The University of Pittsburgh

Study of Writing

A Report on Writing in the
School of Arts and Sciences
Undergraduate Curriculum

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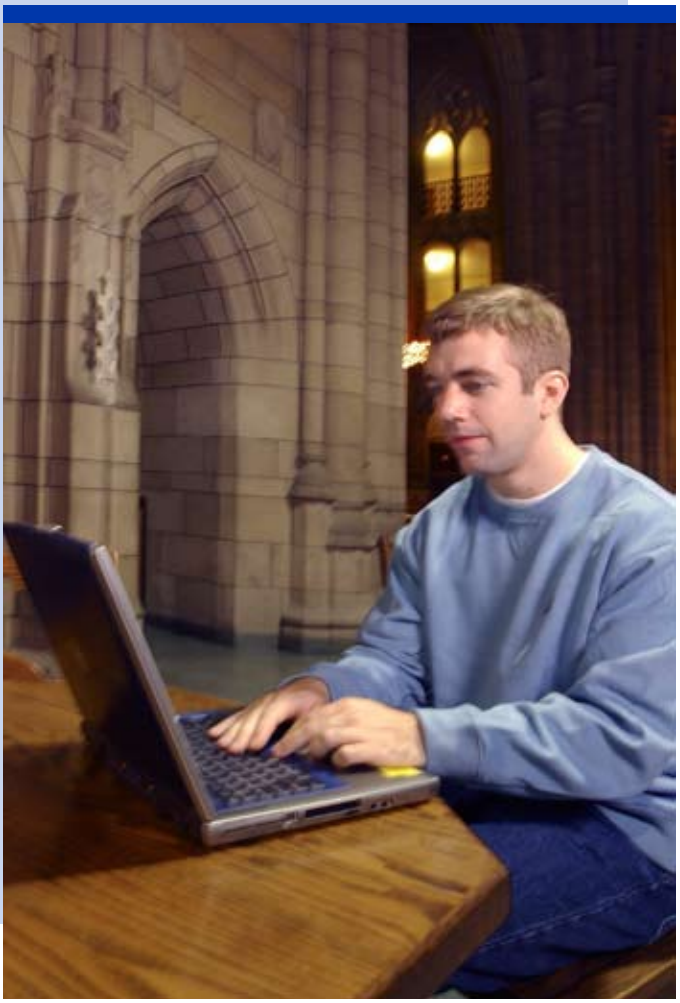
"I never expected to write so many papers in college. I've had several papers every semester since my sophomore year and while it was frustrating at times, I'm glad that I had to write them. My writing is far better now than it was my sophomore year, and I don't mind it so much anymore."



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Study of Writing:

A Report on Writing in the School of Arts and Sciences Undergraduate Curriculum

Executive Summary

I. The Study

The study was initiated in the Spring Term, 2004, by Provost James V. Maher and N. John Cooper, Dean of the School of Arts and Sciences.

The design of the study was as follows:

- a paper survey of existing courses and the "w-requirement" in Arts and Sciences
- focus groups: 10 groups of undergraduates; 3 groups of TA/TFs
- on-line survey: 1,000 Arts and Sciences Juniors and 1,000 Arts and Sciences seniors invited to participate
- faculty interviews: 27 faculty from across the academic departments.

II. Writing Requirements in Arts and Sciences

The current program of required courses includes an introductory Composition course and two writing-intensive courses (w-courses) offered by departments across Arts and Sciences, ideally taken in the junior and senior year, one of them in the student's major area of study.

In September 2004, *U.S. News and World Report* listed the Arts and Sciences-sponsored program of w-courses as one of the top 16 "Writing in the Disciplines" programs in the nation, ranked with Harvard, Cornell, Yale, Duke, Chicago, and Princeton, among others.

The approach to the w-courses varies from department to department.

III. From the Focus Groups

Students' accounts of what they were expected to learn were remarkably consistent with the faculty's accounts of its expectations. For students, learning to write and writing to learn are linked–that is, they don't see writing as simply an "add-on."

The writing assignments they value are those that push them to think further and learn more. They know they are expected write clearly and concisely and to organize the presentation. They value assignments that

allow them to write about something that matters to them. They are helped most by written comments that make specific suggestions for revision. They hope that the faculty will respond to their ideas, to what they say; they want more, that is, than a note saying "Good Job" or "Interesting."

IV. From the Survey

In the Spring Term, 2005, 256 Juniors and 389 Seniors, drawn from across the academic departments in Arts and Sciences, completed an on-line survey. The survey indicated that students do a significant amount of writing beyond the required w- courses and that the assignments are varied in length and task.

Students value most the assignments that ask them to work with ideas and to develop their own position in relation to assigned readings or data sets. Students indicated that in w-courses they were more likely to revise and to receive specific guidelines, advice or strategies for writing. Students indicated that in all of the courses that require writing, they would like to see models of student and professional writing, to have more opportunities for revision and more individual conferences with faculty.

90 percent of the students who responded to the survey said that writing was important, very important, or extremely important to their education at the University of Pittsburgh. 80 percent said that writing was important, very important or extremely important to learning in their major area of study.

Students were generally quite positive about their w-courses, particularly those in the major area of study. The most consistent student complaints concerned the variation in expectations between one w-course and the next. Students were also concerned about the amount of writing they did in courses that ***didn't*** carry the w-designation (particularly in lab sections). This was writing (as they sometimes said) that didn't seem to "count."

V. From the Faculty Interviews

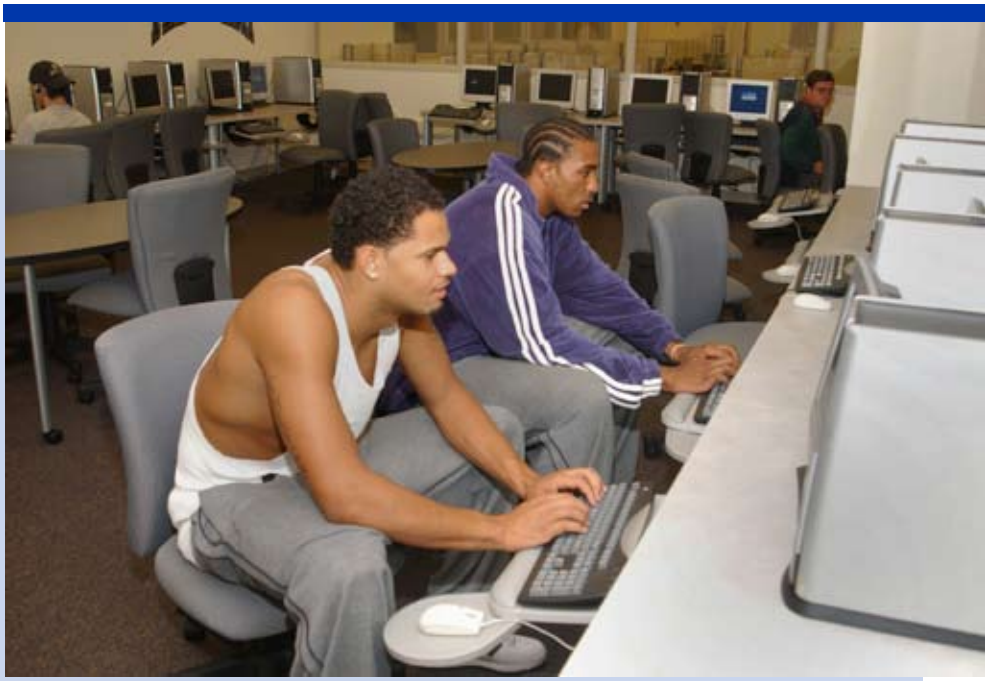
In Spring Term, 2005, we interviewed 27 faculty members from Arts and Sciences. These were individuals known for their interest in student writing. They were drawn from across the disciplines.

Most faculty members 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 and that students are generally prepared to do the work of advanced courses. Almost everyone we interviewed mentioned "clarity" and "coherence" as important qualities in student writing, and almost everyone said that these qualities were often lacking. 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. (Clarity and complexity can, it was noted, be competing objectives for student writers.) A common thread across the interviews was a concern to make writing matter, to make it more than a routine and predictable classroom exercise.

The interviews allowed us insight into best practices on campus. For example. for many of the faculty we interviewed, the long paper in the senior seminar modeled the process of writing an article for a professional journal. For other faculty, the senior seminar was conceived as an introduction to writing in professional

business or industrial settings. Many faculty members we interviewed organize their students' writing through a sequence of smaller assignments that lead to a larger project. They provide close commentary, models and strategies for approaching a specific task, and opportunities for revision.

We asked: "What new (or newly redirected) resources or forms of support would help you as a teacher of writing?" Faculty mentioned undergraduate or graduate teaching assistants to serve as readers and mentors, more visibility for the advanced writing courses in the disciplines on our campus, and additional incentives to develop such courses.



"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."

Introduction

The study was initiated in the Spring Term, 2004, by Provost James V. Maher and N. John Cooper, the Dean of the School of Arts and Sciences.

The purpose of the study was to investigate, describe and make visible the culture of writing in the undergraduate curriculum on the Pittsburgh campus. The School of Arts & Sciences seemed the appropriate unit for an initial study.

We began with the assumption that writing was taught directly or indirectly throughout the four years of an undergraduate education and across the departments on campus (both within and beyond the structure of required "writing intensive" courses). There is much myth and lore concerning the quality and quantity of student writing in any given semester, as there is much myth and lore about faculty practices and faculty expectations. The purpose of the study was to document what can be known about current practices, to give voice to the experiences and expectations of faculty and students, and to make visible the various ways writing functions as part of an undergraduate education at the University of Pittsburgh.

When we began to gather data, Vice Provost Jack Daniel said that the study should document the "core values and practices associated with writing at Pitt." He wanted to hear what faculty had to say "in their own terms and in their own voices." He said, "If we approach the problem appropriately, we can not only learn substantively what is going on with the culture of writing at Pitt, but we can also obtain some positive byproducts such as the administration partnering with faculty across the disciplines to understand, shape, and maintain the appropriate culture of writing at Pitt. . . ."

Our hope is that the study can be used to initiate new conversations on campus about the role, place and value of student writing in the undergraduate curriculum. And our hope is that the study can be used to reassess the curriculum and to reassess the appropriate levels of institutional support for undergraduate writing across the disciplines.

The design of the study was as follows:

- A paper survey of existing courses and the "w-requirement" in Arts and Sciences
- Focus Groups: 10 groups of Arts and Sciences undergraduates drawn from across the disciplines; 3 groups of Arts and Sciences teaching assistants and teaching fellows

- On-line Survey administered to be distributed to 1,000 Arts and Sciences Juniors; 1,000 Arts and Sciences Seniors

- Faculty Interviews: 27 Arts and Sciences faculty drawn from across the disciplines, with 9 each from the Humanities, Social Sciences and Natural Sciences

The administration of the study is as follows:

Director: David Bartholomae, Professor and Chair, Department of English
Associate Director: Beth Berry Matway, Department of English and Arts and Sciences College Writing Board

Advisory Committee:

Lisa D. Brush, Sociology
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The report that follows will provide background information on the Composition Program, including the w-course requirement, and the results of the surveys, focus groups, and interviews.

Section 1: Writing in the Arts and Sciences, Background

"I like to write in a way I feel I can grow."

I. The Writing Requirement in the Arts and Sciences

The current program of required courses includes an introductory course (now called "Seminar in Composition," formerly called "General Writing") and two writing-intensive courses (w-courses) offered by departments across the School of Arts and Sciences. These courses are ideally taken in the junior and senior year, one of them in the student's major area of study. In addition, Arts and Sciences Undergraduate Studies supports a free, drop-in tutorial service, The Writing Center.

The writing requirements are described as follows (from the School of Arts and Sciences *Student Handbook*):

> Written communication remains the hallmark of our culture and is central to almost all disciplines and professions. The writing skills a student acquires in college provide a base for future graduate education and professional employment.
>
> 1. **Workshop in Composition or Intensive Workshop in Composition**: Students scoring below three on the University writing placement exams . . . are required to take one or both of these courses. Course must be completed by the second term of full-time enrollment and students must pass the course with C- or better.
>
> 2. **Seminar in Composition (or its equivalent)**: one approved college-level composition course such as the Seminar in Composition course offered by the English Department. To fulfill this requirement, you need to earn a passing grade of C- or better, and the requirement must be completed by the end of the fourth term of full-time enrollment.

- A student may be required to take a one-credit Composition Tutorial concurrent with Seminar in Composition, if it is determined that this is necessary to strengthen their writing. If so, the student must complete these courses by the end of the second term of full-time enrollment and must pass the courses with a C- or better.

- Initial placement is based on a writing exam during the PittStart sessions. Students scoring at least 600 on the Verbal SAT are exempt from this placement exam and automatically placed into Seminar in Composition. Final placement is based on a diagnostic exam given the first week of Seminar in Composition (or its equivalent).

- Exemption: Students scoring 600 or higher on the verbal SAT and scoring five on the English AP test are exempted from Seminar in Composition.

3. **Two Writing-Intensive Courses:** After the completion of Seminar in Composition or its equivalent, each student must complete two courses that are designated as writing-intensive (w-courses), or complete one w-course and a second English composition course for which Seminar in Composition is a prerequisite. W-courses are designed to promote writing within a discipline through the use of writing assignments spread over the course of a term. Each student must satisfy one element of this requirement within his or her major field of study.

The Required Introductory Composition Course: Seminar in Composition

Formerly called "General Writing," Seminar in Composition is a three-credit course taken by the majority of students in the Arts and Sciences. On the basis of diagnostic testing, some students are required to take an additional one-credit tutorial (in the Writing Center) to support their work in the course. Some sections of "Freshman Seminar" fulfill the introductory composition requirement.

