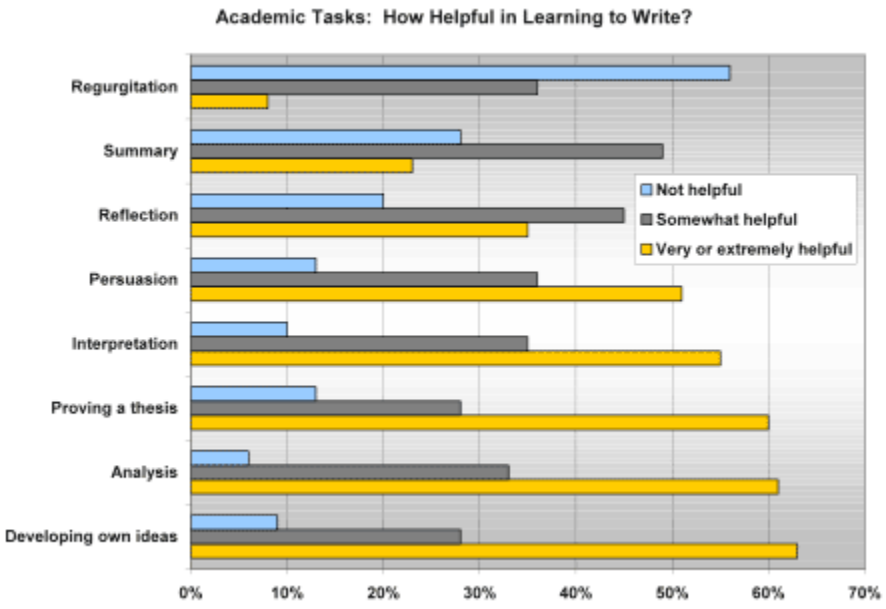
Students did, however, see "regurgitation" as even less useful to them as they are working on their writing. And they found "persuasion," "developing [their] own ideas" and "proving a thesis" to be particularly useful to them as writing tasks. See Figures 5 and 6.

Figure 5: Usefulness in Learning Course Material



Specific response percentages are available in a pop-up window.

Figure 6: Usefulness in Learning to Write



Specific response percentages are available in a pop-up window.

The Teaching of Writing (in and out of the w-courses)

We asked questions about pedagogical practices in the required writing-intensive courses (the w-courses) and in other courses, courses not designated as w-courses that included substantial amounts of writing. The questions were prompted by our work with the focus groups.

In w-designated courses

- Common practices:
  - Assignments are written out.
  - Students receive handouts with additional guidelines, advice, or strategies.
  - Students must meet firm deadlines.
  - Students work with primary sources (books or research data).
  - Students work with secondary sources (books or journal articles).
  - Students are expected to revise a rough draft after receiving comments from the instructor.
  - Students are required to proofread and to correct their work.
  - The written work significantly affects the final grade.
- Not so common practices:
  - Students have the opportunity to choose their own topics.
  - Students submit outlines, topic ideas, bibliography, etc., in advance of first draft.
- Seldom practiced:
  - Students are shown models of professional or student writing.
  - Students receive peer evaluation of drafts.

In courses without the w-designation but with significant amounts of writing

- Students were less likely to be required to revise a draft.
- Students were less likely to be provided with written guidelines, advice or strategies.
- The written work was not as important to the final grade.

When students indicated that they had never encountered a given pedagogical practice, we asked them about their preferences. Would they have preferred a particular pedagogical practice in their courses?

- What would students like to see that they don't see?
  - 76% would like to be shown models of student and professional writing.
  - 60% would like to revise a draft after receiving comments from the instructor.
- What practices would students prefer not to see?
  - 63% would not like to use peer evaluation as the basis for revision.
  - 63% would not like to submit outlines, topic ideas, bibliographies, etc., in advance of a first draft.

We asked students questions about the feedback their writing received in w-designated courses and in courses other than w-designated courses with significant amounts of writing.

In w-designated courses

- Common practices:

    - Students receive written commentary.
    - Students receive check marks, x's or editing symbols.
    - The feedback students receive helps in revision.
    - The feedback is constructive and specific.
    - The feedback focuses attention on ideas, arguments and analysis.
    - The feedback focuses attention on style, format and structure.
    - The feedback focuses attention on grammar and mistakes.
- Not so common practices:
    - Student papers are discussed in class.
    - Students have individual conferences with faculty.
- Seldom practiced:
    - Grading follows a table or rubric.
    - Students receive a grade or numerical score only (with no written feedback).

In courses without the w-designation but with significant amounts of writing, students are:

- Less likely to receive written commentary.
- More likely to have checkmarks.
- Less like to have conferences with faculty.
- Less likely to see sample papers.
- Less likely to revise or to receive directions toward revision.
- Less likely to have attention paid to ideas or to style and format.

Again, we asked students who had not received a particular type of feedback about their preferences. Would they have preferred this form of feedback in their courses?

- What would students like to see that they don't see?
    - 58% would like more class discussion of sample papers.
    - 70% would like to have individual conferences with faculty.
- What would students like to have changed in current practice?
    - 95% would not like to receive papers with grades but no written commentary.
    - 75% would not like to receive feedback that focuses on grammar and/or mistakes.

The Value of Writing

We asked students about the importance of writing to their education and to their future lives and careers.

- 90% said that writing was important, very important or extremely important to their *education at the University of Pittsburgh*.
    - 34% said that writing was *extremely* important to their education at Pitt.
- 81% said that writing was important, very important or extremely important in *helping them to connect with a course and its materials*.

