

# **Department of Technical Communication**

## **Self-Study for 10-Year Review**

**October 6, 2006**

Section A: General Self Evaluation .....	3
A1: Introduction—Strengths and Accomplishments .....	3
A2: Measures of Success .....	12
A3: Weaknesses .....	13
A4: Changes in Teaching, Research, and Service .....	17
A5: Expectations .....	23
A6: Faculty Involvement .....	24
A7: Mentoring junior faculty and students .....	25
Section B: Teaching .....	26
B1: Teaching loads .....	26
B2: Allocation of teaching responsibilities .....	27
B3: Faculty involvement outside of teaching with undergraduates .....	28
B4: Undergraduate involvement in research and scholarship .....	28
B5: Evaluation .....	29
B6: Summary of collected data .....	29
B7: Procedures to improve undergraduate teaching and learning .....	30
B8: Tracking and promoting innovation .....	31
Section C: Research and Productivity .....	32
C1: Balance of individual and departmental needs .....	32
C2: Mentoring of junior faculty members .....	34
C3: Impact of Research .....	34
C4: Influences on research, scholarship, and creative activity .....	35
C5: Faculty heterogeneity .....	36
C6: Impediments to Productivity .....	38
C7: Encouragement and preservation of staff .....	39
Section D: Relationships with other units .....	41
Section E: Diversity .....	45
E1: Inclusion of Underrepresented groups: student, faculty, and staff .....	46
E2: Comparing underrepresented faculty groups to others .....	48
E3: Recruitment and retention of underrepresented groups .....	49
E4: Involvement with GO-MAP and OMA .....	51
E5: Influence of diversity .....	52
Section F: Description of Programs .....	52
F1: Doctoral program .....	52
F2: Master’s degrees .....	57
F3: Bachelor’s degree .....	59
Section G: Graduate Students .....	62
G1: Recruitment and retention .....	62
G2: Advising, Mentoring, and Professional Development .....	63
G3: Graduate Students Inclusion in Governance and Decision-making .....	66
G4: Graduate Service Appointments .....	67

## ***Section A: General Self Evaluation***

Our general self-evaluation opens with an introduction that summarizes our strengths and accomplishments, followed by a discussion of the ways that we measure the success of the unit; weaknesses we suffer; changes in teaching, research, and service that we have experienced; expectations of others about our unit; faculty involvement in governance of the unit; and the mentoring of junior faculty and students.

### **A1: Introduction—Strengths and Accomplishments**

The Department of Technical Communication (TC), one of ten units in the UW College of Engineering, offers courses in two broad (and somewhat overlapping) areas: *communication design* (for instance, the design of Web sites or software user assistance) and *human-computer interaction/usability* (for instance, the study of technology adoption patterns or usability research methods). We offer degree programs at the undergraduate, master's, and doctoral level.

As a department, we have strengths that grow out of our unit's culture:

- We are *innovative* and *entrepreneurial*; we constantly look for appropriate opportunities to improve or expand our programs
- We are *interdisciplinary*; we collaborate successfully with partners across UW, at other universities, and in the professional community
- We cultivate *close, long-term relationships* with our students, alumni, academic partners, and corporate/organizational supporters
- We take *leadership roles* in our rapidly evolving field

We also have disciplinary strengths that differentiate us in our field:

- We are *leaders in research productivity* and the engagement of students at all levels in the practice of hands-on *empirical research*
- We have a strong *international perspective*, anchored by a long-term educational and research relationship with the best TC program outside the USA (Department of Technical Communication at the University of Twente, The Netherlands), a program that shares our empirical-research orientation

TC as a department has been recognized as excellent: in 2000, the overall program received UW's Brotman Award for instructional excellence, and in 2004, the department's Engineering Communication Program received a Certificate of Excellence from the College Conference on Composition and Communication (the "4Cs")—one of only eleven awarded internationally that year. Our faculty and students have also received numerous individual awards and recognitions of excellence (see Appendix M).

The following overview of the department and its strengths first summarizes the department's recent accomplishments and improvements and then provides an overview of activities within the department.

### **Recent Accomplishments and Improvements in TC**

Over the last ten years, TC has made critical progress in two key areas:

- Creation of the PhD program
- Strategic growth: research productivity, donor support, diversity of funding

#### ***Creation of the PhD Program***

Well over a decade ago, TC identified the creation of a PhD program as critical to our continuing excellence. The growth of technical-communication doctoral programs has reflected the rapid growth of the field. In 1979, there was a single doctoral program (at RPI); in 1992, there were thirteen such programs; in 1998, twenty; and now in 2006, thirty-eight. Clearly, if TC was to remain at the forefront of the field intellectually and attract the best students, we needed to offer a doctoral program. After several earlier attempts did not succeed, in 2002 we won approval of a TC PhD program and in academic year '02-'03 admitted our first class; our first graduates plan to finish in Spring 2007. Our doctoral program is distinguished from others in the

field by its emphasis on empirical research and design; most other TC doctoral programs place their primary emphasis on the study of rhetorical theory.

***Strategic Growth***

In a decade of relentless budget cuts at UW, we have made major progress in growing strategically through increases in research grants and gifts and self-sustaining funding:

<i>99-00 budget: \$1.661M</i>	<i>05-06 budget: \$2.504M</i>
9% external self-sustaining	18% external self-sustaining
27% grants (expenditures), gifts	36% grants (expenditures), gifts
4% local funds	4% local funds
60% state funding	42% state funding

*Growth in Research Productivity*

Thanks in part to very successful recent faculty hires and in part to growing research activity across the faculty as a whole, we have succeeded in increasing both the percentage of faculty engaged in research and the dollar amounts of funded research awards (see Appendix B, Budget Summary). Within our broad disciplinary areas of communication design and HCI/usability, we have a range of funded projects currently under way: studies of the adoption of technologies in the developing world, the educational potential of computer games, the development of humanitarian relief systems, workflow analysis for use in the design of a public health information system, strategies for teaching design skills, web-based experiment administration, the usability of a user interface for a health-care informational web site, and more.

We have also created a credit-based mechanism (TC496/596, Directed Research) for engaging students in the hands-on practice of research and in the sharing of their results by

means of talks, poster presentations, and published papers. The more successful projects can then provide the basis for seeking research funding to continue the work. In addition to contributing greatly to our research productivity, we believe this active-learning approach encourages our students at all levels to mature into active, ongoing participants in the thought leadership of the field<sup>i</sup>.

### *Growth in Donor Support*

Starting from zero in 1997, we have built up an endowment of about \$500,000. This achievement is especially important given that TC is a relatively young department with only a very small number of alumni who have a significant capacity for giving. We continue to look for ways to expand this base (cultivating gifts from friends outside of our alumni, etc.). The proceeds of this endowment allow us to provide many amenities for students that we could not otherwise afford; for instance, when a student has a poster or paper accepted at a conference, we help defray the travel costs for the student to attend the conference. We have been able to meet every request from students for this purpose and typically make between fifteen and twenty student travel awards per year (see Appendix Jb, Conferences Attended by UWTC Students).

### *Growth in the Diversity of Funding Sources*

The budget cuts that UW has experienced over the last decade have had a disproportionate effect on smaller units like TC. Our strategy for meeting this challenge has been to develop non-state revenue sources, most significantly our two newer self-sustaining programs: the evening master's program (launched in 2000) and the graduate-level user-centered design certificate program (launched in 2002). In addition, we continue to offer the undergraduate-level certificate program in technical writing and editing (created in 1987). These programs serve an intellectual

need in the community and generate revenues that support a tenure-track faculty line as well as a significant portion of our staff lines. In addition, we have been very successful at winning competitive computing funds in the Student Technology Fee (STF) proposal process and at tapping other “local” (UW-internal) funding sources. Together with the growth in research funding and gifts, this diversification of our revenue sources has reduced the state share of our overall budget from 60% in 1999-2000 to 42% as of last year and enabled us to maintain first-class labs and other resources for students.