The Composition Curriculum Committee of the English department has prepared a document defining the goals of Seminar in Composition. The document states:

> Although the texts and assignments in various sections of Seminar in Composition will differ, students in every section will be asked to address a semester-long sequence of assignments that demand sustained attention to a complex subject. Sequenced assignments are carefully designed to ensure that all students are required to do the following:
>
> - Engage in writing as a creative, disciplined form of critical inquiry.
> - Address challenging questions about their own writing and that of others.
> - Compose thoughtfully crafted essays that position the writer's ideas in relation to those of others.
> - Write with precision, nuance, and awareness of textual conventions.

The course is taught as a workshop, with regular discussions of copies of student essays. Revision and proofreading/editing are built into the sequence of assignments. The Composition faculty note: "It is our expectation that subsequent courses in all disciplines also will insist on, and help students develop, these critical writing abilities."

Pitt's first-year writing course has been widely influential in the field of Composition. The 1998 External Review of the English department, for example, spoke directly about the composition program and its support of the first year, introductory course. The reviewers said:

> Through the program itself . . . , faculty at Pittsburgh have extended the boundaries of knowledge in Composition. It is hard to know of any other curricular work that has done anything like this at the first-year level; one thinks primarily of experiments over half a century ago at Chicago and Columbia, experiments with an altogether different aim.

"Writing is essential, especially for science majors. There should be more writing, and more classes should fulfill the W-requirement."

And,

> In its various forms over the past three decades, General Writing has demonstrated uniquely the possibility of an intellectually rigorous first-year course that prepares students to read critically and write effectively. It is perhaps the most emulated program and course in the field right now, and certainly the most influential. It stands for something important in higher education, and in doing that the Composition faculty at Pitt have empowered serious faculty members across the country (and across a wide range of institutional cultures) to take such work seriously.

Writing-Intensive Courses

The University of Pittsburgh was among the first universities in the nation to develop required writing courses in the disciplines (or "writing across the curriculum," as it was then known). The "Writing in the Disciplines" program at Pitt is supported by a faculty committee, "The College Writing Board," which is directed by Beth Matway and is charged with supporting course development and reviewing new w-course proposals (as well as administering the Ossip Award for Undergraduate Writing). In addition (as a result of the 2000 Arts and Sciences Curriculum Review), Arts and Sciences sponsors a faculty seminar, "Writing in the Disciplines" (led by Beth Matway), in which faculty participants work to integrate writing more effectively into their courses.

Arts and Sciences faculty who wish to propose new writing-intensive courses are expected to follow these guidelines (published by the College Writing Board):

1. Students in w-courses should **write regularly**, from the beginning of the term onward. Students writing in the last month of class should be able to work from what they have learned by writing in the first month. By the end of the term, students should have written at least 25 pages in all.

2. Students should complete a **variety of writing assignments** during the semester. Formal writing projects can engage students in practicing forms of writing integral to the discipline. Informal writing can also play an important role in a w-course, intensifying students' engagement with the course material and preparing their thinking for more formal assignments. Students should be made aware of how their writing will be evaluated, with attention to the particular conventions and expectations of the discipline.

3. At some point(s) in the semester, students should have the **opportunity to revise** a piece of writing substantially. A w-course revision should involve more than correcting mistakes. Revision can be a way for students to develop and extend what they have begun in an earlier draft, particularly when instructors respond to student work by asking questions and making suggestions that prompt further thinking. Instructors should allow sufficient time between a draft and a scheduled revision so

that they can provide effective written commentary to the students. To accommodate this work, we recommend that w-course enrollment be limited to 22 students.

4. Although students typically do most of their formal writing outside the classroom, in a w-course they should also **spend some time in class learning to write**. Instructors should direct the students' attention to writing issues (whether specific to the discipline or more general), and find ways to use class time helping students address those issues.

Once a course has been designated writing-intensive by the CWB, the department can offer it at any time as a w-course. No formal process exists for reviewing the way w-courses are taught after their initial approval.

Like the first-year composition course, the "Writing in the Disciplines" program at the University of Pittsburgh has a strong national reputation. In September 2004, *U.S. News and World Report* listed the Arts and Sciences-sponsored program of w-courses as one of the top 16 "Writing in the Disciplines" programs in the nation, ranked with Harvard, Cornell, Yale, Duke, Chicago, and Princeton, among others.

II. Survey of W-Course Offerings

As indicated above, all departments must offer at least one writing-intensive course so that students may take a w-course in their major. Departments meet this requirement in different ways. Many departments now have several three-credit courses their majors can take to fulfill the writing requirement; just a few (Statistics, for example) still list only one course. Some, such as English and History, have instituted a junior and/or senior writing seminar exclusively for majors. A few smaller departments (East Asian Languages and Literatures, for example) grant writing credits (ranging from one to four) through a Directed Study for Majors. Others attach a one-credit writing practicum to a large lecture course. This practice is common in the sciences; Chemistry, Neuroscience, and Physics meet their requirement exclusively with a one-credit writing practicum, while Biological Sciences offers a two-credit writing seminar and also attaches 14 different one-credit practica to its laboratory courses. In some departments, such as Psychology, the writing practicum is not listed as a separate one-credit course, but the writing component is handled in the recitation sections of a large lecture class. Finally, several majors (History of Art and Architecture, for instance) offer a combination of three-credit writing courses and one-credit practica.

Some departments offer multiple writing-intensive courses, presumably to serve students who come from outside the major to fulfill part of their writing requirement. As might be expected, English lists significantly more writing courses than any other discipline. Other than in English, the highest numbers of w-courses appear in Biological Sciences, History, and Philosophy (all with 10 or more w-courses listed over the past two years). Anthropology, Communication and Rhetoric, Economics, and Political Science follow close behind.

The table below shows the number of different w-courses, and the total number of w-sections, actually conducted in each department over a two-year period (AY 2007-2008, including the summer term, and 2008-2009, excluding the summer term). This information was derived from a Data Report provided by the Office of the Registrar in February 2009.

The total number of writing-intensive courses across the disciplines continues to increase. During the two-year period from the fall of 2003 to the spring of 2005, there were 165 different w-courses conducted. In the period surveyed by the table above, however, a total of 184 w-courses were conducted—about an 11% increase.

Undergraduate Writing-Intensive Courses Offered in AY 2007-2008 and 2008-2009

Department or Major	3-credit w-courses under 1000-level	1-credit w-courses under 1000-level	3-credit w-courses at or above 1000-level	1-credit w-courses at or above 1000-level	Total w-courses	Total sections
Africana Studies	0	0	3	0	3	4
Anthropology	0	0	9	0	9	19
Biological Sciences	0	1*	1 (2 cr.)	13*	15	44
Chemistry	0	0	0	3*	3	10
Classics	0	2*	0	3*	5	9
Communication and Rhetoric	1	0	7	0	8	28
Computer Science	0	0	3	0	3	14
Cultural Studies	0	0	0	0	0	0
East Asian Languages and Literatures	0	0	0	2**	2	10
Economics	4	0	4	0	8	18
English	22	0	12	0	34	287
Environmental Studies	0	0	0	0	0	0
Film Studies	2	0	2	0	4	7
French and Italian Languages and Literatures	2	0	1	0	3	7
Geology and Planetary Science	0	0	2	0	2	5
Germanic Languages and Literatures	0	0	1	0	1	2
Hispanic Languages and Literatures	2	0	0	0	2	6
History	1	0	12	1** (1-9 cr.)	14	64
History of Art and Architecture	0	3*	3	0	6	24
History and Philosophy of Science	0	0	0	1	1	2
Jewish Studies	0	0	0	0	0	0
Linguistics	0	0	3	0	3	5
Mathematics	2 (4 cr.)	0	2	0	4	13
Medieval and Renaissance Studies	0	0	0	0	0	0
Music	0	0	2	0	2	3
Neuroscience	0	0	0	3*	3	10
Philosophy	2	9*	0	0	11	41
Physical Education	0	0	0	0	0	0
Physics and Astronomy	0	1*	0	2*	3	6
Political Science	1	0	7	0	8	25
Psychology	1 (4 cr.)	0	4	0	5	20
Religious Studies	0	1*	2	0	3	6
Slavic Languages and Literatures	7	0	0	0	7	16
Sociology	3	0	2	0	5	12
Statistics	0	0	0	1*	1	2
Studio Arts	0	0	0	0	0	0
Theatre Arts	0	0	2	0	2	5
Urban Studies	0	0	1	0	1	3
Women's Studies	2	0	1	0	3	8
Total					**184**	**735**

* 1-credit Writing Practicum attached to a lecture course
** Directed Study or Research for majors

III. Writing Outside the W-Courses

To find out how often students were asked to write in courses not designated as writing-intensive, we studied official course descriptions for Arts and Sciences offerings. Among the published descriptions for the academic year 2003-2004, we found many that explicitly mentioned writing as part of the work students would be expected to do. Of approximately 1,956 courses listed for the year (this number excludes all w-courses as well as English Composition and Writing courses), about 7% indicate that students will be required to write.

Term Papers. Among the classes that do not carry the w-designation, the type of writing mentioned most frequently in Arts and Sciences course descriptions is the (long) term paper or research paper. In most cases, the term paper is the only writing assignment mentioned, but sometimes the course description specifies that this longer paper will be preceded by some shorter writing assignments. Of the courses that require a term paper, about 30% also require students to do some other writing earlier in the semester.

Short Papers. Aside from the term paper, the type of writing appearing most frequently is a series of short papers—critical essays, position papers, or analytical papers, for example. Some courses require short responses to texts or readings; these assignments are variously labeled as "response papers," "reviews," "summaries," or "reports." Others mention short "exercises" or "writing assignments" (in the Humanities, these are often language courses). As described above, sometimes (in about 20% of the classes that require short papers) these shorter writing assignments precede a term paper.

Other Writing Assignments. Some course descriptions mention journal writing or essay exams, and others state that writing is required without specifying a particular type of assignment.

IV. The Writing Center

The Writing Center is a free tutorial center sponsored by Arts and Sciences. The staff is made up of English Department TA/TFs, professional tutors (on part-time or full-time non-tenure stream contracts), and peer tutors. The Center is located in M2, Thaw Hall, although tutorials are also provided in residence hall Tower A and in Hillman Library. The staff includes Geeta Kothari, Director; Jean Grace, Associate Director; and Beth Newborg, Outreach Coordinator. On its website, the Writing Center describes its work as follows:

> The Writing Center is a place for students, faculty, and staff of the University of Pittsburgh to come to work on their writing. Its services are free. The Center is staffed by experienced consultants who have been trained to help others with their writing. The Writing Center does its work in several different ways. We work with writers one-on-one; you can find more information about that aspect of our work below. But we also run the **Writers' Café**, a regular workshop and writing-exercise gathering for Pitt undergrads who are interested in creative writing. Please visit our Writers' Café site to learn more about what the Café offers. The Writing Center also supports a **peer tutoring program** that allows Pitt undergraduate students to learn about writing and teaching and gives them the opportunity to tutor students who come to the Center. For information about the program, how it works, and what it offers, visit our peer tutoring program page.
>
> We are responsible for teaching **Composition Tutorial**, a one-credit course. Students in Composition Tutorial are also registered for Seminar in Composition, and they have a one-on-one session with a consultant every week. We are also affiliated with the **Writing in Engineering** program and the certificate in **Public and Professional Writing program** here at the University of Pittsburgh.

In the 2008 academic year, the Writing Center helped more than 2400 students with their writing. That year, Writing Center faculty and peer tutors provided outreach assistance to an additional 1,000 people in workshops for international students, the Writers' Café, and events organized by various departments and units on campus, including Freshman Studies, Faculty and Staff Development Programs (for the Office of Human Resources), the Office of Experiential Learning, GSPIA, the Black Action Society, the Katz School, and Arts and Sciences individual faculty and departments.

In academic year 2009, the Writing Center began using on online scheduling system that dramatically increased usage: students were able to make appointments at their convenience and were likelier to cancel if they needed to, allowing others to use slots that would otherwise have been wasted. In the fall term (2091), the Writing Center faculty and peer tutors provided 4,383 tutorials for students who were working on their writing, hosted 81 students at the Writers' Café, and interacted with another 773 people through outreach activities.

"One of the main problems with classes that involve 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."

V. Writing and the 2000 CAS Curriculum Review

The 2000 CAS Curriculum Review surveyed current students, graduates, faculty, and advisors about the "skills" areas of the undergraduate curriculum. Both General Writing and the w-courses were identified as "important" to the undergraduate experience by these percentages of respondents:

	General Writing	W-Courses
Faculty	94%	79%
Advisors	100%	92%
Students	82%	61%
Graduates	100%	100%

The report also identified areas within the undergraduate curriculum that deserved additional resources. All touched on support for writing beyond the first year of the undergraduate curriculum, recommending that resources be designated:

1. To support faculty development activities, including summer workshops in writing.
2. To support consulting for faculty teaching writing-emphasis courses (e.g., freshman seminars, w-courses).
3. To provide increased availability of undergraduate computer labs and appropriate support staff.

There were no substantial changes to the required courses as a result of the 2000 CAS Curriculum Review.

In the FCAS Strategic Plan for FY 2004, the faculty again stressed the curricular importance of writing. In his memo dated March 24, 2004, Dean N. John Cooper emphasized the need for Arts and Sciences departments to include writing in their courses:

> Writing across the curriculum has been a component of our general education curriculum for over a decade, and the existing support structures for WAC have been refined and augmented in response to the curriculum review. [. . .] The goal is to ensure that all departments have effective programs in place that ensure that current and future classes have the opportunity to develop writing skills adequate to support their learning and career goals.