    - 21% said that writing was *extremely* important in helping them to connect with a course and its materials.
- 80% said that writing was important, very important or extremely important *to learning in their major area of study*.
    - 43% said that writing was *extremely* important to learning in their major.
- 81% said that writing will be important, very important or extremely important to their *future professions or careers*.
    - 41% said that writing will be *extremely* important to their future profession or career.

Open-ended Questions

We asked students for the name of the most useful course they had taken, as far as their writing was concerned. We provided a full list in our report. This list, as we noted, garnered considerable attention! The range of courses and departments on this list was interesting and impressive. A substantial number of students mentioned the required introductory course, "Seminar in Composition." And, although the question asked for courses, a substantial number of students referred to the usefulness of the Writing Center.

We asked students for the "one person on campus who has been most important in helping you improve your writing." And we asked, "What can we learn from your experience with this person." A full list of "faculty who made a difference" was included in the report. This, too, garnered considerable interest.

A list of student comments appears in Appendix F.

From students' written comments, teachers were said to have made a difference when

- they had high standards and communicated clear expectations,
- they wrote assignments that were interesting and varied,
- they provided occasions for students to do more than "present information" in a paper,
- they allowed students to follow their own lines of interest and inquiry,
- they showed genuine interest in the student's work and in the student's ideas,
- they knew how to provide close commentary and they knew when to "get out of the way,"
- they were direct and supportive as they led students through the process of revision,
- they were available for conferences on pieces of writing,
- they provided specific guidelines or advice that enabled students to write in a more complex and/or professional manner, and when,
- although demanding, they were also positive and encouraging.

We asked, "What more would you like to tell us about your experience with writing at the University of Pittsburgh?" We included a representative set of responses in the final report. The comments were pointed, thoughtful, eloquent, sometimes critical and often useful. A quick sample is presented below:

> I never expected to write so many papers in college. I've had several papers every semester since my sophomore year and while it was frustrating at times, I'm glad that I

had to write them. My writing is far better now than it was my sophomore year, and I don't mind it so much anymore.

I feel writing was an important part of my college education but I had to seek it out myself. There is opportunity at Pitt if you do not like writing or don't feel it is useful to you to avoid it. This may not be a bad thing but it is important to note.

I personally prefer writing papers, at least for my History classes, because I feel that researching your own ideas and then developing them within the paper is much more beneficial in learning the course material than regurgitating information on a test.

I have written more in one-credit Chemistry or Biology labs than I have in most 3 credit courses, including those in which I have received a W. The lab reports are generally 10-25 pages depending on the experiment. I feel that the writing for this course is not worth the 1 credit received.

Long papers for me personally are ineffective. They are usually weighted more when it comes to grades and require so much time they become exhausting. I really appreciate smaller length papers (2-4 pgs) for a number of reasons. It breaks the material down into smaller chunks that are more easily remembered. Research takes less time and more time can be spent on modifying and working on actual writing. It allows more opportunity for improvement because more than one or two papers can be submitted in a semester. There is a cushion allowed for improvement and time for feedback with numerous papers. Writing very short things in class is not helpful to me...at all. There is too much pressure, and I think that students should really have time to think and organize their thoughts before handing something in.

Writing has played a central role in my education at the University of Pittsburgh. In both Political Science and Economics, writing played a central role and aided in my understanding of the topics, allowing me a chance to integrate the material I learned. My only critique would be of my Business degree. The CBS program seems to avoid individual writing projects, instead favoring quantitative testing and group projects/presentations. While this helps with learning presentation style, I feel it is a severe detriment that the Introduction-level survey courses do not have a writing component.

I think that students should have more opportunities to write different types of papers. Even though I am a History and Political Science major, I would like to write something other than strictly academic essays.

I think writing is extremely useful in learning most material particularly because it forces you to analyze what you are writing about. The process of writing a paper helps you continue the thought process beyond what you are presented with and make conclusions based on that more than just reading through and sitting through a lecture. The feedback from a paper helps you make your points clearer and more precise and also helps you refine your writing more to help you communicate on more than one level. The writing process should definitely not be underestimated. It has been and will be a vital tool in the learning experience and also in communication in general, something all educated people should be able to do fluently and precisely.

> Sometimes papers or writing assignments can become busy work and cause students to lose interest and motivation in the assignment. It is better to have fewer meaningful papers than lots and lots of little ones.
>
> I believe that term papers of ten pages or more in length are key tools for students to learn large amounts of information on a topic, and although time-consuming and more often than not, exhausting to complete, a paper of that size causes a sense of accomplishment and expertise on the subject one completes. The completion of these papers causes students to feel as if they really got their money worth out of the course and learned a lot.

A more complete list of student comments appears in Appendix G.

Part Three. Conclusions

Outcomes

Our project began before "outcomes assessment" hit our campus. Although our study was well-received, it did not, to be sure, serve as a substitute. It did, however, provide a context in which outcomes assessment could be more thoughtful and meaningful, and more of a shared responsibility than it might have been otherwise. It gave departments a very useful context for the evaluation of their capstone, writing-intensive courses. Several department chairs requested copies of the report while it was in draft. Beth Matway led the general assessment of our WID program. Because the study had included so much information on students—their work as intellectual work, their understanding of the value of the work they did, and their sense of its connection to A&S and departmental goals—attention to student outcomes made sense in a way it would not have otherwise. The measurement of outcomes was another way of paying attention to the culture of writing (and learning) on campus; it was not simply a hoop to jump through or a Dean's arbitrary demand.