### **Overview of Departmental Activities**

The following overview of TC departmental activities summarizes our strengths in undergraduate and graduate education, continuing education, research and scholarly activity, and service. One of our strengths is the integrated nature of our community; we strive to include *all* of our students (undergraduates, graduate students, and students in our fee-based certificate programs) in as many of our activities as possible. For that reason, program descriptions include some overlapping information.

#### ***Undergraduate Education***

In our undergraduate program (launched in 1974), we have made numerous improvements over the last several years:

- We have revamped our curriculum and set out clear learning objectives for the overall program and each course in it.
- We have converted our senior study course into a portfolio creation project that enables our undergraduates to consolidate their understanding of what their course of study has taught them and what it equips them to do.
- We have created TC496/596, Directed Research (mentioned above), to give our undergraduates hands-on research experience and the opportunity to be co-authors with graduate students and faculty on posters, conference presentations, and even archival articles.

We require internships of our undergraduates so that they have a guided introduction to the work world. Our success with the STF enables us to offer our students state of the art computing equipment and a first-class usability lab supported by a research assistant. Our students go on to get excellent jobs, primarily in the high-tech industry.

Also at the (mostly) undergraduate level, under the direction of lecturer Karen Kasonic, we offer a large Engineering Communication Program that includes beginning and advanced technical writing classes for engineering students (serving well over 1,000 students per year), a writing center that serves both the College of Engineering and the Information School, and a graduate course in writing for publication, as well as programmatic services to the departments and College (departmental writing assessments, ABET accreditation support, etc.). This program won one of only eleven Certificates of Excellence awarded in 2004 by the College Conference on Composition and Communication (see Appendix O, Application for CCCC Writing Program Certificate of Excellence).

### ***Graduate Education***

At the graduate level, we offer both an MSTC degree (first created in 1986; evening format added in 2000) and a PhD degree (created in 2002).

The MSTC is offered through both a state-supported day program (about 20 students) and a fee-based evening program (about 30 students); the requirements and coursework are essentially the same for the two offerings. Our master's students in both programs take active roles in our research projects and either go on to doctoral education (a small percentage) or take excellent jobs in the professional community.

The PhD program now has 14 students enrolled and will produce its first graduates in Spring 2007. Implementing the doctoral program (still a work in progress) continues to challenge and



excite us; it has driven the greatest cultural change in the department's history. About half of the students intend to seek academic positions, and the rest, industry employment in research positions. We continue to fine-tune the mechanics of the program and to cultivate an appropriate set of professional opportunities for these students. We have just created two PhD Teaching Fellowships to provide a well-rationalized sequence of teaching experiences for those interested in academic positions. We also want to provide appropriate industry experience; this past summer, three (25%) of our doctoral students had internships at Microsoft.

All of the students in our doctoral program have been active as presenters at conferences and authors or co-authors of conference and journal papers. In fact, we believe (based on a scan of the major conferences and journals in our field) that our program has produced more doctoral student publications of empirical research than any other TC doctoral program in the same period. This empirical-research productivity is the strongest distinguishing characteristic of our program.

### ***Continuing Education***

TC has two highly regarded continuing-education certificate programs: the graduate-level certificate in user-centered design and usability and the undergraduate-level certificate in technical writing and editing.

The certificate in user-centered design and usability (created in 2002) is a subset of our evening master's program for the working professional. The program offers required courses in usability testing and user-centered design processes, and electives (from which students choose one) in research design, Web design, and visual communication. This certificate has been very successful, and a significant number of those who have taken it have in fact gone on to enter our master's program.

The certificate in technical writing and editing (created in 1988), a nine-month sequence of six courses (two taken each quarter), is built on the required courses for our undergraduate degree. In the 18 years of this program's existence, it has produced approximately 700 graduates, most of whom have remained in professional employment in the Puget Sound region. The quality of this program has been a cornerstone of our reputation in our local professional community.

### ***Research and Scholarly Activity***

Earlier we described TC's recent growth in research and scholarly activity; in this section, we will characterize research in the field in general, position TC's research in that general landscape, review the main themes of the department's research, and relate them to our two main areas of communication design and HCI/usability.

Historically (owing no doubt to the location of many TC programs in English departments), scholarship in the field has consisted largely of considerations of rhetorical theories and of the pedagogies of technical writing. Graduate students have been supported by teaching assistantships; it has been unusual for faculty to seek funding to support research. Empirical research that entails the collection and analysis of data, although it has always played a role in the field, has not been the dominant mode of enquiry.

In the TC department at UW, however, empirical inquiry is central to our research and scholarship. This research can take the form of experiments that expand our discipline's general knowledge base or it can take the form of investigations that support a specific design effort. Among the experimental studies are several studies of the effects of communication design features (textual or visual elements) on perception and comprehension of information, and a study of the reliability and validity of a common usability testing method (retrospective thinking-

aloud) using eye-tracking. Among investigations that support a specific design effort are a series of usability tests in support of the design of a user interface for a health information system and an assessment of a document design technique, QuickScan, developed by a faculty member. TC research projects can also address broader cultural or organizational phenomena such as technology adoption in the developing world or requirements for information and communication systems in international humanitarian relief operations.

These examples serve to illustrate the breadth and diversity of TC research across the broad areas of communication design and HCI/usability. TC's research activity includes both funded and unfunded projects; our annual research expenditure from funded projects housed within the department is about \$900,000 (grants, contracts, and directed gifts). This number is reasonable for the kind of research we do and is comparable, after adjustments for differences in headcount, to the figures for the other two units on campus that we are most similar to (the Information School and, in Arts & Sciences, the Department of Communication).

As far as we have been able to determine, we have the most active empirical-research program and the largest amount of funded research of any doctoral-level technical communication program in the nation. This is one of the greatest strengths of the department.

### *Service*

TC faculty members have been very active in the usual range of activities associated with service to the profession (manuscript-reviewing for journals, professional-society work, etc.). In this overview, however, we focus on just two activities that illustrate TC's broad leadership in the area of service: our hosting of the editorship of one of the leading journals in our field, *Technical Communication Quarterly (TCQ)*; and the department's range of 2007 activities with the IEEE Professional Communication Society.

By hiring Associate Professor Mark Zachry this year, TC became the home of *TCQ*, one of the leading journals in our field. As editor of *TCQ*, Zachry has influenced the intellectual direction of the field; for instance, he initiated a series of interviews with leaders in HCI from closely related disciplines whose work has powerful implications for TC. Under his editorship, articles published in *TCQ* have also won major awards of excellence for scholarship in our field. Although young in his career to have assumed the editorship of a major journal, Zachry has demonstrated great energy and vision in strengthening this already leading journal. The department is committed to providing resources and support for him to continue this excellent effort.

TC also is providing extensive support for the IEEE Professional Communication Society (PCS) in 2007. Professor Mark Haselkorn, now the vice-president of PCS, will assume the presidency of the society next year. Also, the society's annual conference, the International Professional Communication Conference (IPCC), will be held in Seattle next October, with TC Professor David Farkas serving as program chair. We expect that the rest of the faculty and many of our students will present papers and fill numerous volunteer roles at this conference.

## **A2: Measures of Success**

We measure the success of the department in terms of the performance of the individual faculty. We consider faculty scholarly productivity and teaching effectiveness to be the two most important criteria; we also expect faculty to take part in service activities for the department, the college, the university, and the profession.

We believe that we are among the pioneers in building a funded research culture in our field, in valuing archival articles as the major mark of mature scholarship, and in encouraging co-authorship with students. In the broader technical communication field, sole authorship is much

more common than joint authorship, and the typical scholarly product required for promotion to full professor is the individually produced monograph (the book-length treatment of a topic).