Section 2: From the Undergraduate Focus Groups, Spring and Fall 2004

"The biggest change is . . . confidence."

I. Introduction

Jen Saffron and Beth Matway conducted three focus group sessions with graduating seniors in the spring semester of 2004. Participants were mainly drawn from upper-level writing-intensive courses; nineteen students participated. Information from these sessions helped us to shape the undergraduate student survey instrument and to refine our questions for the later focus groups.

In the fall semester of 2004, Beth Matway conducted five more student focus groups with a total of fourteen participants, primarily juniors and seniors. (An additional nine students had signed up for the groups, but did not appear at the designated times.) In the course of the study, then, we have held face-to-face conversations with 33 undergraduates. This report reflects the views expressed by participants in both semesters.

Focus group participants are self-selected and therefore cannot be viewed as a representative sample of undergraduates or of the disciplines in Arts and Sciences. Participating students in our groups came from a narrow range of majors: History, Philosophy, Sociology, Psychology, English Literature, and Interdisciplinary Studies. Nevertheless, the sessions provided an opportunity for us to gather the perceptions of some articulate, self-motivated students with a high interest in writing.

II. Focus Group Questions

Students were asked the same questions in all five of the fall semester focus groups, and most participants responded to every question.

1. In what ways would you say your own writing has changed in the time you have been studying at Pitt?

2. What are the most valuable lessons you have learned for writing in your major? How did you learn these lessons?

3. In your major, what do you think your professors value most in students' writing? What seems to frustrate them the most?

4. 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?

5. 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.

6. What can professors do to enable students to successfully complete their writing assignments?

7. 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?

These questions fall into two groups. The first three questions elicited students' perceptions of what is expected of them in academic writing, and allowed them to describe how they met those expectations. Questions 4, 5, and 6 invited students to reflect on their work as writers in the academy.

III. From the Focus Groups

The following were the primary themes, topics, and concerns.

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 that 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

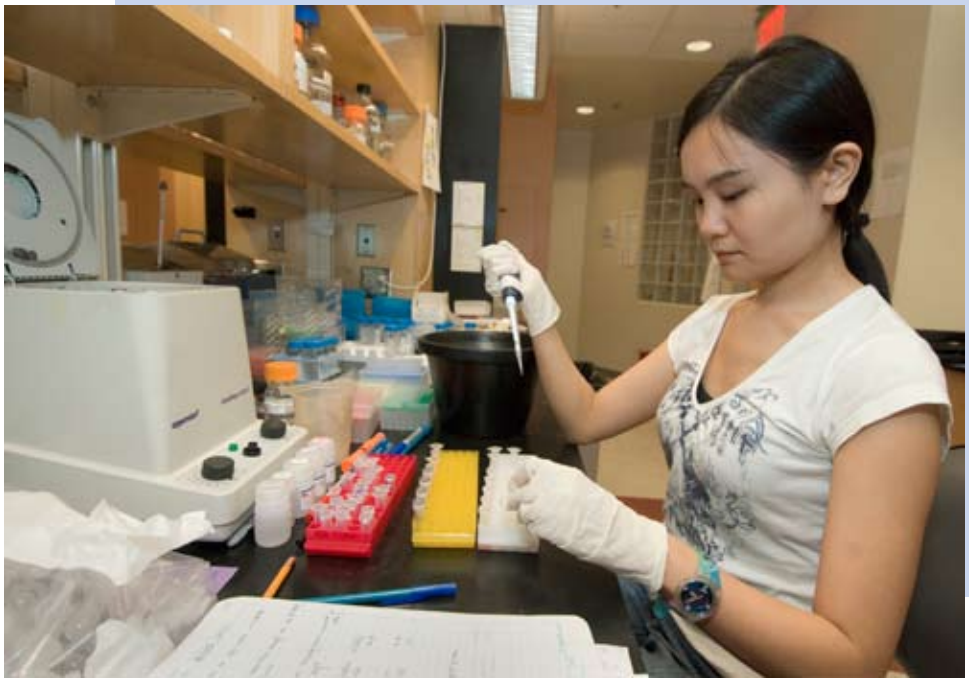
mentioned, and tended to elicit nods all round the table. Students who directly commented on what most frustrates their professors mentioned lack of organization more than anything else—sometimes describing the problem as "rambling." A few students mourned that adhering to this expectation led them to 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.

"I have written more in 1-credit Chemistry or Biology lab than I have in most 3-credit courses, including those in which I have received a W."

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. 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."

"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."

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."

Students receiving good grades described their dismay when an instructor's comments were limited to something like "great job!"

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.

> **"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."**

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 GW and made a lot of progress and then didn't work on my writing at all until this year. I wish I had taken it [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.

IV. Summary of Student Responses

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.

> **"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."**

Students in the Focus Groups made the following observations.

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.

What support is useful 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.

Section 3: From the Student Survey

"I put my heart and soul into it."

I. Introduction

On the basis of the work we did with focus groups, we prepared an on-line student survey designed to elicit information about student attitudes and experiences. In preparing the survey instrument and evaluating the data, we relied on the support of Diego Jarran (from the University Center for Social and Urban Research) and Lisa Brush (from the department of Sociology). We are very grateful for their help and support. The following report summarizes the survey data.

II. The Sample

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

Juniors	256
Seniors	389
Total	645

Who responded to the survey? Students were randomly selected and contacted via e-mail. 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. There was, however, a reasonable distribution of students with majors across the academic disciplines. The disproportions were not substantial, as indicated below:

	# of 05-2 A&S majors (% of total A&S majors)	# of survey majors (% of total survey majors)
Humanities	2666 (38%)	490 (45%)
Social Sciences	2058 (29%)	312 (28%)
Natural Sciences	2382 (34%)	295 (27%)

III. The Timing of the Required Courses: Seminar in Composition and W-courses

We asked students when they took their required courses.

88% took the introductory course ("Seminar in Composition," formerly "General Writing") in their freshman year.

70% took the w-designated courses (2 are required) during their 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 Harvard Study of Undergraduate Writing.)

IV. The Presence of Writing in the Arts and Sciences Curriculum

The survey indicated that students do a significant amount of writing beyond the required courses.

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

V. The Genres of Academic Writing

The focus groups helped us to identify and to name the genres of academic writing in courses in Arts and Sciences. 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 (see Fig 1)

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 short response papers: not often enough, often enough, too often?"

Too often: no genre received more than a scattering of responses.

Not often enough:

Writing as though for an academic journal (55%)
"Creative" assignments (poetry, etc) (52%)
Take home essay exams (43%)
Personal essays (33%)
In-Class writing (not an exam) (33%)
Persuasive/Opinion Papers (32%)
Journals/Reflective Writing (31%)

"You should ask if we think long papers due at the end of the semester are useful (they aren't!!!)."

Students' Assessments of the Usefulness of the Genres in Learning Course Material

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.

Not helpful/Somewhat helpful:

- Writing as though for an academic journal (77%)*
- Personal Essays (77%)
- Journals/Reflective Writing (76%)
- In-class writing (not an exam) (74%)
- "Creative" assignments (poetry, etc) (70%)
- Lab Reports (65%)**
- Research/Literature reviews (65%)
- Short Response papers (57%)
- Essay Tests (in-class) (56%)

Very or extremely helpful:

- Research (term) papers (60%)
- Reports (on readings or research) (56%)
- Persuasive/Opinion papers (50%)
- Essay Tests (take home) (50%)

*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.

Students' Assessments of the Usefulness of the Genres in Learning to Write

Not helpful/Somewhat helpful:

- Lab Reports (83%)**
- Journals/Reflective Writing (79%)
- In-class writing (not an exam) (77%)
- Writing for an academic journal (76%)*
- Essay tests (in-class) (74%)
- Short response papers (72%)
- Research/Literature reviews (67%)
- Personal essays (64%)
- "Creative" assignments (poetry, etc) (60%)
- Essay tests (take home) (59%)

Very or extremely helpful:

Research (term) papers (63%)
Reports (on readings or research) (51%)
Persuasive/Opinion papers (54%)

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

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

VI. 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

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.

Not helpful/somewhat helpful:

Regurgitation (82%)
Reflection (68%)
Summary (64%)
Persuasion (56%)

Very or extremely helpful:

Analysis (71%)
Interpretation (59%)
Developing own ideas (59%)
Proving a Thesis (57%)

Students' Assessments of the Usefulness of This Writing in Learning to Write

Not helpful/somewhat helpful:
- Regurgitation (92%)
- Reflection (65%)
- Summary (64%)

Very or extremely helpful:
- Developing own ideas (62%)
- Analysis (61%)
- Proving a Thesis (60%)
- Persuasion (56%)
- Interpretation (55%)

"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."

VII. The Teaching of Writing (in and out of the W-courses)

We asked students 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.

Teaching Practices 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.

Teaching Practices 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.

Student Preferences for Teaching Practices They Had Not Experienced

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.

Feedback on Student Writing

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, students identified common, not so common, and seldom experienced feedback practices.

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 identified the frequency of several practices for providing feedback:

Students are less likely to receive written commentary.
Students are more likely to have checkmarks.
Students are less like to have conferences with faculty.
Students are less likely to see sample papers.
Students are less likely to revise or to receive directions toward revision.
Students are less likely to have attention paid to ideas or to style and format.

Student Preferences for Types of Feedback They Had Not Received

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.

VIII. The Value of Writing

We asked students about the importance of writing to their education and to their future lives and careers. (See Figures 2-11.)

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 profession or career. (41% said that writing will be extremely important to their future profession or career.)

IX. Open-ended Questions

The survey included some open-ended questions for students.

Students Identify Their Most Useful Course for Working on Their Writing

We asked students for the name of the most useful course they had taken, as far as their writing was concerned. A full list is provided as Appendix 1. In general, however:

The range of courses and departments is interesting and impressive.

A substantial number of students mentioned the required introductory course, Seminar in Composition (or General Writing).

Although the question asked for courses, a substantial number of students referred to the usefulness of the Writing Center.

Faculty Members Who Have Made a Difference and What We Can Learn from Them

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 members who have made a difference to student writers" is included as Appendix 2. We have also included a collection of comments on "what we might learn" (Appendix 3.)

From students' written comments, faculty 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.

Student Complaints and Concerns

By a very large margin, the majority of the students were quite positive about their experience with writing in Arts and Sciences. There were, however, some repeated complaints and concerns. We will summarize

them below. They are consistent with student complaints and concerns as expressed in Writing in the Disciplines programs on other campuses.

Inconsistency in the W-courses. The most frequent expressions of concern were directed at inconsistencies across the w-courses. Faculty members required different amounts of writing or writing in different genres. They had different standards for evaluation; there was no single measure of "good writing." Faculty provided different levels and styles of response. Variety was seen as inconsistency and, therefore, as a problem in a set of required courses.

The Amount of Writing in the Curriculum. There were students who complained that there was too much writing in the curriculum. These respondents usually identified themselves as students who struggled with writing; they were concerned that their QPA's were compromised. They wanted alternative ways to demonstrate what they had learned. We were surprised, however, at the number of students who complained that there was too little or not enough writing in the curriculum.

Writing outside of W-courses. Students felt betrayed when they took courses with substantial amounts of writing and these were not designated as w-courses and did not fulfill the requirement. The writing, they often said, didn't "count" for anything. The problem with a program that relies on a "w-designation," in other words, is that it implies that writing is not present or should not be present in other areas of the curriculum.

What Students Want Faculty and Administrators to Know About Their Experiences With Writing

We asked, "What more would you like to tell us about your experience with writing at the University of Pittsburgh?" What we believe to be a representative set of responses is provided as Appendix 4. It is well worth reading. The comments are pointed, thoughtful, eloquent, sometimes critical and often useful. A quick sample is presented below:

1. 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.

2. 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.

3. Writing has been a small part of my Pitt experience. I consider myself a very good writer—some of my skills I have gained at Pitt, but most of them in high school. I definitely haven't had to write as much as I thought I would in college.

4. 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.

5. I have written more in one-credit Chemistry or Biology lab 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.

6. 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.

7. One of the main problems with classes that involve 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.

8. 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.

9. 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.

10. Writing is very important, but I don't think students should have to take a writing course, above General Writing, that does not pertain to their major. It was a waste of time, in my experience.

11. You should ask if we think long papers due at the end of the semester are useful (they aren't!!!).

12. Writing is essential, especially for science majors. There should be more writing, and more classes should fulfill the "W" requirement.

13. 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.

14. 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.

15. 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 completed. The completion of these papers causes students to feel as if they really got their money's worth out of the course and learned a lot.

Section 4: From the Faculty Interviews

"Students write their way to an argument and main idea through drafts."

I. The Interviews

In Fall 2004 we wrote to department chairs in Arts and Sciences asking them to identify up to 5 members of their faculty from across the ranks (including Lecturer) whose courses included writing (in whatever forms). From this list we created a pool of candidates representing departments across the disciplines. We planned for 30 and we completed interviews with the following 27 members of the faculty:

Humanities	Social Sciences	Natural Sciences
Ligia Aldana (Hispanic L&L)	Shirley Cassing (Economics)	Walt Carson (Biological Sci)
Steve Carr (English Literature)	Janelle Greenberg (History)	Karen Curto (Biological Sci)
Sabine Von Dirke (German)	Frank Giarratani (Economics)	Irene Frieze (Psychology)
Don Franklin (Music)	Michael Goodhart (Poli Sci)	Jason Fulman (Math)
Jane Harris (Slavic)	Maurine Greenwald (History)	Barbara Kucinski (Psychology)
Keiko McDonald (East Asian)	Ellen Mercer (History)	George Novacky (Compu Sci)
John Norton (HPS)	Alex Orbach (Religious Studies)	Vittorio Paolone (Physics/Astro)
Kirk Savage (History of A&A)	Len Plotnicov (Anthropology)	Linda Rinaman (Neuroscience)
Phil Watts (French and Italian)	Ron Linden (Political Science)	Peter Siska (Chemistry)

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.