The study also, however, produced some significant outcomes for the WID program on our campus. After receiving the report, both the Provost and the Dean (and in advance of the later assessment initiatives) offered resources we could use in support of writing in the undergraduate curriculum in the school of Arts and Sciences. There *was* a happy ending, in other words. The report produced action, and that is as much as any report writer can hope for.

In Spring 2007, the Provost provided a full time non tenure track line to add a Lecturer to support and to "build upon the successes" of the initiatives outlined in the study, including a newly designed annual faculty seminar, one that carries a stipend for faculty participants.[11] He offered an additional full time non tenure track line to provide a Lecturer in support of a new program developed in conjunction with our School of Engineering.[12] And, with the Dean of Arts and Sciences, he provided an annual budget of $35,000 to provide additional support to WID. We used these funds initially to

develop a program to train talented juniors and seniors in the sciences, who then provide tutorial support for students in large lecture sections and in laboratories.

What Did We Learn?

As we conceived of this project, we thought it to be primarily descriptive and ethnographic. Our charge was to document the "core values and practices associated with writing at Pitt." We did not have the funding (or the ambition) to do a longitudinal study, although our work was very much influenced by the impressive work underway at Harvard and at Stanford. The data base gathered on these two campuses provides a remarkable resource for research on student learning and student attitudes. The collection of student writing provides a corpus that can serve scholars for decades. It is important that institutions with various profiles find a way to contribute to this collection of student writing.

The Pittsburgh study, however, shared some of the primary concerns of the studies at Harvard and Stanford. We were not in a position to speculate on student learning over time (except through student testimony). With Harvard and Stanford, we were interested, however, in gathering information on the genres of student writing. These genres are both local (determined by traditions of local practice) and disciplinary (determined by faculty understanding of writing appropriate for learning in the disciplines). The focus on revision, the sequencing of assignments and the use of professional models are common on our campus and they are, we think, a distinctive part of our academic culture. As in the case of both the Stanford and Harvard studies, it was important to us to be in direct contact with a large number of students and to spend time considering what they had to say. We, too, were careful to feature and to publish the comments of our students. The comment that had the widest circulation after the release of the study was the comment by the student who got an A on her paper, but who was frustrated because the instructor's written comment ("good job") didn't engage with her ideas. Students help to shape the culture of writing on campus; it is our job to learn to listen to and to value what they say (just as it is our job to learn to read and to value their writing).

The faculty interviews provided rich examples of current (and best) practice on our campus, the report made visible (or gave voice to) teachers across the disciplines from whom we had much to learn. (We had seen similar consequences at Harvard.) We did not pay attention to the writing students do outside of class, a major focus of attention in the Stanford study. It seemed beyond our charge and, to be frank, we were already struggling to make the survey instrument more efficient. If we had it to do over again, we would drop the distinction in the survey between "learning to write" and "learning course material." It doubled our questions and turned out to be a meaningless distinction. Our students knew that learning economics by writing was the same thing as learning to write. This would have opened space for other lines of questioning. We would encourage anyone considering a campus-wide study to give as much time and attention to faculty as to students.

We learned much that was helpful to us locally. For example, the student comments led us to realize that while laboratory courses in the natural sciences required substantial amounts of writing, they had not become a focus for writing instruction and were not included among the courses officially designated as "writing intensive." We learned that a surprising number of students were asking for work with models of professional writing (academic and otherwise) and that a surprising number of faculty colleagues were offering them. This knowledge has produced an interesting and useful debate on campus over the appropriateness of asking students to write as though they were writing for professional publication. Our WID program was 20+ years old; the review of w-courses, the ability the report provided to think comparatively across departments and divisions, these led us to see problems, successes, and anomalies that would otherwise have remained invisible.

We learned that our colleagues, on the whole, were thoughtful, inventive and impressive teachers of writing. The template for a writing-intensive course on our campus is pretty basic. What they did with the template, how it was adapted and inflected by individual teachers and through expectations of their disciplines was quite wonderful to see. The most valuable products of the study, then, were the examples it provided of best practice. A course in Biology has become a model for courses in other areas of the natural sciences; a course in the History and Philosophy of Science has become a model for courses across the Humanities. Departments unused to talking about teaching, or featuring the work of colleagues as teachers, had the occasion (at least for a brief moment) to have such conversations and to see a colleague in a new light. Students had a chance to be heard as a collective and, given the chance, rose to the occasion.

In 1945 Raymond Williams returned to the Cambridge University campus after 4 ½ years as a soldier during World War II. When he returned, he had the sensation that things had changed, that the people around him were speaking a different language, even though they were (obviously) speaking in English. He tells this story in the "Introduction" to the first edition of his ground-breaking project, *Keywords. A Vocabulary of Culture and Society*. And he says

> When we come to say "we just don't speak the same language" we mean something… general: that we have different immediate values or different kinds of valuation, or that we are aware, often intangibly, of different formations and distributions of energy and interest. (1983, p. 11)

We often use this formulation to think about the linguistic and rhetorical demands of the different disciplines—"we just don't speak the same language." As we started to process all the data we received, including the interview and survey data shown above, one of our goals was to record and highlight the common language on our campus—the shared (rather than different) values and valuations, the shared (rather than different) formations and distributions of energy and interest (to use Williams' terms) and not only across departments but across the community of teachers and students, particularly advanced students, our juniors and seniors. We wanted to pick up keywords and then to use them as organizing devices as we provided an account of undergraduate writing on our campus.