Nationally and internationally, there are 38 PhD-granting TC programs (as of this writing; the number is increasing rapidly) (see Appendix Kb, List of PhD granting programs in technical communication). Among these programs, we consider the following to be our peers:

- Carnegie Mellon University (the program in the English Department and the joint program in the School of Design, both of which have connections to the HCI Institute in the College of Computing)
- Georgia Tech (the Language, Culture, and Communication program, which has connections to the Graphics, Visualization, and Usability initiative)
- University of Minnesota (including the Internet Studies Group)
- Rensselaer Polytechnic University (the oldest PhD program in TC in the nation, with close ties to IBM).
- Texas Tech University
- Internationally, the Department of Technical Communication at the University of Twente in The Netherlands

### **A3: Weaknesses**

We suffer weaknesses that are simply the result of being where we are in a university that is under-funded: we are small, our space is inadequate, and our staff is bare-bones minimal. We also have a small non-state funding base. We are working with the new dean of the COE to address some of these issues. Further, we have general issues regarding the visibility of the department and the field. We also have ambitions for growth in the area of HCI/usability that require university-level support. Over the next five to ten years, we expect that our field will define its place within the very fluid, interdisciplinary space of communication design and HCI/usability; TC at UW has an opportunity to be a leader in this emerging area, but our success will depend on the level of support that we can develop from the university and the success of broader interdisciplinary collaborations on campus in the next five to ten years.

## **Size**

We currently have ten tenure-track faculty lines (one of which is currently being held open by the new dean of engineering), three lecturers, and a senior research scientist. Although the department is sustainable at this size, we would become healthier by adding a small number of postdoctoral, research-scientist, and research-faculty positions, as well as industrial visiting scholars and other contributors to the department's funded-research generation. Also, we urgently need to hire into our open line so as to continue to energize the unit and augment its research strength.

## **Space**

We currently occupy space in the basement of Loew Hall, the basement of the Engineering Library, and the Engineering Annex. We are extremely cramped in this space; we have no conference room, no dedicated student lounge, minimal offices, etc. The space itself is also very ugly and not conducive to developing the departmental culture.

## **Staff**

Our staff currently consists of a department administrator, a fiscal specialist, a secretary, a part-time chair's assistant, a student adviser, and a program coordinator. (A portion of the funding for these positions is derived from our fee-based programs.) Our computing support is provided by the general COE computing staff, supplemented by a student hourly hired in our department. We also have two departmental student hourly employees to support general operations. The people who occupy these positions are remarkably able and committed to the department's success, but we simply have more work than they can handle. For instance, our Web site is in desperate need of redesign and ongoing improvement, but we do not at present have a person dedicated to this task, which is critical to a unit focused on communication design.

Also, we do not have a staff person in the area of proposal development and grant administration, also critical to our future development.

### **Small Donor Base and Other Non-State Funding Sources**

We depend very heavily on non-state funding sources, but as a small, relatively new discipline, we have a small donor base. Since 1997, starting from zero, we have managed to build up an endowment of about \$500,000, but a large portion of this funding originates with only a small number of donors. We are actively cultivating and broadening our donor base, but we expect to face challenges in this area for the next five to ten years.

We have enlarged and diversified our department's funding sources by expanding our fee-based program offerings (especially our evening master's program and user-centered design certificate). In an innovative arrangement, we have used our evening master's program to fund a tenure-track faculty line (the occupant of which is now a tenured associate professor). Within the next five years, we would like to strengthen the evening master's program to the point where we are comfortable adding another faculty line, ideally in HCI/usability.

### **Visibility**

We must develop greater visibility for our field and program. Among middle school and high school students, at present TC is virtually invisible; we are working to develop awareness among these students, as well as lower-division UW and community-college students, so as to develop a healthy pipeline of incoming majors. Our students love us when they find us, but it is entirely too hard for them to find us in the first place.

On campus, we suffer somewhat from lack of differentiation from the I-School and the Department of Communication. Those students who are drawn into the COE recruitment efforts are largely already committed to traditional engineering disciplines and do not have a positive

understanding of our field, and those who are “naturals” for our field (interested in both technology and helping people) do not often look to the COE for options for their major. We have an ongoing advertising program under way to attempt to address some aspects of this issue (posters, brochures, etc.), but we must do more. We also have healthy collaborative relationships with both the I-School and the Department of Communication, which over time will allow us to work together to attract a larger common student audience and map individual students into the programs that best meet their needs.

### **Barriers to growth in HCI/Usability**

There is university-wide interest and research momentum in HCI and usability, and TC wants to play a strong role in developing this campus-wide research focus. We must also seek ways to enlarge our impact in this research area, which is critical to our growth and impact over the next five to ten years. To do so, we must overcome the weaknesses identified above.

### **Need for succession, assessment plans**

The current department chair is in her tenth year; the department needs a succession plan to ensure that new leadership will carry the unit forward with energy and direction for the next five to ten years. The department feels that an external hire of a chair with a national profile in HCI/usability would be most beneficial for the department at this time.

The department also lacks a formal assessment plan. The field of TC is not ranked by *US News & World Report* or other ranking agency, nor is there another disciplinary assessment system currently in place. We are proposing to work with a professional society to create a descriptive database covering all TC PhD-granting programs that will provide a firm grounding for such a plan. Until that effort bears fruit, we will continue to rely on university metrics (student evaluations, etc.) to evaluate our performance.



## **A4: Changes in Teaching, Research, and Service**

TC has experienced changes in teaching, research, and service, and in our relationships to other fields. We also have experienced external pressures: changes in funding and challenges associated with the PhD program; and the need to pursue greater diversity.

### **Teaching**

TC as an academic field has grown in response to the burgeoning growth of the TC profession nationally and internationally. In academic TC, the number of schools offering courses, concentrations, and degrees has grown rapidly; according to the listing of the Society for Technical Communication ([www.stc.org](http://www.stc.org)), there are now over 250 schools offering some level of instructional program in TC, of which 38 offer the Ph.D. degree. The number of TC specializations has also become increasingly diverse and interdisciplinary: user-centered design/usability; internet studies; rhetoric; international technical communication; information and communication design; science and engineering communication; visual communication; policy studies and civic communication; study of technology in society; Web development; organizational communication; and even more. There have also been changes in teaching formats, for instance the introduction of evening degrees and distance certificates/degrees (offered by RPI, University of Minnesota, and Mercer University, among others). Programs that do not offer distance formats nevertheless include the use of teaching technologies (discussion boards, blogs, wikis, and similar tools) in regular course offerings with increasing frequency.

In positioning our teaching program in this diverse context over the last decade, we have drawn upon strengths in our setting in the College of Engineering and the high-tech Puget Sound region.

We are fortunate to have a close collaborative tie to the COE Center for Engineering Learning and Teaching (CELT), which has informed our teaching with theories of active and collaborative learning and strategies for applying them in the education we offer. The primary example of our implementation of these strategies is our adoption of TC496/596, directed research groups, as part of our regular curriculum, but the use of portfolios, community “clients” for class projects, student poster presentations of their projects, and other student “action and synthesis” activities can be traced to the same influence.

Developments in the profession, especially as they play out in our cutting-edge region, have also influenced our conception of our unit’s role. For example, in the area of communication design, we see a continuing reduction in the boundaries between technical and mass communication, with the emergence of “continuous publishing,” syndicated content, user-group-based assistance, and other Web-design strategies. Also, in the area of human-computer interaction and usability, we see accelerating growth in “off the desktop, out of the office” systems like social network systems, personal entertainment devices, etc. We have responded to such trends by continuously revising the content of our undergraduate curriculum to ensure that our students are aware of such developments, and perhaps most critically, that they learn how to *learn* emerging technologies fast and use them effectively to create user-centered communication designs. At the graduate level, we encourage students to develop theoretically rich understandings of the human experience of technologies, empirical studies of this experience, and design responses to it.

We have also responded to the internationalization of the TC profession. The profession has existed longest in the United States and Europe, with Japan close behind, but currently is experiencing rapid growth all around the world. In 1991, our Technical Japanese Program was

established, and in 1997, we started our international collaboration with the department of technical communication at the University of Twente in The Netherlands, which has included summer workshops, student and faculty exchanges, and joint scholarship<sup>ii, iii</sup>. We have offered students learning and research experiences in Africa, Central Asia, and Japan as well as Europe.