Questions for Faculty Interviews

The interviews took their own shape and direction; they lasted from 30 minutes to 90 minutes. The interviewers began, however, with a core set of questions:

1. How often do you use writing assignments (formal or informal) in your teaching? Are there particular forms or genres that you find most important or useful in your teaching? Would you be willing to provide copies of writing assignments for us to review and to put on file?

2. Where and when do you use writing assignments in your teaching—in which classes, at what points in a semester, sequenced out in what order or over what period of time?

3. What do you do with the writing you receive? What are the most effective ways you have found to respond to student writing?

4. Why do you have students write in your courses? How do you understand the role of writing in relation the general objectives, aims or concerns of your courses? How are your assignments and expectations different at different places or levels in the curriculum?

5. What skills do students bring to your classes as writers? What do they do particularly well? What do they need to learn? Where and how have you been most effective in helping them to improve?

6. What resources or forms of support would help you as a teacher of writing? What might help students to be better prepared for your classes?

7. What qualities define successful writing in your field? Are there scholars whose work you particularly value for the quality of their writing? Could your students (or do your students) learn from their example?

8. How did you learn to write? What were the key moments or lessons for you as an undergraduate, graduate student, and beyond?

II. A Brief Testimonial

Before going on to report the relevant findings from the interviews, let me break out of report-mode for a brief testimonial. I have been consulting with and evaluating undergraduate writing programs for the past 20 years, including programs at Harvard, Cornell, Michigan, Rutgers, Berkeley, Duke and Ohio State. In all my travels, I have never met with so many faculty members who taught at such a high level, whose teaching was as careful, thoughtful, and innovative as I found interviewing Pitt faculty and reviewing the transcripts from the interviews by my colleagues. There are courses across the disciplines in the Arts and Sciences, not all of them designated as writing-intensive, that could serve as models across campus and across the country, courses where the work of writing is central to preparing students to do the work of the disciplines and where student writing is given a remarkable level of care and attention.

D. Bartholomae

III. Interview Findings

Summary accounts of the interviews (and, in some cases, course materials) could be made available on request. The interview summaries are worth reading in full, since interesting and useful detail is lost in a redaction. We will, however, summarize highlights and common themes or issues, and provide brief examples. Please understand, however, that these examples do not fully represent the range of practices found in the interviews (nor have we been able to cite every individual who gave us their time and attention).

"Students have to be able to describe what is really out there in order to theorize or to explain the forces and consequence of economic adjustments in the steel industry."

Negotiating Academic Writing

Writing beyond the Freshman 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. Jane Harris, for example, was enthusiastic about her students' skills. She said it was very rare to encounter students who were bad writers or unresponsive. Most felt that Arts and Sciences 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. Alex Orbach (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 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. Maurine Greenwald (History) proposes an "institutional policy promoting the use of Standard English."

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, Kirk Savage (HA&A) 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 cliche.

Peter Siska (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.

"Teaching writing in the sciences poses special challenges."

John Norton (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 . . . ."

"Students have difficulty limiting the information they provide to only that which is relevant to their hypotheses."

Frank Giarratani (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.

Irene Freize (Psychology) says, "Students have difficulty limiting the information they provide to only that which is relevant to their hypotheses."

Keiko McDonald (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; Keiko, however, 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 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.

> Shirley Cassing (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.

Complexity. Alongside their concern for clarity and coherence, some colleagues 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.

> Sabine von Dirke (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.
>
> Ron Linden (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.
>
> Janelle Greenberg (History) and Len Plotnicov (Anthropology) expect students to manage lots of detail and "nitty-gritty data" in their writing; they expect a clarity that is not synonymous with "simple mindedness."
>
> Ligia Aldana (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. Aldana 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.

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.

"The lack of structure is as related to not quite understanding analysis as it is to not knowing how to get [the analysis] on paper."

> Jane Harris (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.

"Students can be skillful about memorizing—but it's in the use of that knowledge that I can determine what they truly understand."

Len Plotnicov (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." Plotnicov 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."

Ligia Aldana (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." Aldana 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."

Karen Curto (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."

Maurine Greenwald (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," Greenwald says. "Students can be skillful about memorizing—but it's in the use of that knowledge that I can determine what they truly understand."

George Novacky (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.

"I stress that research is not required to prove something. The object of research is to learn what was not previously known."

Vittorio Paolone (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."

John Norton (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."

"I say to students, 'You have to be able to present your work so that others understand it or it's like a tree falling in the forest with no one around. It's useless, wasted effort."

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 Phil Watts (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.

Michael Goodhart (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. Michael uses short assignments that prompt students to practice "specific analytical and expository skills" beyond the basic essay.

Barbara Kucinski (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, Barbara 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."

Steve Carr (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.

Ron Linden (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. Ron 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

"If we assume that [students] cannot have a good idea, that they can only rehearse the ideas of others, the field will ossify."

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."

Don Franklin (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.

Frank Giarratani (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, Frank 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.

Writing in the Disciplines/ Writing as a Professional. For some of the faculty members we interviewed, the long paper assignment models the process of writing an article for a professional journal. In John Norton's Senior Seminar in History and Philosophy of Science, for example, students are writing articles directed toward the journal, *Philosophy of Science*. This practice is most common in the Natural Sciences.

Walt Carson (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. Carson 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. Carson 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.

Linda Rinaman (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. Linda 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 colleagues, the senior seminar (or writing practicum) is conceived as an introduction to writing in professional business or industrial settings.

Irene Freize (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 first hand 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.

George Novacky (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.

Frank Giarratani (Economics): Giarratani'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, says Vittorio Paolone. Faculty members 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. Many of those we interviewed assign 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 precis, generating ideas from data sets. In large lecture courses, short informal assignments are used to engage students but also to assess what they know.

Ron Linden (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: WDWWWWHGW (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.

Kirk Savage (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.

Kirk Savage (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." Kirk believes that the extended work in the preliminary assignments allows students to find a "voice" for the larger paper.

"Writing is a tool for [students], rather than purely performance—it can help focus their minds and clarify their thoughts."

John Norton's (History & Philosophy of Science) "Junior/Senior Seminar" (with a one credit Writing Workshop attached) 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. John'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.

Frank Giarratani (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."

Don Franklin's (Music) Senior Seminar 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 Faure 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

"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."

"orchestration, vocal setting, and texture." Students are invited to "expand the paper to include a larger segment of the movement, or the entire movement."

Len Plotnicov (Anthropology) and Irene Freize (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.

Engaging Students as Writers and Thinkers: Working with Student Writing

Responding to Student Writing. The 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. . . ."

Phil Watts (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."

Ron Linden (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, Ron 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."

Maurine Greenwald (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 Maurine 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 Maurine'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."

Frank Giarratani (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 Frank's course is staged out. At the opening of the course, Frank 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.

Revision. All of the faculty members 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. Not everyone, however, described revision as a way of cleaning up or tightening up a draft. In many courses, 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.

Karen Curto (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.

Steve Carr (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 members we interviewed provide task or assignment-specific handouts (or on-line guides)—detailed supports that anticipate problems students might encounter in their writing.

Maurine Greenwald (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.

John Norton (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.

Don Franklin (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:

"When you provide a structure—not a template—you get more orderly writing."

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.

Karen Curto (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," Karen says.

Linda Rinaman (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.

John Norton (History & Philosophy of Science) and Walt Carson (Biological Sciences) have students writing articles as though for particular professional journals, and therefore have them reading regularly from the journals.

Shirley Cassing (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 members 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, like Len Plotnicov (Anthropology), prefer that students ***not*** read the professional literature. 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. Janelle Greenberg (History) also 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.

> Maurine Greenwald (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.
>
> Sabine von Dirke (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.
>
> Len Plotnicov (Anthropology) distributes copies of term papers from previous classes to "serve as examples of research topics, how reports have 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 colleagues 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 members 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 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.

> Ellen Mercer (History, Teaching Assistant) thinks 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.
>
> Janelle Greenberg (History) 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 mid-term! 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.

Resources and Forms of Support for Faculty

We asked colleagues, "What additional forms or programs of support would help you as a teacher of writing?" They were encouraged to think broadly, to use this as an exercise, and to make suggestions without reference to specific sources of revenue.

In general, the faculty felt they were appropriately supported by existing programs. The question did not produce expressions of frustration or dissatisfaction—either with the quality of the students or with the w-courses and the available programs of support. Everyone who teaches writing, to be sure, would like smaller classes, more courses in the curriculum to prepare students as writers, and teaching assistants to help with the time-consuming work of meeting with students and commenting on student papers—and these desires are represented below.

We will summarize first the most frequent requests and concerns, and then list other observations or suggestions.

1. The most frequent requests and concerns:

> **More campus-wide attention to writing in the disciplines.** Kirk Savage (History of Art & Architecture) says that teachers with an investment in student writing need to feel that they "don't have to go it alone." Phil Watts (French and Italian) similarly asks the university to "open up more spaces to talk about pedagogy." Frank Giarratani was concerned to make good writing courses more visible on campus. The interviewees suggested a variety of forums for discussion and development:

workshops like the Communication Across the Curriculum seminar, colloquia at the departmental or college level, open lectures by Pitt professors teaching exemplary courses, booklets and newsletters.

Incentives for developing courses in support of student writing. Many we interviewed suggested that faculty receive institutional support when they work to integrate writing into their courses or their departmental curriculum. Maurine Greenwald (History) proposes that one incentive could be smaller classes. Kirk Savage (History of Art & Architecture) suggests a stipend or course release as an incentive to develop writing courses. Finally, Phil Watts (French & Italian) imagines the possibility of offering a teaching award for writing in the disciplines.

More writing courses in the curriculum (perhaps required). Many faculty members suggested that students would benefit from taking more writing-intensive courses, so that their writing instruction is not limited to the two required w-courses. Several (Frank Giarratani in Economics and George Novacky in Computer Science, for example) specified that students need to write more frequently in their majors. Peter Siska (Chemistry) says that students training in the sciences get few opportunities to practice writing in the discipline, and he recommends the creation of courses primarily devoted to science communication rather than science content. Other faculty members advocate an increase in required student writing in all courses, in and out of the major; Shirley Cassing (Economics) envisions a program in which students would do "continual writing throughout the curriculum"—a moderate amount of writing in each course rather than a large quantity of writing in just two courses.

Graduate and/or undergraduate teaching assistants to serve as readers and mentors. Faculty members frequently discussed the value of having "another pair of eyes" (Ron Linden, Political Science) to read and respond to student drafts, or to help students hone their editing and proofreading skills. Both graduates and undergraduates in the discipline could be recruited to assist faculty at different stages of a student writing project. A majority of faculty we interviewed advocated the employment of such teaching assistants, trained specifically to serve as writing mentors in a particular discipline. A few, however (such as Irene Frieze in Psychology and Michael Goodheart in Political Science), stressed that they did not want teaching assistants to help with the task of reading students' work. In their view, the job rightly belongs to those with experience and advanced standing.

More courses with enrollments that will allow attention to student writing. There were repeated calls for courses with limited enrollments so that faculty could routinely require and respond to student writing. Smaller classes, they say, make all the difference in their ability to provide effective feedback. Michael Goodheart (Political Science) asks for the opportunity to teach more small classes, because he believes that teaching writing requires "the time and energy for extensive practice and constructive feedback"—nearly impossible to achieve in large courses. Recitation sections could also be sized to allow TAs to give more attention to their students' written work. Ellen Mercer (History) points out that TAs in her department are often responsible for 80 students per course; increasing the number of TAs for each lecture course would enable them to more effectively support the undergraduates as they learn to write within the discipline.

2. Other comments and suggestions:

A first-year program where all courses are small and writing-intensive. Maurine Greenwald (History) envisions a writing-intensive first year. Beyond their introductory composition course, students would take other small classes that called for extensive writing practice. Other universities provide models for this type of program.

More senior seminars (or writing practica combined with senior seminars). Since the senior seminar provides an ideal combination of advanced research and advanced writing, why not provide increased access to these seminars and insure their place across the disciplines? John Norton (History & Philosophy of Science) says that to teach writing is a way to teach research and vice versa. He suggests a new requirement for "research-intensive courses" for upper division students.

Support for writing in large lecture courses. Faculty expressed their concern that students lose something important from the learning experience when a class is too large to allow meaningful writing assignments. These faculty members asked for smaller recitation sections and special training for the graduate TAs who lead the recitations. Students in Barbara Kucinski's (Psychology) writing-intensive Research Methods course work through several drafts of their lab reports, with coaching from the TAs who lead the recitation sections. Barbara meets weekly with the TAs to support them in their efforts; she would like to see additional support offered to graduate assistants like these, who serve as the hands-on writing teachers in large lecture courses.

Increased IT support. Some colleagues mentioned the need for better technology to support the teaching of writing—a switch to something "better than Blackboard," access to more digitally equipped WIFI classrooms, laptops for all students.

We should note that many (if not most) of our peer institutions—Rutgers, Michigan, Ohio State—have received substantial gifts in support of undergraduate writing across the curriculum. Our report might suggest new targets for development.

Section 5: Outcomes

". . . one of the things that made me come to Pitt was the emphasis on writing."