Our point was not to insist that the Pittsburgh campus has its own private language, something unique. However, we did believe it important to give our primary audience a way to think about writing in the disciplines as a shared project of articulation, one where we create (and revise) the key terms used to represent, organize, prompt and value writing on our campus. We do not have our own private language, although we believe there are some distinctive key terms—like revision and sequence and genre. On our campus, it is not unusual to hear student writing referred to as "intellectual work" or as crucial to the work of the disciplines. John Norton, Professor and Director of our Center for Philosophy of Science, stunned us by saying: "If we assume that [students] cannot have a good idea, that they can only rehearse the ideas of others, the field [History and Philosophy of Science] will ossify. A field like HPS depends upon the work of undergraduates in our senior seminars." We also learned that there are some important sites of contestation, as in the different ways of imagining "professional" writing, represented by the disagreement over whether students should or shouldn't read and imitate the writing in academic journals.

We're not in a position (nor do we have the desire) to think comparatively. (It is interesting to note in passing, however, that in the Harvard Study, "thesis" was a key term and "thesis" is a word that seldom appeared in the conversations we had with teachers and students. The Stanford study gives particular emphasis to "performance" and "embodied writing"; on our campus, in the terms and

practices of students and faculty colleagues, writing is still represented primarily as textual, represented in books and papers—even if they circulate in digital environments.) The study did much to reanimate conversations about writing and the teaching of writing across the disciplines on our campus. It created new points of reference and rich examples of best practice; it provided a new sense of our students, and what they thought and what they could (and couldn't do) as writers; and it highlighted courses and faculty colleagues that would otherwise have remained invisible.

APPENDIX A: Faculty Interview Responses (Complexity)

- L.A. (Hispanic Languages & Literatures) says that in her field, it's not enough for writing to be correct, clean, and clear; instead, it must engage a reader on many levels. She acknowledges that this type of writing, which calls on students to manage multiple texts or disciplines, can be very difficult, and she takes pains to support her students as they attempt it.
- R.L. (Political Science) wants students to consider a statement from a variety of points of view, and "to understand trends and to see patterns" in complex bodies of information.

APPENDIX B: Faculty Interview Responses (Making Writing Matter)

- K. C. (Biological Sciences) notes that students spend four years accumulating content. The role of writing is partly to demonstrate that they've learned something—but, more importantly, having students write compels them to find ways to "communicate information to an audience for a purpose."
- M.G. (History) believes students need to write in order to develop their understanding of how a historian thinks. Writing means "learning for understanding," as opposed to learning just to accumulate information. "I don't think I can determine what students truly understand without having them write at some length," she says. "Students can be skillful about memorizing—but it's in the use of that knowledge that I can determine what they truly understand."
- G. N. (Computer Science) directs students in his 1000-level course, "Algorithmic Implementation," to write to a lay audience, as in a popular magazine. This is partly to demonstrate their responsibility to a larger public, but also to insure a real or deep understanding of what they have done.
- V. P. (Physics) wants his students to understand how important writing is to them as scientists. They can do all the work in the world, he says, "but you have to be able to present your work so that others can understand it or it's like a tree falling in the forest with no one around. It's useless, wasted effort."
- J.N. (History & Philosophy of Science) asserts that "undergraduates can be engaged as scholars …. If we assume that [students] cannot have a good idea, that they can only rehearse the ideas of others, the field will ossify. A field like HPS depends upon the work of undergraduates in our senior seminars."
- J. H. (Slavic) said that her comments on students' papers focus on substance, logic, and mechanics–but also on what she called "excitement." She wants students to explore what excites them, so she stays alert to levels of interest as she reads their papers.

APPENDIX C: Faculty Interview Responses (Taking the Next "Disciplinary" Step)

- B. K. (Psychology) notices that "report writing" is the genre students know best when they come into her classes. "They are able to read and summarize what they read," she says. In the Research Methods course, she and her team of TAs have begun to emphasize argumentation in their writing assignments, so that students gain the ability to "integrate, to think beyond what they're summarizing and form an argument."
- S. C. (English) says that English literature majors are good at writing the 5 page critical essay. Assigning longer papers (term papers) will not necessarily move them beyond that. That is, the 20 page paper that is a collection of four "5-page critical essays" is not necessarily an advance in learning. His goal is to teach them to complicate the kind of argument represented by the 5-page essay (by considering alternative points of view, or by varying critical style and approach), so that the "long paper" is a different intellectual exercise than the short paper.
- R. L. (Political Science) is also concerned to take students out of a "term paper" mode. He works primarily through shorter assignments that put students into positions where they are responding to the news, imagining solutions to real problems, taking positions on quite specific policy issues, even projecting themselves into the role of presidential advisors. R.L. says that he wants to teach students how to pay attention to the news; he wants them to think that they can take a position on current events, he wants them to take a position on what they read (and not just process it as information). He wants them to be aware of how much thinking is based on unwarranted assumptions. His writing assignments are designed to allow students to experience first hand the "pleasures of the extended argument."

APPENDIX D: Faculty Interview Responses (Sequencing the Task)

- In D. F.'s Senior Seminar (Music) students write a series of four short papers that culminate in a longer "critical" paper. The first short paper assignment asks students to discuss (describe) one movement of the Mozart *Requiem* with attention to orchestration, to harmonic language and modulation, and to the text to be sung (declamation and expression). The second short paper assignment asks students to place the description in a larger context—and the larger context has to do with the "meaning" of the text and the composer's choices. The assignment announces its objectives: to give students experience "in writing about harmonic progressions in prose rather than labeling each chord"; and to give students experience working with a short passage rather than an entire movement. The third short paper is a return to the project of the first. Students are asked to analyze harmony in one of four prescribed passages from Fauré or Verdi. The fourth paper is to be based on the harmonic analysis of the third. It is to be a critical paper and should also take into account "orchestration, vocal setting, and texture." Students are invited to "expand the paper to include a larger segment of the movement, or the entire movement."
- L. P. (Anthropology) and I. F. (Psychology) have students conduct a semester-long research project and prepare a research report. A key element for both is the writing of a Proposal or

Prospectus. Here students are shown what it means to have a research problem that is specific, manageable and interesting. Both give substantial attention at this early stage; if not, the students' work for the semester can be wasted. From that point on, the assignments are written to organize the student's research and their understanding of the genre and audience for a report.