On the engineering communication side, the national ABET accreditation criteria began in 2000 to require that engineering departments assess the communication skills of their students. Partly in response, we created the Engineering Writing Center (now a collaboration with the I-School), in which trained student tutors work one-on-one with their peers to improve their communication skills. The director of the center also conducts writing assessments for the engineering departments, provides guidance to faculty in how to assign and grade writing, etc.

Finally, as we pursue our interest in international TC, we want to cultivate more opportunities for international student experiences, especially service-learning and experiential-learning opportunities. We feel that these experiences are more durable and valuable when offered in the context of a strategic teaching and research relationship with a partner institution. Distance learning technologies can enable and enrich these kinds of programs. We want to look carefully at the use of such technologies and evaluate whether we believe that we can use them to deliver first-class educational programs internationally. In any case, we expect to continue to expand the incidental use of educational technologies in our courses and in our collaborations.

In general, in our teaching programs, we have identified emerging areas early and have been entrepreneurial in taking advantage of opportunities to introduce these topics into our curriculum. Sometimes topics or even programs (content management; science news writing) have not succeeded in becoming permanent parts of the curriculum; in other cases, we have kept a topic or program but changed the emphasis placed on it. For instance, after Bellevue

Community College began to offer technical writing and editing courses, we eliminated one of two sections (the one held in Bellevue) of our evening certificate in technical writing and editing. Again, as the field moved more strongly in the direction of human-computer interaction, user-interface design, and usability, we broadened our coursework in the area and introduced our graduate User-Centered Design certificate and our undergraduate coordinated-study option in user-centered design and usability. We plan to initiate further campus-wide collaborations in this area.

## **Research**

The past decade has been a period of intensive *capacity-building* for us in the area of research. Our capacity for doing research, especially funded research, has been greatly accelerated by a combination of changes in the faculty makeup and the maturing of the PhD program to full size. We now have more faculty capable of building and managing large research programs, and we have more students to staff them who will be with us longer than the one to two years previously typical of master's students. We have also introduced powerful mechanisms for "bootstrapping" research ideas (mainly, the directed-research groups) and we have succeeded in building up our technical infrastructure to support projects (for instance, improvements to the Laboratory for Usability Testing and Evaluation, LUTE, first founded in 1990). We want to continue this research capacity-building by adding postdocs, research staff positions, and ultimately, a small number of research professors. We have begun this process by adding Suzanne Weghorst, a senior research scientist and interim director of the Human Interface Technology Laboratory (HITLab).

Our program is distinguished nationally by our leadership in empirical research of many kinds (ethnographies, surveys, experiments, etc.), a distinction that we share with our Dutch

colleagues and collaborators. Graduate research in our field is most often grounded in rhetorical theoretical frameworks; we acknowledge the value of that work but are committed to empirical research methods (including the development and assessment of methods as a distinct focus in itself). We also are committed to applied research that solves a communication problem through design. Every faculty member of the department, including those who would include theory among their main interests, has conducted funded empirical research and/or applied design.

### **Service**

The primary change that we are beginning to experience on the national level in the category of service is our activities for NSF. Several of our faculty who are funded by NSF have begun to take part in agenda-setting workshops, review panels, etc. We expect the rest of the faculty to begin to play these roles soon.

### **Relationships with other fields**

The TC field is interdisciplinary by nature; the units at UW with which it has the greatest natural affinity are, in the College of Engineering, Computer Science and Industrial Engineering (with respect to their interests in human-computer interaction, human factors, and usability); the Information School (which has similar interests); and the Department of Communication in the College of Arts and Sciences (with respect to its interest in Web design, Internet studies, and digital media). We also have ties to industrial design and visual communication in the Art School. Although all of our units have different histories and traditions, we are coming increasingly to find a complementary intellectual space at the intersection of our disciplines.

At this moment at UW, we have an excellent chance to develop an initiative in HCI and usability that exploits this complementary intellectual space. TC welcomes the opportunities and challenges of this collaboration. We do however have some concerns, as a small unit, about the

visibility of our program to prospective students, partners from the professional community, etc. It will require care and effort to balance the advantages of collaboration with the need, at the same time, to maintain a distinctive identity.

### **Pressures**

The greatest external pressure we have experienced has been the reduction in state funding; we have been required to generate an increasing percentage of our basic departmental operational funding and all funding for amenities. We have responded by being entrepreneurial and energetic in developing fee-based options for growth and resources, although we experience the continuing pressures of developing a student pipeline to maintain revenues and other business-oriented aspects of fee-based programs. We also have worked to create a departmental endowment, which we would like to double over the next five years. We expect this trend toward developing non-state funding to continue for the foreseeable future.

We also have experienced the pressures of launching our Ph.D. program. Over the next ten years, we will experience continuing pressures to further define our program, distinguish it from our peers, and develop ongoing relationships with the best of the other doctoral programs in the field. One aspect of this work, in a rapidly growing field, will be to continuously identify and work with the emerging strong new programs.

### **Diversity**

We need and want to increase the diversity of our program. (TC has great gender diversity but not racial or ethnic diversity.) We have received an undergraduate endowed scholarship for this purpose, and we are building a departmental diversity initiative around it (see Appendix R, Diversity Plan); we will advertise it and solicit our first group of applicants this year. We expect

that this scholarship will improve our visibility among underrepresented groups, but we want to do more in this area.

## **A5: Expectations**

Historically, in the College of Engineering and the broader university, TC was known as much or more for its technical writing service program as for its disciplinary programs; there was little awareness of the rapid growth of our academic field or of our strong reputation as one of the top programs in the country. We value our award-winning Engineering Communication Program and are committed to its continuing strength and improvement, and our TAs are very valuable in establishing and maintaining our reputation for excellence in the college and university. At the same time, we have expended a great deal of effort to publicize our *disciplinary* research and programs in communication design and HCI/usability so that the university community would develop a clearer understanding of all that we do. We believe that these efforts have met with success thus far, although we clearly have more work to do to address this issue.

At this point, we believe that we are respected in the College of Engineering for our Engineering Communication Program as well as for our disciplinary programs. We have much in common with our engineering colleagues and in fact are, at this moment, planning to collaborate with a subset of them and others across the university in a major initiative in HCI and usability. Our interdisciplinary collaborations over the last five years (with units as diverse as the School of Medicine, Evans School, Jackson School, and School of Public Health and Community Medicine) have also greatly increased our visibility across the university.

## **A6: Faculty Involvement**

TC faculty participate actively in the management of the department and the planning of its future (as is typical of small departments in which the service load is shared by a small number of people). In TC, faculty members rotate through assignments as chair or member of the department's computer committee, curriculum committee, admissions committees, peer review committee, human subjects review committee, Chair's Advisory Committee, etc. We have also had faculty ad hoc committees for revising the Web site, preparing policy documents, etc.

Over the past ten years, we have undergone several large strategic-planning activities that required extensive participation by faculty. At the request of then Dean Denice Denton, in 1998 we produced our first department strategic plan; the faculty took part in producing the original plan as well as two major and several minor revisions of it since then. (We are now in the process of producing Version 7.0 for the new dean, Matt O'Donnell; see Appendix Ia, Strategic Plan 7.0 and SWOT Analysis.) Collectively the faculty also produced a department-internal faculty workload document for use in our annual review process and mentoring activities, a set of guidelines for our peer review process, and other policy documents. We expect to revise them once again next year.

Our two largest efforts at self-study and strategic planning were the Ph.D. program proposal (included in Appendix Ka) and the self-study that preceded this ten-year review. The Ph.D. program planning took several years, including a two-year activity funded by the UW Tools for Transformation program devoted to a collaborative PhD exploration with the School of Communication and Speech Communication (now merged, as the result of that process, into the Department of Communication) and Political Science. It became clear during that process that a cross-college interdisciplinary Ph.D. program did not make sense; in the final report on this



effort, these units (as well as the Information School) supported the independent creation of a TC Ph.D. program. The TC faculty then took part in preparing and reviewing the Ph.D. proposal document (a process that lasted another year, culminating finally in approval of the program in 2002).