A draft copy of the report was provided to both the Dean and the Provost. In Spring, 2007, the Provost provided significant new revenues to support undergraduate writing:

- The creation of a lectureship to support and "build upon the successes" of the initiatives outlined in the study. This position is currently held by Beth Matway, who chairs the College Writing Board and leads the Arts and Sciences efforts on behalf of Writing in the Disciplines.

- The creation of a lectureship in support of the first year writing initiative in the School of Engineering. That position is currently held by Beth Newborg.

- Funding to support peer tutoring, to create and support the College Writing Board website, and for other efforts to extend the reach of the work of the new lecturers.

School of Engineering Initiative

The English/Freshman Engineering Writing Program (E/FEWP) is a significant part of the Swanson School of Engineering freshman curriculum. The writing instructors prepare writing assignments attached to a required first year lecture course; they evaluate the papers and work with the students as they prepare and revise their papers. Currently, a staff of 11 writing faculty provide the equivalent of Seminar in Composition to 485 freshmen engineering students. Each year, the E/FWEP staff creates and refines writing assignments, support materials, and assessment tools.

Arts and Sciences Undergraduate Writing Fellows

This year, Beth Newborg and the Writing Center staff created a new "Arts and Sciences Undergraduate Writing Fellows" program to support the teaching of writing in the disciplines (with a focus on the natural and social sciences) by funding advanced undergraduates to serve as writing tutors. Participating departments select Fellows from among their own majors to tutor in designated introductory-level courses that they themselves have successfully completed. The Fellows receive training from the Writing Center, but their work takes place within their own departments, with the aim of helping first-year and sophomore students learn to write in discipline-specific genres. Two departments—Biological Sciences and Psychology—are piloting the program during the 2008-2009 academic year. Eight Undergraduate Writing Fellows are serving as tutors for key introductory classes in their majors.

> **Biological Sciences**. The Biological Sciences initiative is led by Lydia Daniels, director of undergraduate curriculum and member of the College Writing Board. The Undergraduate Writing Fellows are working in Foundations of Biology (BIOSC 0150), a 150-student lecture class with no teaching assistants. Because she has the assistance of the Writing Fellows, Daniels has been able to add writing assignments to this course for the first time, transforming the mode of learning for entering Biology majors. Class work will now include write-to-learn exercises on a regular basis to introduce students to the ways biologists pursue and produce knowledge. Writing Fellows will work with students on the write-to-learn assignments, serve as small group leaders to facilitate discussions, and will be available for one-on-one or small group consultations for students who are writing the short essay that is part of the final exam.
>
> **Psychology**. The Psychology initiative is headed by Barbara Kucinski, also a member of the College Writing Board, who teaches PSY 0035 Research Methods in Psychology (between 60 and 150 students). Kucinski also oversees the graduate student teaching assistants who conduct the labs and writing practica attached to the course. In the Psychology pilot program, Undergraduate Writing Fellows will meet individually with students during the drafting and revision phases of two lab reports and will provide feedback on organization, argument, sentence variation, APA style, proper citation, style, and mechanics.

Writing in the Disciplines Faculty Seminar

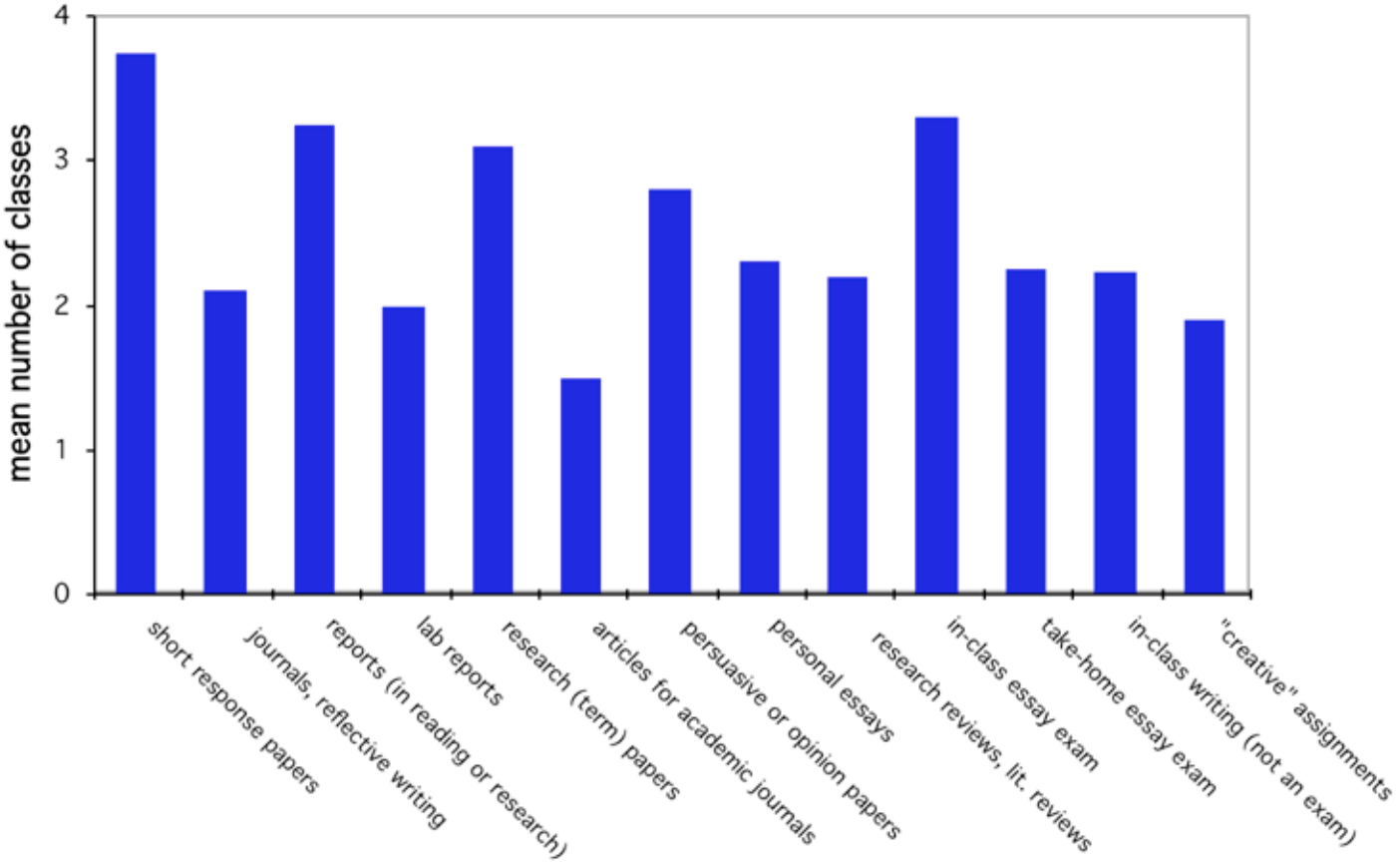
In the spring semester of 2008, Arts and Sciences Undergraduate Studies launched a new semester-long faculty seminar focused on Writing in the Disciplines, developed and facilitated by Beth Matway. Each semester, ten participants receive $1200 fellowships to develop new undergraduate courses or revise existing ones such that writing plays a more significant role in student learning. They meet every other week to discuss pedagogical practices, to workshop their own course materials, and to consider the uses of writing in the Arts and Sciences undergraduate curriculum.

Seminar sessions address:

- Writing to Learn: Formal and Informal Writing Assignments;
- Across the Semester: Assignments in Sequence;
- Responding to Student Writing: Drafting and Revision;
- Responding to Student Writing: Approaches to Grammar and Style;
- In the Classroom: Activities that Support Writing.

Figures

Fig. 1. Frequency of Academic Genres



Students were asked, "In how many classes were you assigned..."

Fig. 2. How important has writing been to your education at the University of Pittsburgh?

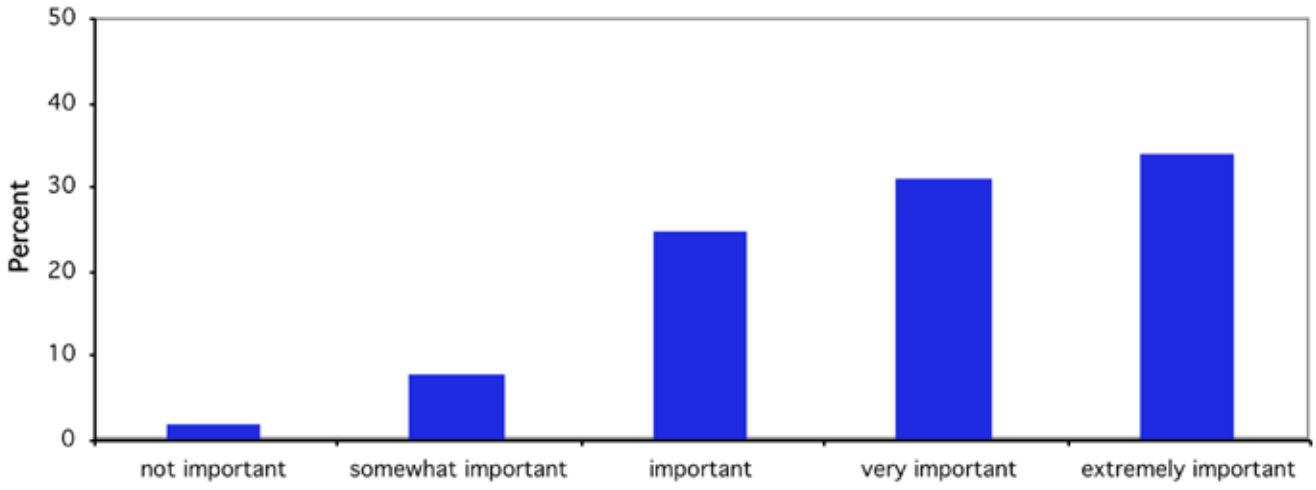


Fig. 3. How important is writing to learning in your major?

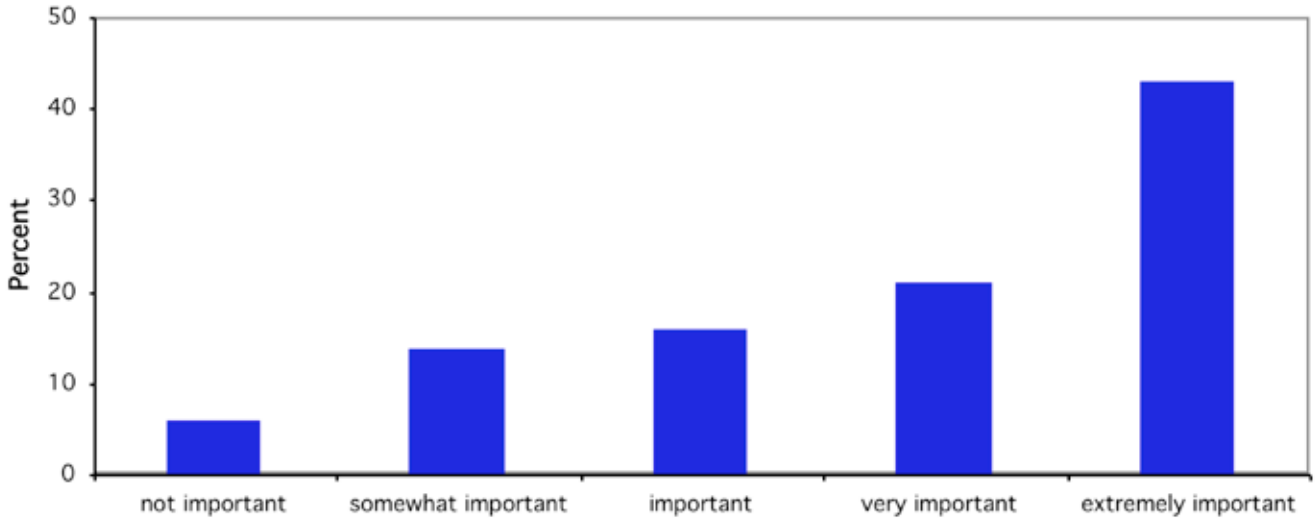


Fig. 4. How important is writing to demonstrating what you've learned in a course?

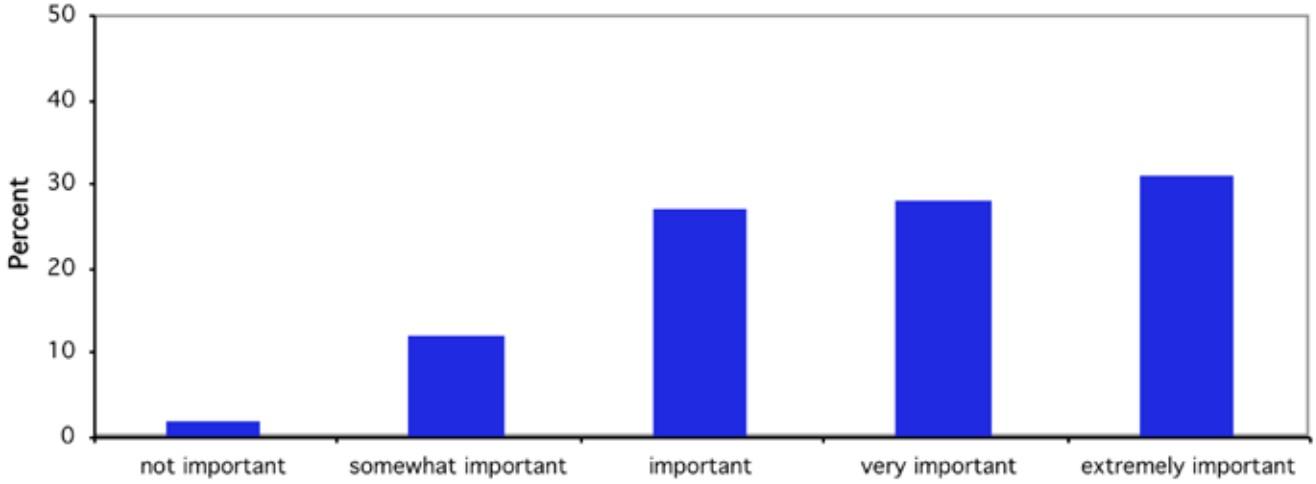


Fig. 5. How important is writing to helping you connect to the course and its materials?