APPENDIX E: Faculty Interview Responses (Responding to Student Writing)

- M. G. (History) provides extensive feedback in writing and in person. Her marginal comments on a paper are designed to create a dialogue with her students, raising questions about ideas. They are also diagnostic, labeling errors so that students can go to the Diana Hacker website to do the relevant exercises. Finally, a one-page commentary discusses the paper's overall strengths and weaknesses and offers alternatives for revision. While they are revising, students can be in conversation with MG by e-mail or in conferences. She acts as a sounding board for new thesis statements, for topic sentences that will drive the argument—for anything students are struggling with as they write. In addition to her own comments, students in M.G.'s classes receive feedback from each other. "Students tell me that being critics is one of the most difficult tasks of the course," she admits. "They are not accustomed to interrogating another person's prose. But it raises their consciousness about how to persuade, and so on. They learn how to take into account possible disagreement."
- F. G. (Economics) points to the importance of directing students back to work they have completed. Instructors can provide advice up front, he says, but it is often lost as students work on an assignment. They need to bring out the knowledge (content knowledge, writing knowledge) that underlies students' work. This gives them "ownership of their ideas and their projects; it teaches them to work over time (by reflection and revision) to express what they know in words." The feedback in F.G.'s course is staged out. At the opening of the course, he is in very close contact with students; he spends a lot of time working with the writing and with the individuals. This effort serves to establish his standards for their work, but also to show them that they have him as a point of reference and a source of support. They can see that he gives the care and attention to their work that he gives to the work of his profession and his professional colleagues.

APPENDIX F: Selected Student Responses (What can we learn from your experience with this person in class?)

- …He helped me add flow to my sentences, tying together my paragraphs, and ultimately creating a 'tight' paper.
- …He returns our work with a variety of comments and ideas on how to improve our stories, while still pointing out many positive aspects as well.
- …In the past two years of my college experience, she has been an important commentator, reviewer, and critique for my academic writing. She always provides

detailed revision suggestions for her students and she has helped them to grow into critical thinking during class discussions, which inevitably makes them better writers.

- Dr. R focused on creating and supporting sound arguments and provided excellent feedback on papers. Dr. P focused on stylistic aspects, such as condensing paragraphs and refining sentences for greater impact and clarity.
- Excellent feedback, and he was always willing to discuss writing with me.
- Expectations of all writing assignments were clarified. Intensive feedback if sought would be accommodated.
- He expected so much from his whole class, and had a great way of giving his students feedback.
- He figures out what his students are capable of and then demands that or better on all writing assignments, it is very difficult to impress him with your writing but his demeanor makes one want to try.
- He gave me the best constructive criticism I've ever gotten in my entire educational career. He has a knack for seeing and defining students' styles, and helping them refine them. Respecting him as a teacher made me more eager to provide him with good writing and original ideas.
- He has been particularly helpful in matters of style, documentation, and research skills, and he is one of the few professors I've had that consistently uses peer review in non-seminar courses.
- He helped me to learn how to develop and argue a thesis instead of just presenting information in a paper.
- He helped the class with writing by explaining common grammatical errors as well as ways to appropriately develop a paper. The combination was very helpful and instructive.
- He is always critical yet encouraging in terms of developing my writing style.
- He is extremely honest about students' writing even if the feedback is negative. When he gives negative feedback he always gives ways in which the writing can be improved.
- He is great at helping students to develop original ideas by guiding them in research in texts outside of class. He really helps writing on ideas that aren't mainstream.
- He provided positive criticism along with constructive criticism.
- He was extremely helpful in advancing my writing skills, both grammatically and in regards to style. He put a lot of emphasis on thinking through arguments, analyzing texts to support your point, and reflecting upon things from a different point of view than you normally would....
- He was one of the only professors who could recognize talent in his students and was willing to let them know. His support and motivating teaching style made you want to learn more. His comments were constructive and fair and he gave you plenty of room for improvement.
- He wrote the usual comments on the papers, but he would also come up to you after class and talk to you or advise one about their writing and understanding of the material. We could come to him with questions or comments, but I found it interesting and cool that he came to us on an individual basis. It felt more personal and encouraging.
- Helped students in the class learn to be more precise in our writing.