### **A7: Mentoring junior faculty and students**

We appoint an official mentor for every junior faculty person and augment that person's activities with discussions with the chair and extensive informal discussions among the junior colleague and the rest of the faculty. We have identified literature and other resources available from the COE ADVANCE program to help us in the process.

With respect to the mentoring of graduate students, we have a two-level process. The first contact person is the department's staff adviser, who handles the general introduction to the program of study and logistics and orientation. The student also meets with the faculty adviser for the program that he or she is entering (one faculty member advises the master's students and a second one advises the doctoral students). These faculty advisers continue to work with the students until they select their supervisory chair and set up their committee. At the master's level, the process is well-defined and relatively simple (most now opt for the coursework-only option). At the doctoral level, we have a standing committee for preliminary exams, which in our scheme are intended to evaluate the student's ability to do formal research. Once the student passes the preliminary exam, he or she chooses a chair and three other members of his or her general-exam committee, which will evaluate the student's mastery of our four core areas (theory, research methods, society and systems, and media design and applications). At that point, the student's chair takes over as his or her mentor and adviser, with the support of the staff

adviser. After passing the general exam, the student presents and defends a dissertation proposal, and then proceeds to complete the dissertation, under the direction of the supervisory chair.

All students have an orientation session for their group (undergraduate and graduate) run by the staff adviser and attended by the chair, the faculty advisers, our library representative, etc. Teaching assistants receive a further specialized orientation from the director of our Engineering Communication Program that acquaints them with the details of their teaching responsibilities. We also have one or more social events at the beginning of the year to help students get to know each other and develop a sense of community. The mentoring of undergraduate students follows a pattern similar to that for graduate students. All students are invited to take part in the chair's Student Advisory Group meetings, which take place once a quarter. In an informal pizza-lunch setting with the chair and staff adviser, students are encouraged to talk about what is working and what is not.

## ***Section B: Teaching***

This section on teaching discusses faculty teaching loads, the allocation of teaching responsibilities, faculty involvement outside of teaching with undergraduates, undergraduate involvement in research and scholarship, evaluation of teaching, summary of collected data on teaching, procedures to improve undergraduate teaching and learning, and tracking and promoting innovations in teaching.

### **B1: Teaching loads**

The table below indicates the average teaching loads for TC faculty (based on data from the four-year period through 2004-05). Note that this table does not include Prof. Mark Zachry, hired this year; we also have one open faculty line. Also, as with any small department, the numbers fluctuate from year to year because of differences in the number of credits of courses

(undergraduate courses are now almost all 5-credit courses, whereas graduate courses vary from 3-5 credits), the occurrence of buyouts from research funds, course releases for major service assignments, etc.

Faculty Member	Courses Taught/Yr.	Credits/Yr	SCH/Yr (+individual instruction)
Farkas	4	13.75	305.75
Haselkorn	3	9.75	157.75
Kasonic	3.25	11.25	268.25
Kato	5.5	16.5	367.5
Kolko	2.75	10.25	226
Ramey	2.75	9	292
Spyridakis	3.75	13	243.25
Tsutsui	3.67	9.67	73.33
Turns	3.25	12.5	295.25
Williams	4	17.5	505.75

## **B2: Allocation of teaching responsibilities**

With respect to formal classes, teaching responsibilities are allocated by the Chair based on advice from the curriculum committee and take into account a balance of departmental and curricular needs, faculty specialties, and individual preferences. We have a grid that shows the curriculum plan and teaching assignments for the next four years (Appendix P, Teaching Schedule: Four Year Outlook). Our curriculum planning is also influenced by the need to manage student flow through each program and by the strategic importance of the course. When there is a course that is strategic to offer but we do not have faculty resources to cover it, we will often staff it with a well-qualified instructor from our professional community.

The base level of teaching in the department is determined through measurement of student credit hours and number of graduate students supervised (see Appendix Id, Faculty Teaching Reports 2004-05). Faculty teaching responsibilities fall into three categories: formal classes, individual instruction, and directed research groups (TC496/596). Faculty members who do not

lead research groups for several quarters assume an increased course load. The number of student credit hours taught by individual faculty members varies based on the kind of class and the nature of the research groups; faculty effort is also weighted by considering the time commitment of new course preparation, productivity of research group activity averaged over several quarters, faculty initiative in proposing new courses, etc. All faculty members teach both graduate and undergraduate classes. Research groups also enroll both undergraduate and graduate students.

### **B3: Faculty involvement outside of teaching with undergraduates**

Faculty are involved in undergraduate student learning and development through a number of different mechanisms:

- Directed research (TC 496): The TC Directed Research class is a fundamental way in which faculty are involved in undergraduate student learning. These research groups are focused on individual or group research areas that involve students in primary research activities.
- Senior study (portfolio creation; TC 493): Over the past three years, the TC department has redefined the senior study activity, required of all students, to focus on building a professional portfolio and presenting it formally to a faculty panel.
- Independent study (TC 499): Some undergraduate students work with faculty on independent projects.
- Internships (TC495, a required undergraduate course).
- Supervision of undergraduate students participating in funded research projects
- Supervision of student chapters of professional organizations (STC, CHI)
- Directed student production of postTCComm, the department annual newsletter (see Appendix L)
- Management of Research and Design Showcase and Engineering Open House (yearly opportunities for undergraduate students to showcase their research projects to prospective students, alumni, and local industry)
- Arrangement of international student exchanges
- Supervision of tutoring in Engineering/I-School Writing Center

### **B4: Undergraduate involvement in research and scholarship**

Faculty involve undergraduate students in research and scholarship in a number of ways:

- Including them in directed research groups (TC 496)

- Employing them as undergraduate research assistants on funded projects
- Directing individual study projects (TC 499)
- Co-publishing with them
- Co-presenting with them at conferences
- Bringing research data sets or case studies into undergraduate classes for analysis
- Offering them participation in studies as human subjects
- Offering them realistic class research projects (such as usability tests with real “clients”—sponsors from industry)

## **B5: Evaluation**

The department evaluates the instructional effectiveness of faculty in the following ways:

- Requires course evaluations through the university Office of Educational Assessment (OEA) for both full-time faculty and part-time faculty
- Requires a statement of core competencies and learning objectives for each class
- Requires self-evaluations of teaching for each class for fulltime faculty
- Requires peer teaching evaluations. Peer evaluations are performed yearly, and they include some or all of the following: a review of teaching documents, class visits, review of sample assignments, review of any online course materials, and conversations between colleagues about teaching experiences. A full review, which includes all of these activities, is performed every year for pre-tenure faculty and every two years for tenured faculty members. Every year at least an abbreviated review is conducted for all full-time faculty members. (See Appendix Ib, Peer Review of Teaching Guidelines and Memo)
- For part-time faculty, the first year they teach for us, the department requires a CIDR mid-quarter evaluation and final OEA student evaluations. After that, we require a final OEA student evaluation and encourage that they get a mid-quarter CIDR evaluation.
- We involve CIDR in ad hoc evaluations such as the evaluation of the directed research groups done in 2005.
- We consult advisory groups from the professional community with respect to the currency of our curriculum (for instance, we held a focus group in 2004-2005).
- We conduct an exit survey.

## **B6: Summary of collected data**

The department augments its data collection on teaching effectiveness (see item B5 above) with data collection targeted at evaluating student learning, and responds to the findings in a number of ways.

For instance, the introduction of the directed research groups was a very large change for the department and we wanted to monitor the impact carefully. To do so, we invited CIDR to

conduct an evaluation that included individual written responses, focus group discussion, etc. The CIDR representative and a student panel reported the findings to us at our annual retreat. We were very happy with student reception of the innovation but noted improvements that could be made. In response to what we learned, we introduced more explicit descriptions of expectations and mutual responsibilities, etc.