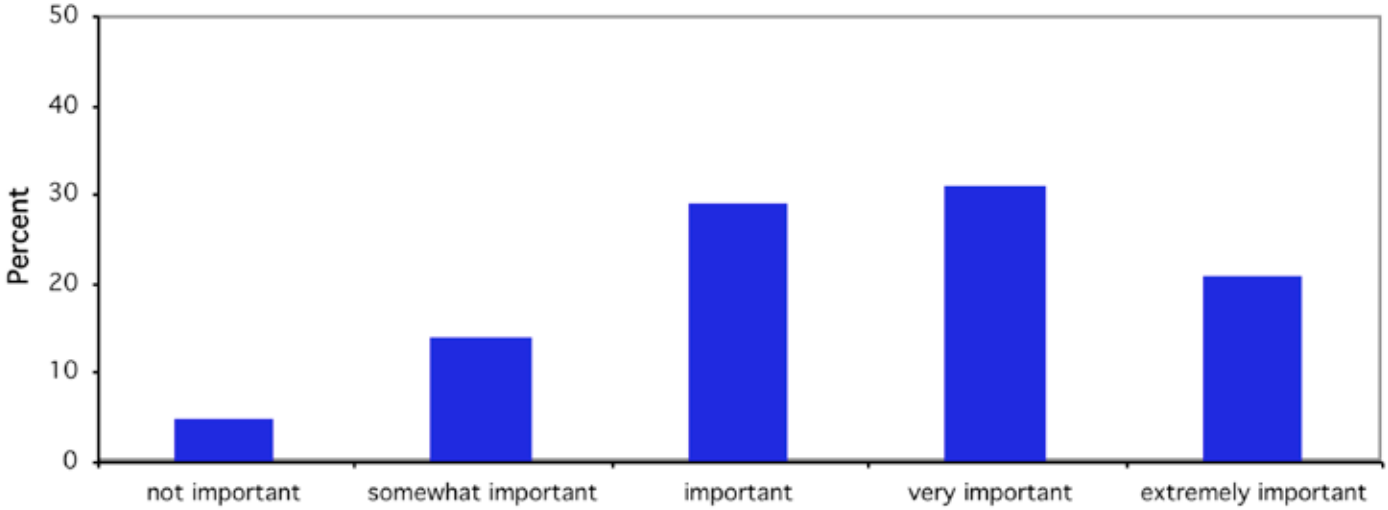


Fig. 6. How important is writing to helping you develop your own insights or opinions?

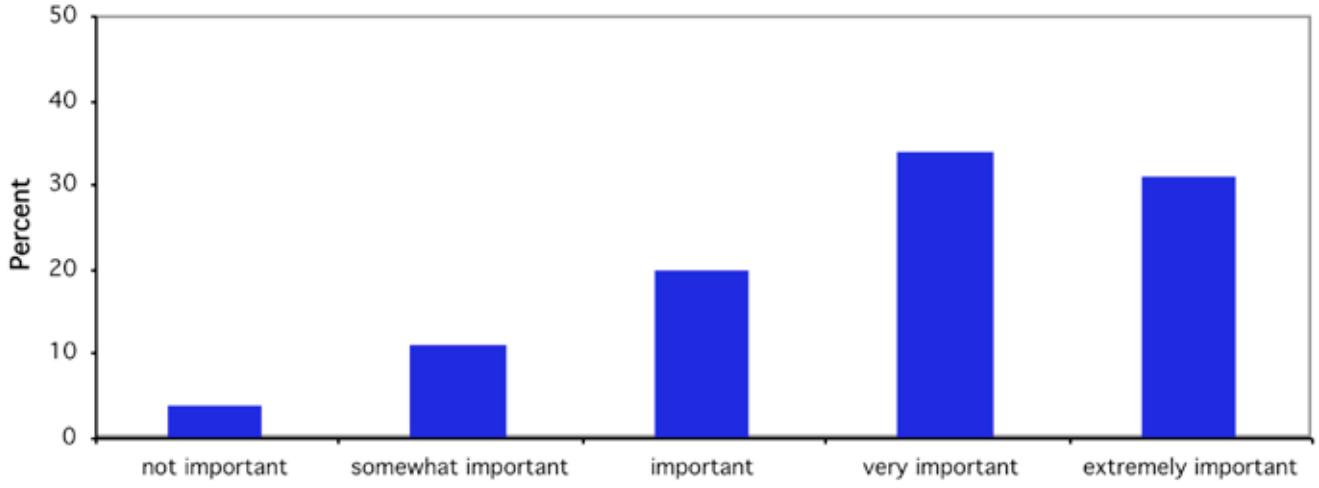


Fig. 7. How important is writing to helping you appreciate and understand new ideas?

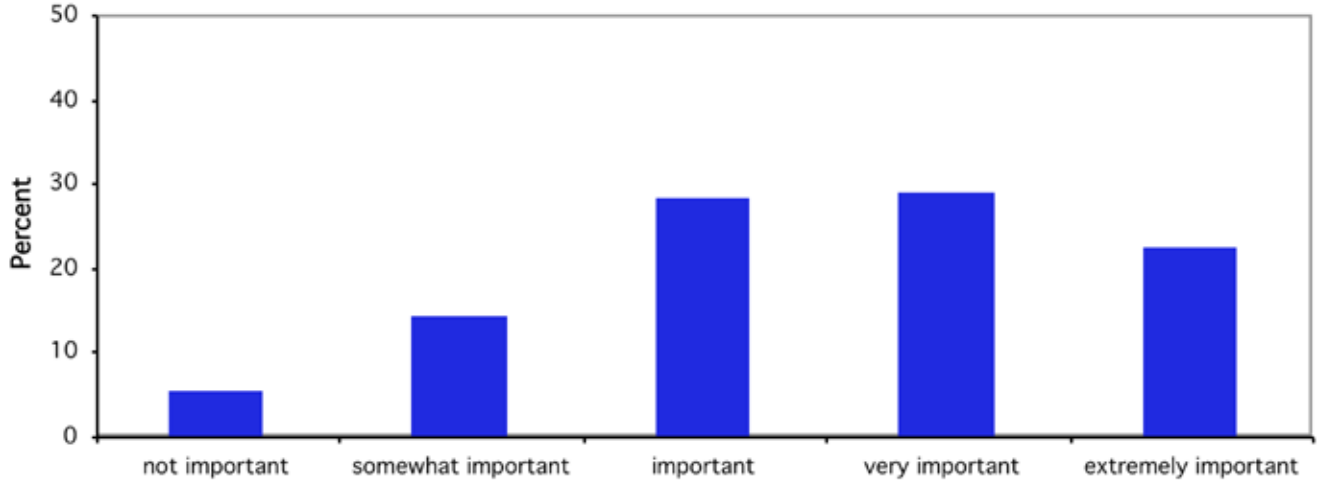


Fig. 8. How important has writing a long paper been to your educational experience at the University of Pittsburgh?

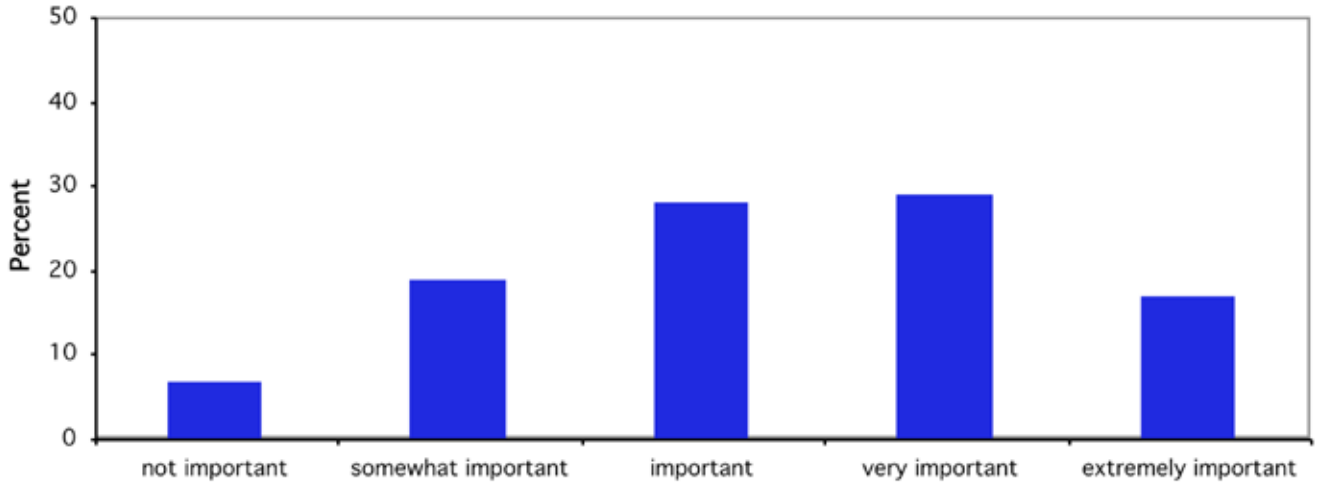


Fig. 9. How important has writing a short paper been to your educational experience at the University of Pittsburgh?

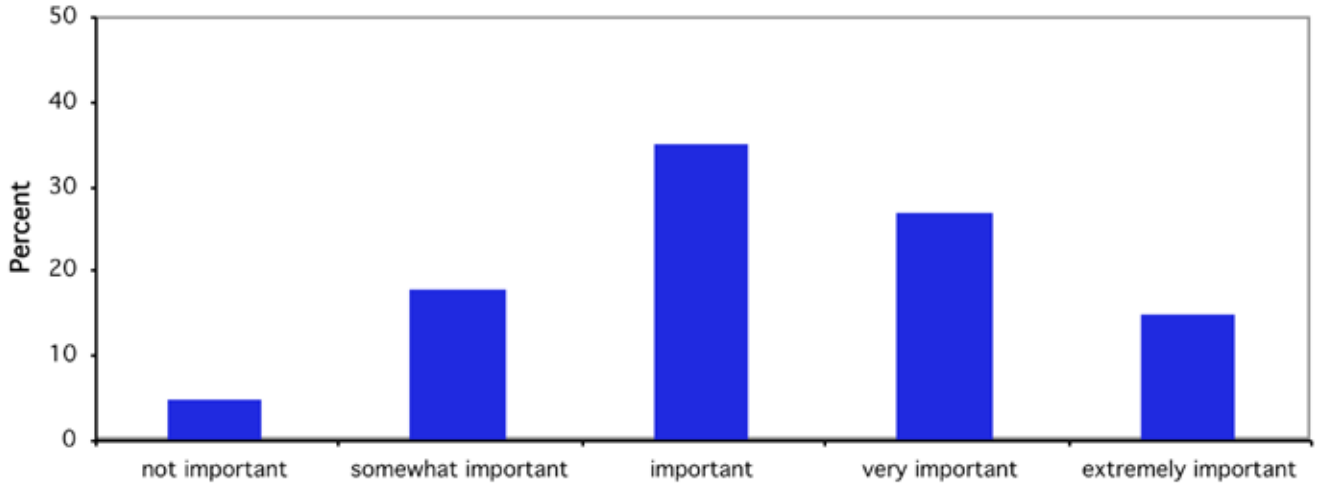


Fig. 10. How important do you think writing will be to your future profession or career?

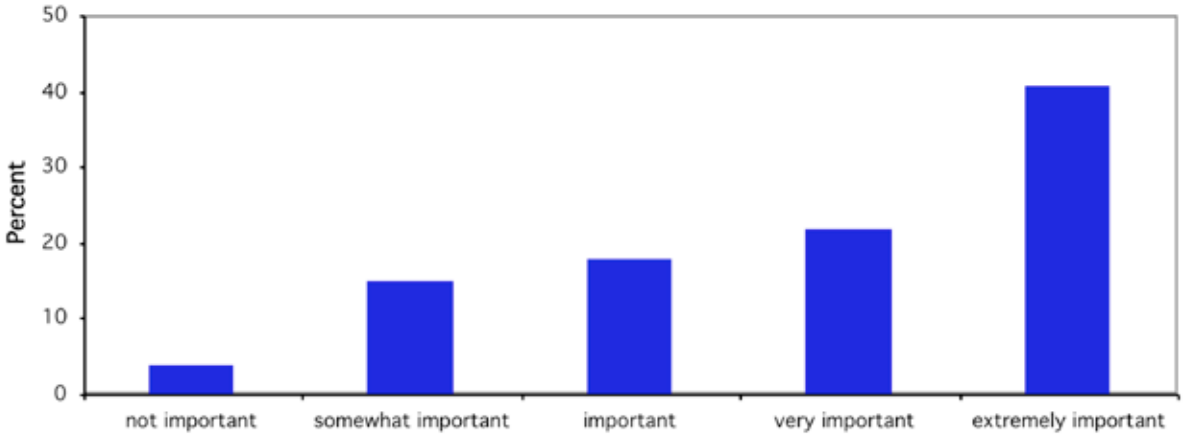
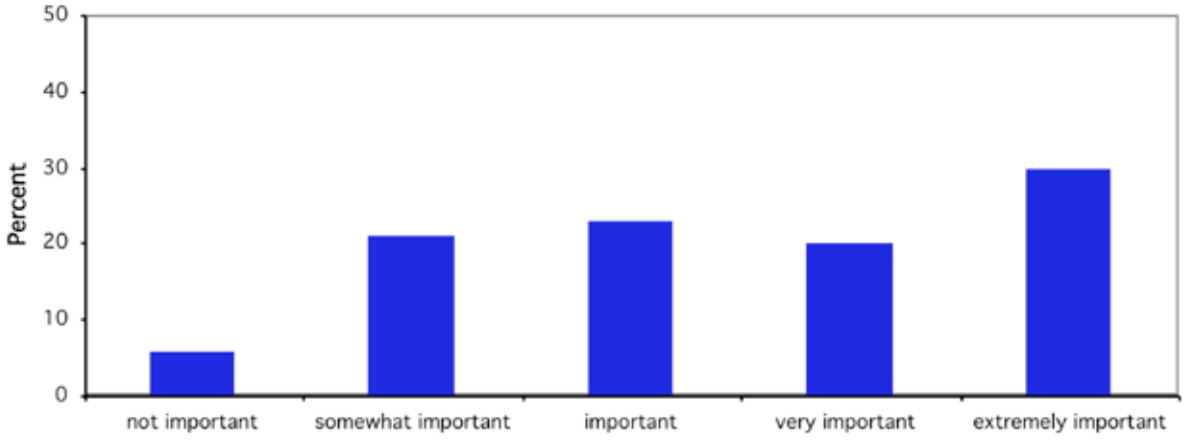


Fig. 11. How important do you think writing will be to your adult life beyond your profession or career?