- High demands for quality of work.
- His course, History of Mass Media, forced me to write in many different styles, formats, and on a broad range of topics. He was also very quick to return writing assignments with necessary corrections and suggestions for revision, even when a revision was not necessary.
- His term paper assignment was very helpful to me because I became more experienced with using primary sources. Also, he was always available when I needed to discuss my paper with him, and he provided useful feedback.
- I believe that all of my lab instructors have been very influential in my writing development. They have taught me how to analyze data and how to sum up observations without babbling on. Also, my freshman writing teacher C. C. helped me to understand my potential.
- I had always been able to write reasonably well in my philosophy courses, but I believe that his guidance in that class, even though the assignments were rather short, helped me to improve my writing style dealing with often complex ideas and topics in a concise way.
- I have always been a strong writer, but Dr. P. challenged me and didn't give me a good grade off the bat. I worked hard and met with him often and eventually was able to achieve an A in the class. He forced me to think critically and analyze my own work. His writing advice has helped me in every class since.
- I rely on the writing center because the atmosphere is professional and its more helpful and less stressful than dealing with a teacher on a one to one basis.
- In her Junior Seminar course, V exposed us to a lot of theory we were unfamiliar with and showed us how it applied to our writing about literature.
- Introduced me to advanced analytical writing and primary resource writing. Also stressed proof reading.
- It is of the utmost importance to organize your thoughts when you write. G. sets a great example of how one should organize his or her thoughts. I feel that this has helped me tremendously in my paper writing.
- Learned to revise, to clean up my grammatical errors and "spot" good writing. Very honest, direct and monumentally helpful.
- She compelled students to debate with each other anonymous work that they were given in advance; but she herself never made any comments publicly. Rather, she asked the right questions. This way, students exchanged ideas with each other, but their writing was not trained in any particular style (e.g. hers).
- She designs her assignments so that I am able to write an individual paper using class concepts and also to collaborate with a group for the purposes of writing and presenting material. Class discussion of text makes it easy to think critically and creatively, which is something that was lacking in my GW course. Dr. M-C. does not ask for regurgitation in written work. She actively engages the class in a thorough understanding of the material and facilitates discussion around her findings and the conclusions we draw from various texts and external media.
- She gave me confidence in my abilities by explaining to me the strong points in my writing as well as showing me where the weaknesses in my arguments were. I have taken several literature courses since, including Intro to Critical Reading, and none have helped me develop my writing as much as Intro to Lit with A.M.

- She gave step by step directions for all the students, and anytime I had a question or was concerned, she always helped me through it.
- She has helped me write better as a researcher in doing the papers for Research Methods class.
- She held one on one required conferences and had us do drafts and exchange papers with other students in class. She has contributed to my learning and has helped me to improve my skills as a writer.
- She helped the class to articulate their reasons for liking/not liking certain aspects of theatrical performances that we were required to see which, in effect, helped the class to sharpen their skills in writing persuasive papers.
- She is an extremely engaging and focused instructor. Teaches students to write analytically in a professional academic manner.
- She left the writing assignments very open, and provided extensive comments on formation of our papers thesis and arguments as well as grammar and mechanics.
- She provides helpful ways to improve your writing and sets up conferences to discuss your writing with you on a one on one basis.
- She pushed me in new ways, always helping me bring out the best work I could do. She read my papers carefully, which provided me with constructive feedback that enabled me to successfully revise my work.
- She taught her class how to write clearly and persuasively about literature and gave specific grammar and style tips. Most importantly, she wanted her students to choose words and craft sentences to convey full meaning without fluff. She helped us develop our own topics and argue them well.
- She taught us how to analyze a text closely and to clearly state and support a thesis through interpretation of the text and additional research. She is the first professor I had at Pitt who stressed the importance of a thesis statement.
- She took the time to meet with each student and go over details of research and outline and suggested ways in which we could further develop our work. Furthermore, she pushed us to go beyond our ordinary limit and do better work, thus forcing me to focus on the argument and develop it to a great degree.
- She was an amazing teacher who was willing to work with the students. Allowed for informal discussion that provided an interesting and educational atmosphere. She was one of my very favorite teachers.
- She was clear in her critiques, kept discussions of papers (which she kept anonymous) open and interesting, and made a class that could have been very basic and useless worthwhile.
- She was extremely encouraging, but also a tough grader. She gave you chances to improve work, and assignments were interesting, not just the same type of paper over and over again.
- She was extremely patient and helpful, her class was structured help us be more critical readers and more professional writers.
- She was the first professor I had to really spend a lot of time responding to students' drafts and having conferences with us. I've gotten this kind of attention from teachers in my nonfiction classes, but not in my W classes.

- She was very patient and constructive with our writing, and one of the most important things she did was have one on one conferences with each student to talk about our writing. I think encouraging one on one student-professor talks is critical to a good education and good relationship between the professor in the class. Some (even most) professors seem like they are too busy or could care less if a student drops by his or her office to talk—especially about the work/writing the student is engaged in with that professor's class.
- She would always take time to sit down with me and go over my responses to readings/essays/etc. Not only did she give me comments on paper, but she allowed me to discuss with her my writing, which means so much more.
- The process of becoming a good writer is aided by having contact with other amazing writers and learning their tricks and fusing these tricks into your own writing style.
- The reason I improved during her course was probably a matter of motivation to improve, because she was genuinely interested my improvement and I respected her.
- They have both very much helped me to improve my written Spanish—given opportunities for revisions, specific guidelines and feedback, one-on-one assistance, and small or one-on-one class size which is beneficial to writing classes.
- Through extensive weekly readings and weekly short papers that relate to the readings, students are encouraged to evaluate what they've read, ask questions relating to what they've read, and compare their ideas to those presented.
- W. focuses on making students write in a professional yet interesting and straight forward manner which is essential for a career in science.

APPENDIX G: Selected Student Responses (What else would you like to tell us about your experiences with writing at the University of Pittsburgh?)