In a second example, we recently changed the format of TC493 to a portfolio-creation project. To assess how the change was working, Turns and her Laboratory for User-Centered Engineering Education (LUC EE) team conducted field observations and interviews with students and polled the faculty. We continue to evaluate the effectiveness of the portfolio creation exercise by processing data from faculty evaluations of portfolios. The portfolio evaluation rubric we now use in the evaluation was created based on the core competencies developed by department that we expect our undergraduates to develop. We also noted that, in a 2005 university-wide portfolio creation contest conducted by the UW Catalyst group, a TC student won the grand prize and three of ten finalists were TC students.

In a final example, each year the chair reviews all the department teaching evaluations. In response to this review and input from both part-time lecturers and students, we made three major changes. First, we created the TC Part-Time Lecturer Handbook (Appendix Ic) to provide as much orienting information as possible. We also dedicated an office to the use of part-time faculty so that they could more easily prepare for class and meet with students. Finally, we created the requirement that, in the first year they teach for us, part-time faculty must do a mid-quarter evaluation with CIDR.

## **B7: Procedures to improve undergraduate teaching and learning**

The department helps faculty improve undergraduate teaching and learning in a number of

different ways:

- All lecturers and assistant professors are provided a mentor (for lecturers, the supervising faculty director of the course to be taught; for assistant professors, a faculty person senior in rank)
- We invite CIDR to help us as a group or as individuals on a regular basis
- We discuss peer review results in detail and use them to improve course delivery
- We host lectures and workshops by engineering education specialists such as Karl Smith and Jean-Luc Dumont.
- For our award-winning Engineering Communication Program, Karen Kasonic trains the TC231 and TC233 TA's extensively and monitors and directs their performance through their participation in TC597, through classroom observations, etc..
- For other classes, the directing professor exhaustively trains and supervises the instructor.
- We encourage our TAs to attend the annual CIDR TA Conference.
- Faculty share course materials and consult with colleagues who have previously taught the same course.
- Faculty have attended the UW summer teaching institute.
- Faculty have attended September workshops sponsored by the Office of Undergraduate Education.
- Faculty have attended the UW large-class collegium.
- Faculty make use of the resources of COE CELT.
- Karen Kasonic offers workshops on improving grading, designing writing assignments, etc.
- Faculty attend Engineering Education Conferences (and share what they learn with colleagues).
- At our annual retreats, faculty share best practices and discuss course content.

## **B8: Tracking and promoting innovation**

We are fortunate to have on the faculty a professor whose scholarly interest is in pedagogy; she has been instrumental in keeping us aware of best practices and helping us to innovate in our teaching. We use a variety of mechanisms to achieve these goals:

- We use the research groups as opportunities for students to learn about cutting edge topics that aren't yet covered in courses
- We use discussions in the PhD seminar to get feedback on graduate teaching
- The PhD advisor meets regularly with all PhD students for feedback on graduate curriculum and graduate student learning
- We conduct exit surveys with all students
- We maintain conversations with industry for input on curricular improvements that will help align our curricular goals with professional best practice, and help our students to get hired

- We encourage and facilitate conference attendance by students and delivery of student papers and conference presentations
- We are flexible in allowing people to offer experimental courses that promote innovation
- We regularly solicit student input on computing needs for course support
- We introduce innovative technology, regularly renovate the student computer lab, and write Student Technology Fee (STF) proposals to get computer resources that improve student learning
- We have redesigned our technology infrastructure so that it supports teamwork and collaboration rather than just the one-student-one-project model.

## ***Section C: Research and Productivity***

This section on research and productivity addresses the balance of individual and departmental needs; mentoring of junior faculty members with respect to research; the impact of our research; influences on research, scholarship, and creative activity; faculty heterogeneity; impediments to productivity and the encouragement and preservation of staff.

### **C1: Balance of individual and departmental needs**

The interdisciplinary nature of TC as a field guarantees that TC will hire faculty with diverse interests. The challenge in hiring is to identify new faculty who will help expand our departmental research areas and pedagogical offerings, yet also be part of the core of TC that runs through technical communication departments around the world. To help achieve this balance, the faculty make annual to tri-annual agreements ( frequency depending on rank) with the chair as required by the UW Faculty Handbook (Chapter 24). These agreements allow the chair to maintain an overall view of curricular offerings, departmental needs, student interests, and research funding availability.

Overall, TC takes an open-minded approach to where individual faculty members' scholarly interests take them, and works with the faculty to integrate their interests into the curricular offerings. A good example is Prof. Mark Haselkorn's course TC520, Technical Communication Systems, in which he uses humanitarian relief systems as the extended example/case study of a



complex information and communication system. Mark's interest in and research on ICT systems has over the past few years focused more and more strongly on humanitarian relief as a major area of application, and it is reasonable to bring that focus into the classroom as well. The required balance is to ensure that the core disciplinary content is thoroughly conveyed through the presentation of the case study.

We also use the mechanism of the directed research group, which counts as part of the faculty member's official course load, to allow faculty to explore new ideas and emerging research interests.

To ensure that our classes cover the content that they were designed to present and develop the competencies they are supposed to support, we have set up faculty supervisory committees for each class (Appendix Q, TC Faculty Assignments for TC Courses) that will review syllabi and work with the instructor and curriculum committee on proposed course revisions. This system is new; we will monitor it this academic year for feasibility (given that the department is small, each faculty person is on 5-8 course committees).

To meet COE expectations for our unit, we must balance our service mission and our disciplinary focus; to do so, we make an effort to integrate aspects of our service and regular degree curriculum (which are of course grounded in the same core competencies and theoretical perspectives). Our graduate students serve as TA's in the Engineering Communication Program; the director of that program participates in the general TC curriculum as well.

Decisions about promotion, salary, and retention are handled by faculty committees that are advisory to the chair. Following the UW Faculty Handbook (Chapter 24), all TC faculty who are senior in rank to the faculty under consideration (or, in the case of full professors, all other faculty of equal rank) meet and review candidate materials, vote on their position with regard to

the issues, and provide a written report to the chair (who may or may not be part of the oral discussions about a case). The chair takes the report under advisement and makes final decisions.

TC faculty have taken a cooperative, consensus-building approach so that faculty diverse backgrounds can be brought into play to evaluate diverse faculty. Only in rare instances does the faculty review committee fail to reach agreement (in which case the committee may delegate a question to the chair).

Merit reviews take into account the faculty annual record and cumulative vita (including peer teaching reviews, self-evaluations, etc.), as well as the faculty agreements with the chair. If a faculty agreement with the chair specifies levels of research, teaching, and service which differ from the norm of 40% teaching, 40% research, and 20% service, the committee honors the agreement with the chair. .

## **C2: Mentoring of junior faculty members**

Junior faculty members are mentored in terms of research productivity in a number of ways:

- Annual advisory meeting with the chair and numerous informal meetings
- Informal interactions with other faculty
- Encouraging attendance at professional society meetings; having faculty attend with them and making sure that they meet the appropriate senior people
- Course releases to accomplish specific scholarly milestones
- Greatly reduced service loads
- Formal assignment of a mentor to assistant professors
- Start-up packages to provide financial resources to launch a research program (hire research assistants, etc.)
- Where appropriate, including junior faculty on the research projects of more senior faculty
- Making sure to introduce junior faculty to other young researchers with similar interests across campus
- Nominating junior faculty for all appropriate awards and recognitions

## **C3: Impact of Research**

TC research has had a great impact on our field in both communication design and HCI/usability. On the communication design side, our faculty have produced award-winning,

widely used publications on help design and software user assistance, text comprehension and visual communication, and Web design. For example, our multi-article special issue of the journal *Technical Communication* (2000) on guidelines for Web communication, produced with our Dutch colleagues, won the STC Frank R. Smith Outstanding Journal Article award for the introductory article by Spyridakis and van der Geest. We have also produced first-rate scholarship in specialized communication-design areas, for instance, engineering education and the design of pedagogical communication.

On the HCI/usability side, again our faculty have been agenda-setters and leaders. Our work in usability testing has moved the field forward in formality and rigor. The development of a remote Web-based design experiment system (WeblabUX) is a powerful contribution to the usability toolkit. The examination of broader cultural impacts of technology in the developing world have advanced our understanding in provocative ways.