Appendix 1 The Most Useful Course (with Number of References)

19th Century British Literature
Acting 3
Advanced Composition (3)
Advanced German Structures
Advanced Reporting
African American Poetry
African Americans and Mass Media (5)
African Politics and Globalization
Algebra
American Civil Region
American Culture (2)
American Foreign Policy (2)
American History (2)
American Literary Traditions
American Presidency
American Public Policy
Analysis of Political Variables
ANTH 1750
ANTH 1777
Approaches to Art History (3)
Arthurian Legend and Cultural Change
Asian Medical Systems
Aspects of Sociolinguistics
Autobiography and the Creative Impulse (2)
Basic Writing
Biological Sciences
Capstone Seminar
Chem Lab (2)
Childhood's Books (3)
Children and Culture (3)
Christians and Pagans in the Ancient World
Cold War
Colonial America – UPJ
COMMRC 1114
Communication
Comp 1 (7)
Comp 2 (7)
Comparative Government Seminar
Comparative Political Party Systems
Composition and Grammar
Composition and Political Theory Seminar

Computer Science 1501
Computer Science 1590 (3)
Concepts in Human Nature (2)
Constitutional Law
Creative Corporate Writing
Creative Nonfiction (2)
Creative Writing (4)
Critical Approaches to Children's Literature (5)
Critical Reading (2)
Critical Writing (3)
Detective Fiction
Developing the Feature Script
Developmental Biology Laboratory
Dramatic Imagination
East Asia's Dynamic Economies
Eastern European Politics
Ecology Lab Writing Practicum
ECON 1670
Enlightenment to Revolution (2)
Ethics
Film Analysis
Film Directors (2)
Forest Ecology (2)
General Chemistry – Honors
German Writing (2)
HA&A 1010
HIST 1001
History 1000
History of European Intellectuals
History of Literary Criticism
History of Mass Media (2)
History of Modern Philosophy
History of Rhetoric
History of Russian Film 1
History of the American Left
History of United States 1865 – present
History Seminar – Honors (3)
History Writing Seminar (4)
Hitchcock's Films
Human Physiology – Honors
Independent Study (3)

Appendix 1 The Most Useful Course (with Number of References) continued

Intensive Composition (2)
Intermediate Fiction (6)
Intermediate Fiction II
Interpersonal Communication (2)
Interpersonal Theories
Into to Art
Intro to Art Writing Practicum (2)
Intro to Asian Art Junior Seminar
Intro to Creative Nonfiction Writing (2)
Intro to Creative Writing (4)
Into to Critical Reading (13)
Intro to Differential Analysis
Intro to English Literature
Into to Ethics (2)
Intro to Existentialism
Intro to Fiction Writing (9)
Intro to Film Genres (2)
Intro to Hispanic Literature (2)
Intro to Journalism (9)
Intro to Literature (11)
Intro to Logic
Intro to Mathematic Education
Intro to Modern Art
Intro to Philosophical Problems (2)
Intro to Philosophy
Intro to Philosophy (2)
Into to Poetry (3)
Intro to Popular Culture
Intro to Renaissance
Intro to Research – Chem
Intro to Rhetorical Process
Intro to Shakespeare
Intro to Short Story
Intro to Social Philosophy Writing Practicum(2)
ITAL 0060
Italian Literature Composition
Japanese Culture and Society through Cinema
Japanese Writing class
Junior Seminar (10)

Kant
Lab courses
Legislative Process
Lit. and the Contemporary (7)
Lit. Tradition and the New (3)
Literature of the Americas (3)
Logic
Mass Communications
Media and Music
Media Crit
Media Relations
Medieval Imagination (2)
Medieval Russian
Men and Women in the Ancient Mediterranean
Microbiology Lab Writing Practicum (3)
Minds and Machines/Writing Practicum
Modern Art
Modern French Novel (3)
Modernist Period
Modernist Traditions
Morality and Medicine
Mythology in the Ancient World
Neuroscience Writing Practicum
Newspaper 1 (6)
Newspaper 2
Nietzsche
Nonfiction 1 (16)
Nonfiction 2 (12)
Old World Archaeology
Organic Chemistry 1 (4)
Organic Chemistry Lab
Peace Movements and Peace Education
Persuasive Writing in Advertising and Fundraising
PHIL 0440 (2)
Philosophy 0300
Philosophy and Liberal Democracy
Philosophy and Science
Philosophy of 20th Century Physics
Philosophy of Human Nature

Philosophy of Religion (2)
Physical Chemistry Lab 1
Poetry Workshop (4)
Polish Literature
Political Development
Political Parties and Elections
Political Philosophy (2)
Political Science 1261
Political Science 1341
Political Science Seminar
Political Theory and Analysis
Population and Culture
PS USSR & RUSS FED
Psychology – Directed Research
Public Policy Analysis (2)
Public Speaking (3)
Race and Caste in the World Perspective
Reading in Nonfiction
Reading Poetry (4)
Readings in Contemporary Fiction
Readings in Contemporary Nonfiction (2)
Regression Analysis
Research Methods (22)
Research Writing (9)
Rhetoric and Culture (7)
Rhetoric and Human Rights (3)
Rhetorical Criticism (2)
Rhetorical Processes (3)
Russian Film 1
Science Fiction
Screenwriting and Narrative
Seminar for History Majors
Seminar in Composition (91)
Senior Seminar – Nonfiction (4)
Senior Seminar (12)
Senior Seminar in Fiction (2)
Senior Seminar in Poetry
Short Story in Context (8)
Slavery/Anti-Slavery – Honors

Social Foundations of Education
Social Implications to Computing Technology
Social Philosophy
Social Theory (2)
Socialism v. Capitalism
Sociolinguistics
Sociology Demography Research Practicum
Span 1404
Spanish Advanced Composition and Stylistics
Spanish Grammar and Composition
Spanish Senior Capstone Seminar
Special Topics in Communication (6)
Special Topics in Culture Anthropology (2)
Special Topics in Nonfiction Senior Seminar
Special Topics: Civil Rights Movement
Sports Writing (2)
Strategic Management
Structure and Function of Molecular Mechanisms
Survey of Latin American Literature
Television Analysis
Television and Society
The American Short Story
The Art of the Column
The Modernist Tradition
The Newspaper Column
The Roaring Twenties (3)
The Writer's Journal (5)
Theatre Criticism (3)
Theories of Interpersonal Relationships
Theories of Rhetoric
Topics in Nonfiction: Magazine Writing
Topics in Systematic Philosophy
Tutoring Peer Writers
TV and Society
Twentieth Century Russian Literature
UHC Western Civilization
Undergraduate Seminar in Anthropology and Archaeology of War and Violence
Urban Anthropology

Appendix 1 The Most Useful Course (with Number of References) continued

Urban Ethnography
Urban Studies 1500
US History since 1945
Uses of Literacy (5)
Western North American Archaeology
Women and Literature (6)
Women and Society (3)
Women's Studies
Women's Writing and Feminist Theory
WOMNST 0030
World Literature in English (3)
Writing Biological Sciences
Writing Composition
Writing Composition – Film (2)
Writing for the Public (3)
Writing Health and Illness
Writing in the Biological Sciences (3)
Writing in the Legal Professions (2)
Writing Intensive
Writing Practicum
Writing Seminar in History
Writing the Review
Written French I and II
Written Professional Communication (17)

Appendix 2: Faculty Who Have Made a Difference, Organized by Departments (with Number of References)

Africana Studies	Berrian, Brenda
Anthropology	Allen, Kathleen (2)
Anthropology	Hanks, Brian (3)
Anthropology	Plotnicov, Leonard (6)
Biology	Brodsky, Jeff
Biology	Carson, Walt (2)
Biology	Curto
Biology	Daniels, Lydia (3)
Biology	Gilbert, Susan
Biology	Jacobson, Linda
Biology	Newman (2)
Biology	Popa, Melanie (4)
Biology	Tress – Titusville (Biology)
Carlow	Aiken, William – Carlow
Chemistry	Cohen, Theodore
Chemistry	Huston, Erika
Chemistry	Pierce, Josh
Classics	Miller, Andrew
Classics	Possanza, Mark
Communications	Baker, Jody (3)
Communications	Bannon, Mickey
Communications	Bayer, Trudy
Communications	Crick, Nathan
Communications	Egolf
Communications	Fusfield, William
Communications	Gale, Deborah Dysart
Communications	Gareis (5)
Communications	Gerideau, Vanessa
Communications	Krips, Henry
Communications	Means-Coleman, Robin (5)
Communications	Olsen, Lester (4)
Communications	Porrovecchio, Mark (2)
Communications	Poulakos, John
Communications	Renschler, Carrie (2)
Communications	Shuster, Gerald (2)
Communications	Simonson, Peter
Communications	Skupien, Janet (2)
Communications	Sterne, Jonathan
Communications	Zboray, Ronald (2)

Computer Science	Addleman, Bob
Computer Science	Aronis, John
Computer Science	Bigrig, Michael
Economics	Rawski
English	Adiele, Faith (11)
English	Anastasiou, Eleni
English	Andrade, Susan
English	Angell, Kate (2)
English	Aspell, Thomas (3)
English	Aziz, Jeff
English	Baker, Laurene (5)
English	Bartholomae, Dave (3)
English	Basu, Manisha
English	Bates, Sara (2)
English	Bauman, Emily
English	Beatty, Jan (3)
English	Best, Mark (3)
English	Boettcher, Chris (2)
English	Boone, Troy (8)
English	Borden, Amy (2)
English	Bowers, Keely (4)
English	Bradley-Steck, Tara (2)
English	Brumble, David
English	Butler, Michelle
English	Byers, Michael (6)
English	Camp, Rebecca
English	Campbell, Lori (4)
English	Carlisle, PJ (2)
English	Carr, Jean
English	Carr, Stephen (5)
English	Cheong, Fiona
English	Conkle, Brittany
English	Conte, Andrew
English	Cook, Amy
English	Cruz, Conchitina
English	Curran, Ron
English	Demo, Susan
English	Derricotte, Toi
English	Dickie, Jennifer

Appendix 2: Faculty Who Have Made a Difference, Organized by Departments (with Number of References) continued

English	Dobler, Bruce (6)
English	Erbe, Arthur (2)
English	Feuer, Jane
English	Fine, Steve
English	Flannery, Kathryn
English	Flecker, Sally Ann (2)
English	French, Kevin (3)
English	Fuoco, Mike
English	Gargo, Matt
English	Gerber, Ellen (3)
English	Giles, Jack
English	Gillespie, Peter (3)
English	Glascott, Brenda
English	Glazener, Nancy
English	Grace, Jean (5)
English	Gramm, Marylou (2)
English	Grimes, Prudy
English	Gubar, Marah (4)
English	Gutkind, Lee (5)
English	Hawhee, Debra
English	Johns, Adam
English	Johnson
English	Kafka, Janet (5)
English	Kameen, Paul
English	Kearney, Joshua
English	Kinder, Chuck
English	Kirchner, Bill (2)
English	Kloman, Harry (2)
English	Kothari, Geeta (3)
English	Kozusko, Andrew
English	Krips, Valerie (2)
English	Kurlander, Carl (6)
English	Lee, Jennifer (7)
English	Leo, Peter (3)
English	Lockhart, Tara
English	London, Sara
English	Lowenstein, Adam (2)
English	Luckett, Moya
English	Majumdar, Neepa

English	Martin, Tim, (3)
English	Matway, Beth (3)
English	McDermott, Sharon (3)
English	Mellix, Barbara (3)
English	Mundari, Ingrid (2)
English	Murray, Amy (2)
English	Newborg, Beth
English	Nordan, Buddy
English	Oaks, Jeff (5)
English	O'Brien, Pam (7)
English	Orbach, Linda
English	Paff, Wendy
English	Pannell, Jessica (2)
English	Parascenzo, Marino
English	Parent, Richard
English	Pentin, Liz
English	Petesch, Donald
English	Petrosky, Anthony
English	Pugliano, Fiore
English	Puri, Shalini (2)
English	Quinn, Sally
English	Rawson, Chris (2)
English	Rehm, Maggie (2)
English	Robertson, Kellie (2)
English	Rubinkowski, Leslie (7)
English	Saffron, Jennifer
English	Satyavolu, Uma (3)
English	Searle, William
English	Smith, Ellen (2)
English	Smith, Philip (4)
English	Smith, Susan (2)
English	Stahr, Margaret (2)
English	Tarr, Kathy (3)
English	Thompson, Heather (2)
English	Tobias, Richard (2)
English	Trainor, Jennifer (2)
English	Trale, Marianne
English	Tumino, Stephen
English	Twyning, John