- I think that mandatory, brief, one on one interviews between the teacher and the student would tremendously boost academic performance. Speaking is like writing in the air with your vocal chords. For me, it is important that I develop a one on one relationship with the professor. Once the professor demands my respect directly, I find that it is much easier to hunker down and do my homework.
- I think writing is a hard thing to teach, and do well in college. There are so many writing assignments, and each teacher has a particular writing style they want you to adhere to. It is impossible to learn all of the possible styles beforehand, but learning how to adapt to a teacher's specific style is important. I think I have done well here, only because after the first exam or paper, I can realize what the professor wants and is looking for in the papers.
- I was exempt from [the required first year writing course] because of my high score on the AP English test. It was not until I took my W courses that I had any writing-specific instruction. I feel like my writing skills have not improved much since high school. For some time, I blamed my exemption from [first year writing], but everyone I know who has taken it insists it was not helpful to them….
- I wish I had more opportunities to work on projects with other media related majors. For example, film studies students and journalism students could be assigned to a project for credit where some written material could be realized in a play or TV show

…. Another possibility would be computer engineering majors and communication majors perhaps collaborating on a website or something and receiving credit for it.

- I wrote FAR FAR more in my organic chemistry lab than I did in my English, Philosophy, or Spanish classes. Organic Lab should be a W course. I wrote upwards of 15 pages a week in there, while in the other classes I mentioned it might have been around 3 to 5.
- In most of my writing experiences the professors have been liberally biased. I am forced to tone down my opinions in order to receive a decent grade.
- It increased the way I write and think at the same time. I found that it is extremely important to think as you write and revise your thoughts into what you're writing. If you do that you expand your thesis and your general purpose.
- Long research papers are a waste. There is little to no learning involved. All long papers are for most classes is lots and lots of bull shitting and space filler. A shorter paper that can be to the point is always best. If what needs to be said can be said in 6 pages, not 10, why have a 10 page length requirement. Profs need to be realistic when assigning these long papers. They don't want to read them and we don't want to write them.
- My experience in writing at Pitt has been great, and very well-rounded, the only thing I feel that is missing from it is perhaps more social gatherings of writers and more conferences that are free and open to the public, sponsored by the university and not corporations. I would have also appreciated more emphases in my writing classes on using scientific research. I feel that use of research, or at least the perspectives of other people, is something that writers (fiction/poetry/nonfiction, mainly) sometimes steer too far away from.
- One of the main problems with classes that involved writing at the University of Pittsburgh are the essay tests, particularly tests that are given in class. These tests often cause students to feel rushed, thus they simply list information in the form of paragraphs, ignoring style and format, as well as not completely developing their ideas. I think this is detrimental to the students' development as writers because these exams connect writing to anxiety and unpleasantness. Essentially, they associate writing with regurgitation of information.
- Some of the other (non-major, non writing intensive) courses were way too heavily weighted on the writing assignments. If a class is going to have a lot of writing in it, there should be other forms of evaluation in addition. It's not fair to base the whole course grade on whether or not the instructor likes your writing.
- Some professors are absolute sticklers for mechanics and content in papers and these are the ones that lead to an increase in the writing abilities of their students. These professors are scattered across the disciplines as this drive is a personal one.
- Strangely enough, I learned to think about grammar when I took a foreign language class. I know that as native speakers, we know the rules of how to speak English (for the most part), but it would be most helpful at the beginning of the writing degree to have a type of foundation on many basic rules in addition to the correction received on written papers. To know why a particular rule applies is to reinforce its use in a much deeper sense of the writing process.
- The availability of a writing center is a fantastic resource for those who would like more help or feedback on their writing. So overall, I feel the amount of writing and the skills and resources available through the university are very good.

- The emphasis that this university places upon incorporating writing within its curriculum has contributed greatly to my receiving of a well-rounded education, and I believe prepared me to succeed in law school.
- The [required first year writing course] destroys good writers. I had a professor before I took the course and immediately after and he called me into his office hours to ask what happened to the good writer. Limiting the creative license of a writer, limits the potential of that writer. I am still in recovery from that terrible … course.
- There hasn't been much room for creative writing for me to pursue at Pitt. Don't let writing be too mechanical.
- There is almost too much writing at the university. Almost every class is like a writing class at another university.
- Unfortunately, many of the professors teaching writing courses (not necessarily W courses) do not do a good job in actually teaching. All they do is assign a grade to your essays, and if the grade isn't an "A", they have a hard time trying to explain what exactly to do to make the paper better. Often times this results in a mediocre grade in the course, unimproved writing skills, and frustration.
- Writing at the University of Pittsburgh does not take a primary place of importance in many of the natural and physical science classes due to the large class size. This impersonal nature does not allow the professors and students to communicate through writing and therefore hinders science students when they are confronted with writing in their other courses.
- Writing is extremely important. Unfortunately, many professors have a different style of writing and a different way papers are to be written. This makes it difficult for a student to remain consistent with how one writes. … Perhaps more uniformity across majors and writing for different classes would be helpful. I do understand that writing for a bio class is much different than a poly sci class. However, writing for a poly sci class is not much different than a history or an art class. I also believe that there should be more strict guidelines held for reviewing written work. As an RA for the university for two and a half years, I have corrected many student's writing and have also seen student's with poorly written work receive high grades. This does not seem to be an effective way to improve the student's writing.
- Writing is important, but some of the low level gen. ed. classes put too much on structure and grammar, rather than seeking main ideas.
- You should ask if we think long papers due at the end of the semester are useful (they aren't!!!)
- … At college I have found that teachers are far less stringent on the style and grammatical correctness of papers. They rather that the general content is acceptable and that you use some form of citation. My major requires me to write lab reports, so the most help and improvement from high school to college has been in that area.
- … one of the things that made me come to Pitt was the emphasis on writing.
- All too often, one just receives a grade on a writing assignment. I would like to have the opportunity to improve my writing. A grade alone does not teach me how to improve my writing. I think conferences are a good idea.
- I believe that critical reading and writing are sorely lacking from the physics department. My goal is to become a research professor in astrophysics and I am fortunate that I work in a research group which encourages reading current papers

from scientific journals. I would not have any exposure to writing in my field if it was not for my research group.