#### **C4: Influences on research, scholarship, and creative activity**

The growing acceptance of empirical research (as opposed to theoretical exploration) as a major mode of inquiry, with the concomitant need for funding to support research, has been the most dramatic development in the past ten years in our field.<sup>iv, v</sup> TC at UW has always been a leader in empirical research in our field; we are also leading the changes in funding patterns in our field in that we are demonstrating that technical-communication research questions are fundable and in fact our faculty are getting funding for their work.

The field has also been dramatically affected by internationalization and the emergence of global information and communication systems. The emergence of the Internet and Web publishing has fundamentally shifted our curriculum and our research agendas, as well as our range of possible research collaborators and funding sources. The increasingly rapid growth of

personal, social, and informal collaborative technologies, as well as the emergence of computer-based games and other entertainment technologies, challenge and stretch our user-centered methods of inquiry.

The introduction of our doctoral program has also had an influence on our scholarship and visibility. In working with our doctoral students, on funded projects or in research groups, we have continued to move away from the paradigm of individual-author studies to a more collaborative (and thus productive) paradigm. Now that our endowment is sufficient to fund conference participation for students so that they can deliver papers reporting their research work, both our scholarship and our students have enhanced visibility on the national/international scene (see Appendix Jb, Conferences Attended by UWTC Students).

### **C5: Faculty heterogeneity**

TC faculty have a rich variety of academic backgrounds and therefore bring a wonderful complement of theoretical, observational, and experimental methods to their research. The faculty backgrounds in rhetoric, cognition, education, linguistics, systems engineering, and information design, create great potential for the faculty to conduct interdisciplinary research. For example, in the Kolko and Spyridakis collaboration on the study of patterns of technology adoption in the developing world, Spyridakis contributes expertise in survey design and data analysis and Kolko contributes theoretical perspectives as well as knowledge of qualitative methods.

In TC we cover at least the following subfield specializations:

- User-centered design and usability
- Documentation—print and online
- Information and communication technologies
- Web design
- Information development
- Technology enhanced learning

- International TC
- Refinement of methods
- Visual media
- Engineering education
- Society and technology

### **Strengths and Weaknesses generated by faculty differences**

Differences among faculty guarantee that we have the strengths provided by a diverse set of perspectives and a wealth of intellectual traditions to bring to bear on research questions.

Questions in our field are best approached with multiple research methodologies; solutions usually involve the integration of multiple perspectives.

Differences among faculty can also create difficulties typical of any interdisciplinary activity in a small unit—it may not be clear where to go for a second opinion, for instance in doctoral preliminary exams in evaluating a research method outside of one's own expertise. But these difficulties can also prove to be strengths, in that they force us to confront and explicitly articulate the assumptions and value systems behind our various methodological traditions.

### **Obstacles in communication**

We sometimes encounter the fact that we use different vocabularies and have different world views, a situation common to any interdisciplinary conversation. But we are well positioned to accommodate intellectual diversity, as opposed to many older, more traditionally constrained disciplines.

We have introduced a number of forums that enable us to communicate across (and about) our disciplinary boundaries and develop a richer understanding of each other's traditions. We offer two to three quarters per year of our speaker series, TC521: one devoted to presentations by faculty or faculty-led student groups about the research they are conducting; one devoted to presentations about emerging issues in user research and usability by prominent practitioners

from our regional professional community; and one devoted to presentations about cutting-edge technologies and user-centered design strategies currently under development, either on campus or in industry. These presentations engender rich discussions among faculty, students, and other participants that illuminate the diversity of perspectives and methods currently in use in the broader field. We also have annual Research and Design Showcases and Engineering Open House presentations that give students a venue for explaining their work to their peers and others.

Also, we have mechanisms within the department's operations that help ensure that we maintain a multi-dimensional appreciation of the different threads that are possible within our discipline. Among these are peer teaching evaluations, research updates at faculty meetings, research reviews at our annual retreats, and the collaborations that result from co-authoring department documents and policies, as well as co-authored papers and grant proposals. We have found that these mechanisms, together with our essentially collegial departmental culture, have succeeded in promoting ongoing communication across the departmental community.

## **C6: Impediments to Productivity**

Because we are a small department with many degree and non-degree programs, our faculty carry an unusually heavy service load at the department, College, and University level. Also, being internationally recognized, our faculty have taken leadership roles in international societies. These service-load claims on our time can certainly compete with research and teaching. To deal with some of the service load, we have recently begun inviting PhD students to help with certain service roles, an approach that also provides these students with opportunities for the development of professional experience and credentials. (For instance, we had a doctoral

student on our most recent faculty search committee, and we have encouraged Ph.D. students to take part in writing policies and review documents.)

### **C7: Encouragement and preservation of staff**

The TC department has long had a culture of recognizing and valuing staff. Although we are a small unit with limited resources, we find creative ways to provide support for staff when they need it; for instance, we always have a set of student hourly workers, and in fact even our student hourly workers have demonstrated great loyalty to us. (Our current department administrator started with the department years ago as a student hourly worker.)

Also, within the limits of covering the core set of duties necessary to run the unit, we give staff as much freedom as possible to grow and adapt their jobs to fit their skills and interests. We have a strong record of promoting from within, and in fact several of our staff have completed our degree and gone on to secure excellent jobs in the profession.

#### **Recognition and rewards**

We recognize the contributions of our staff and reward them in a number of different ways.

##### ***Rewarded with money or bonuses:***

- Staff members are upgraded to higher level when appropriate. Several key staff members have undergone reorganization or reclassification of their job description to better represent the work that they do. In annual staff reviews and at any time during the year when it makes sense, we consider the appropriateness of a reclassification or other adjustment.
- Staff members are given a temporary salary increases to compensate for work performed at higher levels, usually when other staff members are away for extended amounts of time.

##### ***Rewarded with recognition:***

Many UWTC staff members have been nominated for awards. Current staff members who have been recognized are:

- Jeff Babauta: nominated for the 2006 COE Community of Innovators Award (formerly Outstanding Staff Award). Received honorable mention in professional staff category. Nominated for 2004 Outstanding Staff Award – received honorable mention in classified staff category.
- Kate Long: given the UWTC Award for Excellence in 2001; nominated for the 2001 UW Distinguished Staff Award (received Honorable Mention), nominated for the 2005 COE Outstanding Staff Award.
- Carolynda Valerio-Lucas: nominated for the 2004 and 2005 COE Outstanding Staff Award. Received Honorable Mention in Classified Staff category in 2005.
- Kyle Sullivan: nominated for 2005 COE Outstanding Staff Award.

Staff are often congratulated by the department chair and faculty members for their hard work at department meetings.

### ***Rewarded with Time Off***

- The chair has allowed staff to work flexible hours and alternative work schedules (9/8's, 4/10's), especially in the summer months.
- Staff are encouraged to take classes and allowed flex-time to do so during the usual business hours. The current adviser completed a master's degree in educational administration in 2005-06 under this program.

### ***Rewarded with "a piece of the action"***

- Faculty ask staff their opinions and ideas – individually and in meetings.
- Staff participate on committees and in meetings—faculty meeting, Chair's Advisory Board, Curriculum Committee, Computer Committee.
- Staff are assigned projects which draw on their ideas & creativity.

### ***Rewarded with fun:***

- Birthday parties
- Staff lunches out, paid for by UWTC
- Staff appreciation day
- Holiday gift exchanges

### **What programs are in place to support professional development of staff?**

TC depends heavily on UW-level programs to support the professional development of staff, but augments those programs where possible with departmental contributions:

- Tuition reimbursement
- Flexible schedules



- Participation in workshops such as newsletter development, grant-writing, or Web development/authoring
- Encouragement to take advantage of UW development and training programs in personnel, computing and communications

## ***Section D: Relationships with other units***

TC, as an interdisciplinary unit, has extensive relationships with units at other institutions as well as with colleagues here at UW. We deploy theories, methods, and design strategies to investigate questions and solve problems in communication design; anybody who is in need of communicating information in whatever format is a prospective collaborator for us. We also study broader questions concerning the contexts and patterns in which information and communication technologies are playing roles in the lives of people and organizations. Our range of application domains is virtually unlimited. Our collaborative relationships are best explained through a series of examples.