English	Ulanowicz, Anastasia (2)
English	Valerie Krips
English	Waite, Stacey (2)
English	Walton, David (3)
English	Wei-Lee, Lin
English	West, Michael (4)
English	Whatley, Jennifer
English	Whitney, Brenda
English	Wild, Daniel
English	Williams, Lois (2)
English	Wollenberg, Daniel
English	Writing Center (7)
French & Italian	Looney
French & Italian	Meriz, Dianna
French & Italian	Russell, Daniel
German	Harris, Beverly
German	Lyon, John
GSPH	Terry, Martha Ann
HA&A	Churchill, Derek
HA&A	Harris, Ann Sutherland
HA&A	Huebner, Karla
HA&A	Landsdown, Sara
HA&A	Neal, Kenneth J.
HA&A	Wilkins, David
Hispanic	Aldana, Ligia (2)
Hispanic	Branche, Jerome
Hispanic	Martinez, Luciano
Hispanic	Williams, Sarah (4)
History	Davin, Eric
History	Drescher
History	Galpern
History	Greenwald, Maurine
History	Hagerty (3)
History	Hammond, Leslie (2)
History	Harris
History	Karapinka, Orysia
History	Muller, Edward
History	Novosel, Tony
History	Rediker

History	Ruck, Robert (2)
History	Tsoukas, Liann (4)
History	Van Beck Hall
History	Weis, Anne
Honor's College	Herb
HPS	Reutsche, Laura
Jewish Studies	Brodsky, David
Linguistics	Gooden, Shelome
Neuroscience	Miller, Penelope
Organic Chemistry	Hensler, Mike
Organic Chemistry	Kotchey, Gregg
Philosophy	Criley, Mark
Philosophy	Cunningham, Arthur
Philosophy	Gale, Richard (2)
Philosophy	Gupta, Anil
Philosophy	Heis, Jeremy
Philosophy	McDowell, John
Philosophy	Slyar, Jamsheed
Philosophy	Wilson, Herb (3)
Physics	Koehler, Peter
Political Science	Barker, David
Political Science	Bonneau, Chris (2)
Political Science	Donaldson, Robert (2)
Political Science	Goodhart, Michael (2)
Political Science	Halpern
Political Science	Harris, Jonathan
Political Science	Linden, Ron (2)
Political Science	Michael, Goodhart
Political Science	Owen, Raymond
Psychology	Klein, Bill
Psychology	Kucinski, Barbara
Psychology	Shuker-Williams, Kim
Psychology	von Stauffenberg, Camilla
RS	Denova, Rebecca
Russian	Donnorummo, Bob
Slavic Languages	Padunov, Vladimir
Slavic Languages	Seckler, Dawn
Slavic Languages	Swan, Oscar (2)
Sociology	Brush, Lisa

Appendix 2: Faculty Who Have Made a Difference, Organized by Departments (with Number of References) continued

Sociology	Lovell, Peggy
Sociology	Luther, Jim
Theatre Arts	Coleman, W. Stephen
Theatre Arts	Dryer-Lude, Melanie (2)
Theatre Arts	Mertz, Doug
Theatre Arts	Rosenstein, Anna (2)
unknown	Bullio, Jen
unknown	Jacob, Anjana
unknown	Lotz, Andrew
unknown	Strohm, J. Elizabeth
unknown	Taylor, Michelle Scott
UPG	Heimel, Elaine
UPG	Manning
UPG	McDevitt
UPG	Murabito, Steve
UPG	Vollmer, Judith
UPJ	Wood, Leeland
Women's Studies	Crawford, Alice
Women's Studies	Huebner, Lisa (3)

Appendix 3: Student Responses: "What can we learn from your experience with this person in class?"

1. …he helped me add flow to my sentences, tying together my paragraphs, and ultimately creating a 'tight' paper.

2. …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.

3. …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.

4. Dr. Reutsche focused on creating and supporting sound arguments and provided excellent feedback on papers. Dr. Palmieri focused on stylistic aspects, such as condensing paragraphs and refining sentences for greater impact and clarity.

5. Excellent feedback, and he was always willing to discuss writing with me.

6. Expectations of all writing assignments were clarified. Intensive feedback if sought would be accommodated.

7. He expected so much from his whole class, and had a great way of giving his students feedback.

8. 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.

9. 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.

10. 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.

11. He helped me to learn how to develop and argue a thesis instead of just presenting information in a paper.

12. 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.

13. He is always critical yet encouraging in terms of developing my writing style

14. 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.

15. 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.

16. He provided positive criticism along with constructive criticism.

17. 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…

18. 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.

19. 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.

20. Helped students in the class learn to be more precise in our writing.

21. High demands for quality of work.

22. 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.

23. 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.

Appendix 3: Student Responses: "What can we learn from your experience with this person in class?" (continued)

24. 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 Conchitina Cruz helped me to understand my potential.

25. 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.

26. I have always been a strong writer, but Dr. Poulakos 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.

27. 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.

28. In her Junior Seminar course, Valerie exposed us to a lot of theory we were unfamiliar with and showed us how it applied to our writing about literature.

29. Introduced me to advanced analytical writing and primary resource writing. Also stressed proof reading.

30. It is of the utmost importance to organize your thoughts when you write. Gupta 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.

31. Learned to revise, to clean up my grammatical errors and "spot" good writing. Very honest, direct and monumentally helpful.

32. 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).

33. 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. Means-Coleman 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.

34. 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 Amy Murray.

35. 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.

36. She has helped me write better as a researcher in doing the papers for Research Methods class.

37. 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.

38. 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.

39. She is an extremely engaging and focused instructor, teaches students to write analytically in a professional academic manner.

40. 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.

41. She provides helpful ways to improve your writing and sets up conferences to discuss your writing with you on a one on one basis.

42. 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.

43. 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.

44. 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.

45. 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.

46. 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.

47. 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.

48. 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.

49. She was extremely patient and helpful, her class was structured help us be more critical readers and more professional writers.

50. 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.

51. 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.

52. 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.

53. 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.

54. 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.

55. 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.

56. 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.

57. Walt focuses on making students write in a professional yet interesting and straight forward manner which is essential for a career in science.

Appendix 4: Student Response: "What else would you like to tell us about your experience with writing at the University of Pittsburgh?"

1. 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.

2. I found the importance of writing in communication, research and work at Pitt. Since writing paper takes big effort and energy from me, it is a little painful. However, I feel good anyway after I get it done

3. I have always been a talented writer, and in an attempt to avoid vanity, I'll say that the University of Pittsburgh has helped me mature as a writer and develop my skills as a writer of many topics. As a Microbiology major, I'm often expected to write scientific papers which differ greatly from essays and other prose required in the EngLit/EngCmp classes, but I appreciate the opportunity to develop myself as a writer in each of those areas.

4. I have found amazing resources at the University of Pittsburgh, I wish that more classes were structured around take home exams, I have always found I learn much more in those discussion/seminar based classes.

5. I have written more in one credit chemistry or biology lab, 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.

6. 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.

7. 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.

8. 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.

9. I think term papers are a better reflection of learned knowledge than an exam.

10. 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.

11. I think that writing has been a very significant part of my college experience at the university. However, I am afraid that it was the only measure of learning in many classes. This could make things difficult on those with a grasp on the subject but who are not strong writers.

12. I think the questions were great and I believe the University of Pittsburgh does a great job with its writing criteria for both general ed and majors.

13. 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.

14. 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 thoughts 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.

15. I was exempt from GW 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 GW, but everyone I know who has taken it insists it was not helpful to them…

16. 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

Appendix 4: Student Response: "What else would you like to tell us about your experience with writing at the University of Pittsburgh?" (continued)

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.

17. I would like to say that this university has very strong standards in terms of writing for all students to meet.

18. 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.

19. 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.

20. In my W course, we barely wrote.

21. 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.

22. I've done more writing in my chemistry labs than I ever did in the writing intensive classes I've taken.

23. 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 in to smaller chunks that are more easily remember. Research takes less time and more time can be spent on modifying and working on actually 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 real have time to think and organize their thoughts before handing something in.

24. 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.

25. Most of the History department professors have been instrumental in shaping my writing style, writing focus, and analytical skills. These three course elements have given me, what I believe, is an edge in the methodology of writing and the examination of the writing of others.

26. My academic writing has greatly improved during my education at Pitt. I hope to pursue an academic career in the field of anthropology, including the publication of professional journal articles, fieldwork reports, and books. My honors thesis has been most helpful in preparing me for future professional academic writing.

27. 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.

28. My experience with writing at Pitt has been positive, and has helped me to improve my writing.

29. My writing at the University of Pittsburgh has been a good experience but I have really come to detest in-class essay exams. There is never enough time to say every thing you want to say.

30. 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.

31. Overall it has been very positive. I have written many papers from lab reports to research papers. I have learned how to actively express my ideas effectively and in a way that makes sense.

32. Overall I've found lab reports to be completely useless regarding my development as a writer as the TA's who grade them are concerned only with the science involved and I generally have better English grammar than they do.

33. 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.

34. 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.

35. 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.

36. 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.

37. 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.

38. The difference in the expectations of the quality of writing in classes offered by the English Department and other areas is somewhat alarming. When there is writing required in classes offered by other departments there is a remarkable lack of concern for things like grammar, punctuation, and general writing style.

39. 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.

40. The GW courses destroy 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 GW course.

41. The university has faculty that are very willing to encourage students and take the time to offer thoughts and expectations for future careers and life beyond graduation.

42. The Writing Center is a wonderful idea and has greatly helped my performance as a writer.

43. The Writing Center is a wonderful place to go to access help with writing. A lot of students do not take advantage of the center but it is definitely something that all writers should consider. Many students are shy about asking for help outside of professors office hours but it pays off to run ideas and questions by with someone else and to get others' opinions.

44. There hasn't been much room for creative writing for me to pursue at Pitt. Don't let writing be too mechanical.

45. There is almost too much writing at the university. Almost every class is like a writing class at another university.

46. There should be more training in science writing at Pitt.

47. 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.

48. Working at the Pitt News has been the single greatest lesson in writing that I have, or believe I could have, received.

49. Writing is essential, especially for science majors. There should be more writing, and more classes should fulfill the "W" requirement.

50. 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.

51. Writing has been a very small part of my Pitt experience. I consider myself a very good writer – some

Appendix 4: Student Response: "What else would you like to tell us about your experience with writing at the University of Pittsburgh?" (continued)

of my skills I have gained at Pitt, but most of them in high school. I definitely haven't had to write as much as I thought I would in college.

52. Writing has been an integral part of my education here, primarily because it is an integral part of both of my majors (writing and lit). But I feel like I have been prepared and challenged well in terms of writing throughout my education.

53. 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 CBA program seems to avoid individual writing projects, instead favoring quantitative testing and group projects/presentations. While this helps with learning presentation style, I feel that it is a severe detriment that the introduction-level survey courses do not have a writing component.

54. 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.

55. Writing is important, but some of the low level gen. ed classes put too much on structure and grammar, rather than seeking main ideas.

56. Writing is not emphasized in a statistics major, thus I have only taken two 'writing' courses in my time here.

57. Writing is very important, but I don't think students should have to take a writing course, above general writing, that does not pertain to their major. IT was a waste of time, in my experience.

58. Writing papers is usually an important part of grades in classes. That isn't always fair because some people such as myself will never be able to improve their writing skills no matter how hard I try. Papers will always bring my grades down.

59. You should ask if we think long papers due at the end of the semester are useful (they aren't!!!)

60. … 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.

61. … one of the things that made me come to Pitt was the emphasis on writing.

62. 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.

63. Classes which weren't specifically labeled as "writing" classes were the most useful.

64. Courses in every department are different, it's difficult to make generalizations. Sometimes teachers are misinformed and think their classes count for a W (I know this because as they review the syllabus they point out that "this is a W course so we'll be doing a lot of writing," yet it isn't), and they assigned lots of busy work papers that I do not feel contributed to my understanding of the course, and could just have easily been left out.

65. Have smaller writing classes to allow more 1 on 1 interactions and feedback between professor and student. I had to go out of my way to have criticism on papers explained.

66. Having taken advanced writing/English courses throughout high school I was expecting college to be much more difficult. Upon my arrival, I was shocked to discover that a long paper is 5 pages double spaced. I had been writing 15-25 pages since grade school. I acknowledge that advanced courses dive deeper than main stream ones, but I still find it discouraging that the professors have such low expectations. I am a senior and in the W course that I am currently taking (with other upper classmen) the professor had to chart out sentence

structures. If you are a junior or senior in college, you should know this before the class as to not waste other's time.

67. 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.

68. 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.

69. I believe that writing is a fundamental skill, and this University has provided me with more than enough practice.

70. 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.

71. I do not like having TA's grading writing assignments. I think that they are often too tough as well as extend biases because they are new at their job and don't act with the same professionalism.

72. I feel some professors just used it for extra points and it wasn't very pertinent to what we were learning.

73. 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.

74. I feel that there are some classes where they focus too much on writing but the class is not a W class. For someone like me, writing is not my strong suit, this is a major disadvantage to them.