- I believe the Professional Writing class should be a requirement for all students. It is a class that 100% of graduating students will apply to their daily work activities. I believe that many students have a distorted/unrealistic view as to what the expectations are in the workforce. I believe they don't know the first thing about writing a memo, or a proposal, or how to prepare a resume. Many don't even know how to put together a business portfolio so they have examples to bring to interview of the type/level of work they are capable of. This class was beneficial in every way and I can't figure out for the life of me why the University does not make it a mandatory requirement.
- I feel that many times when teachers/grad students grade our papers they're grading them based on their opinion of our paper and not set-in-stone paper critiquing techniques. I'm not sure that best way to get around this, other than maybe having more than one person grade papers and not tell each other what grade they gave and then comparing and taking an average or just going from there.

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Notes

[1] We are grateful to Michael Pemberton and to *ATD* for publishing this version of the study. Michael recruited a Dream Team for our referees: Gail Hawisher and Andrea Lunsford. We are very grateful for their suggestions, for their help and support, and for the standards of scholarly care and attention they have established through their careers. We want also to thank colleagues at Pitt who played a major role in the development of the project: Lisa D. Brush, Sociology; Jean Ferguson Carr, English; Nick Coles, English; Jim

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[2] The key terms are represented in the section headings below.

[3] The Study has provided a useful resource for participants in our semester-long Writing in the Disciplines faculty seminar. For example, Arts and Sciences faculty are especially interested in what students had to say, in the focus groups and in the survey, about the teaching practices and writing assignments that had helped them the most in learning to write. The faculty interviews offer a rich fund of possibilities, inspiring the seminar participants to try new approaches in their own classrooms. Most importantly, however, the report makes tangible for faculty the distinctive writing culture that thrives on their own campus, and includes them in the conversations that will continue to shape that culture.

[4] We've used the report in several courses, and we've used these questions to frame discussion: what makes sense to you as a student? What doesn't ring true? What is missing in the report? What is missing in the curriculum?

[5] We are grateful to Nancy Sommers who came to campus to consult with us on our project. We began our discussions at Pitt by circulating a copy of her first Harvard Study (1994). Her study combined faculty and student interviews with a student survey and provided the model for our own. Like Sommers, and like Lunsford (see below), we were interested in documenting the genres of student writing on our campus, and we were interested in focusing attention on these genres as forms of intellectual engagement related to or en route to disciplinary work. (For the 1994 Harvard study, see "A Study of Undergraduate Writing at Harvard," Nancy Sommers, Harvard University, 1994. Unpublished.)

[6] The WID program at Pitt provides a variety of support services to the faculty community and to course development. Students are required to take two writing intensive courses, one of them in their major area of study. These are meant to be taken in the junior and/or senior year; most writing-intensive courses are advanced courses for juniors and seniors or one-credit add-ons for junior and senior seminars. The English department supports a first year writing course (required of all students) and a selection of basic and advanced composition courses. For more on the WID program, see http://www.wid.pitt.edu/. For more on the Composition Program, see http://www.english.pitt.edu/composition/index.html.

[7] Our work along these lines was very much shaped by Jim Slevin, who had been to our campus several times and whose book, *Introducing English*, has circulated widely on our campus. See *Introducing English. Essays in the Intellectual Work of Composition*. University of Pittsburgh Press, 2001. The relevant chapters are in sections three and four: "The Context and Genres of Intellectual Work in Composition" and "Composition's Work with the Disciplines."

[8] The interviews were conducted by the project directors and members of the Advisory Board: David Bartholomae (11), Beth Matway (9), Lydia Daniels (2), Jim Lennox (2), Lisa Brush (1), Jean Carr (1), and Jim Seitz (1). All were scheduled during the Spring Term, 2005.

[9] These were our students' terms—something deeper, something more. They directly echo students in Nancy Sommers' survey at Harvard.

[10] When we began to design our project, we were influenced directly by the 1994 Harvard Study, and Nancy Sommers came to the campus as a consultant. For accounts of the more recent longitudinal study at Harvard, see: Nancy Sommers, "The Call of Research: A Longitudinal View of Writing Development." *College Composition and Communication 60*.1 (2008): 152-164; Nancy Sommers and Laura Saltz. "The Novice as Expert: Writing the Freshman Year." *College Composition and Communication 56*.1 (2004): 124-149; Nancy Sommers. "The Case for Research: One Writing Program Administrator's Story." *College Composition and Communication 56*.3 (2005): 507-514; and two videos available from the Harvard University Expository Writing Program: *Shaped by Writing: The Undergraduate Experience* (2002) and *Across the Drafts: Students and Teachers Talk About Feedback* (2004). For access to the Stanford Study, see the

website http://ssw.stanford.edu/. See also: Andrea Lunsford, Jenn Fishman, Beth McGregor, and Mark Otuteye, "Performing Writing, Performing Literacy." *College Composition and Communication 57*:2 (2005): 224-252, and Erin Krampetz, "Writing Across Cultures and Contexts: International Students in the Stanford Study of Writing" (Masters monograph). Stanford University, 2005.

[11] The new line created a permanent position for our WID Director, Beth Matway.

[12] We have created a writing intensive freshman course for Engineering, one with goals similar to our first year writing course, but one that meets the expectations of the School of Engineering accreditation agency. See Beth Newborg, "It Takes a Whole University to Educate the Whole Engineer: Narratives of Collaboration," *ASEE Conference Proceedings*, 2008.

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