On the international front, we have an ongoing departmental educational and research relationship with the department of technical communication at the University of Twente, Enschede, The Netherlands. We have mentioned earlier that, as the scholarly output of one of our international summer workshops, we produced a special issue of *Technical Communication* on heuristics for Web design (2000). Individual faculty from the two institutions have also worked together; Ramey and de Jong co-edited a special issue of *IEEE Transactions on Professional Communication* devoted to evaluation methods (2000), and Spyridakis is currently supervising an Internet-Based Research project for two UT visiting scholars and one student. Several faculty have taken part in exchanges. We expect to continue this productive relationship for the foreseeable future.

We also have other large international collaborations. Kolko and Spyridakis have an NSF grant entitled “The Effect of the Internet on Society in Central Asia,” with faculty from George Mason University. This grant also involves broad UW collaboration; they are working with faculty and students from the Department of Communication, Department of Political Science, the Information School, and the Jackson School of International Studies. Haselkorn’s humanitarian relief work involves the Evans School of Public Affairs and the Marc Lindenberg Center within UW as well as a range of nongovernmental organizations such as Mercy Corps. Tsutsui is co-developer of the Japan External Trade Organization (JETRO) International Internship Program, with participating universities across the USA, Canada, and the UK. Farkas, as a Fulbright Specialist, has conducted a series of workshops in Egypt.

In the USA, we also have extensive collaborations (some of which were mentioned above). In a project unfortunately just canceled, Kasonic taught a honors Engineering 100 class that was part of the Virtual Development Center sponsored by the Anita Borg Institute that involved ten universities across the country, as well as community groups and high-tech companies. The goal of the VDC was to find innovative ways to engage and retain female computer science and engineering students; Kasonic’s approach was based in service learning focused on Web design. She worked closely with Microsoft and community groups like Seattle Girls School and CASA Latina to give students a rich set of opportunities in design. In a different example, Turns, through her relationships with CELT and the NSF-funded Center for the Advancement of Engineering Education, has worked with leading educators across the country on numerous projects. Zachry, our new faculty hire, is collaborating with people at Michigan State and the University of Texas on a study of communication activities associated with grant-writing in organizations.

Here at UW, we have a similarly broad range of collaborations. In addition to the ones mentioned above, Ramey is working with the Center for Excellence in Public Health Informatics to formally describe the workflow of public health officers related to managing and reporting communicable diseases. Also, the UWTC Laboratory for Usability Testing and Evaluation (LUTE; Ramey, director) has worked with faculty from EE, CS, I-School, Medicine, Nursing, Public Health, and many other groups. Kasonic manages the Engineering/I-School Writing Center, a collaborative effort between our two units. Spyridakis is working with faculty from the School of Medicine on several health-information projects. Kolko is working with the Center for Internet Studies on a project funded by Microsoft developing a methodology for assessing the impact of IT on diverse communities.

Our greatest and most immediate opportunity for further collaboration with other units at UW is in the area of HCI and usability. The new dean of the COE has expressed interest in supporting a collaboration between TC, the I-School, Computer Science and several other units across the university to create an HCI Institute (similar to the HCI Institute at Carnegie Mellon University or the Graphics, Visualization, and Usability group at Georgia Tech). This effort will build on the foundation of the DUB group galvanized by James Landay of CS and the growth of cross-listed classes, jointly advertised speaker series, and other collaborative activities in this area already under way. We will be pursuing this opportunity vigorously this year.

These collaborations provide us with testbeds for the application of our theories and methods. The critical cornerstone of our discipline is a commitment to audience analysis and the idea that a design is only as good as its fit with its intended users and context of use. For us, the rich variety of application domains provides us with continuously renewed opportunities to test the power of our theories and methods.

In the remainder of this section, we discuss the influence of interdisciplinary opportunities, impediments to developing interdisciplinary research relationships, university assistance in collaborations, and faculty participation in the governance of the larger institution.

### **Influence of interdisciplinary opportunities**

We have several kinds of formal relationships with faculty in other units such as adjunct professorships. We also have members of doctoral committees from other units (e.g., Gerry Philipsen from the Department of Communication on PhD student Matt Eliot's committee; Karen Fisher from the I-School on Steve Lappenbusch's committee). We also have cross-listed classes, for instance with Raya Fidel in the I-School (TC/LIS 515, Ecological Information Systems).

All of these collaborative relationships increase our visibility and aid us in recruiting new faculty and graduate students. Participation in our classes and research groups by students from other units gives us the positive energy that arises from the friction between our different points of view. We find that students who discover us through these collaborations are very enthusiastic about the TC experience and seek out a continuing relationship with us, sometimes to the point of changing departmental affiliation to TC.

### **Impediments to developing interdisciplinary research or connections**

We face the same impediments that units across the university as a whole face with respect to developing interdisciplinary research or connections, but somewhat less intensely since our department values interdisciplinary research as central to our mission.

An example of an ongoing barrier is the way that credit for research funding is allocated to CO-PIs and Co-Investigators; essentially, it is not tracked by UW for awards and is not tracked

for expenditures unless a sub-contract is set up. This means that grants become one person's grant (the PI) regardless of multiple faculty efforts, which discourages collaboration.

### **University assistance in collaborations**

It would be helpful to have the accounting systems changed to recognize the contributions of all participants of funded projects. Also, the usual problems must be addressed of giving faculty credit for teaching courses offered in two different units, making sure that, in joint activities, both merit review committees have agreed on the same standards for evaluation of effort, making sure that out-of-unit activities remain visible in the home unit, etc.

### **Faculty participation in the governance of the college and university**

TC has a history of a high degree of involvement in governance (especially given our size) at all levels. For example, Mary Coney, professor emerita of TC, was Chair of the UW Faculty Senate, and Mark Haselkorn was chair of the College Promotion and Tenure Committee. We have been very active on other committees at the UW level as well as the College level. We value this participation in the life of the institution on its own terms, in terms of what it contributes to the professional standing of the person involved, and in terms of what it contributes to the visibility and credibility of the department. At the same time, we acknowledge that this service burden falls more heavily on smaller units.

## ***Section E: Diversity***

This section discusses the inclusion of underrepresented groups among students, faculty, and staff; comparison of underrepresented groups to others; recruitment and retention of underrepresented groups; involvement with GO-MAP and OMA; and the influence of diversity.

## E1: Inclusion of Underrepresented groups: student, faculty, and staff

TC is committed to fostering a supportive environment for diverse students, faculty and staff.

We recognize that it is essential to identify and educate diverse students in order to achieve our goal of remaining an elite, nationally recognized leader in the field of Technical Communication.

At the heart of Technical Communication research, theory, and practice lies a shared understanding of the importance of people as users and consumers of information and technology. To ensure that our research, theory, and practice are always on the forefront of the user experience, we must reflect the diversity of our society. To that end, TC is committed to identifying, recruiting and retaining diverse faculty, staff and students with respect to race, ethnicity, gender, age, sexual identity/orientation, disability, religion, culture, and geography.

A snapshot of the last three years with respect to under-represented groups for TC students by entering cohort is below.

2003-04	total	total female	total male	total black		total asian		total hispanic		total n.a & p.i.*		total white		total other	
				F	M	F	M	F	M	F	M	F	M	F	M
				BSTC	63	32	31	2	1	5	3	1	1	1	1
MSTC	56	34	22	0	0	4	1	0	2	0	1	26	17	4	3
PhD	5	2	3	0	0	1	0	0	0	0	0	1	1	0	1
total	126	70	56	2	0	10	4	1	3	1	2	44	35	11	10
% of total	100%	56%	54%	1.60%	0.80%	7.90%	3.20%	0.80%	2.40%	0.80%	1.60%	35%	28%	8.70%	7.90%

2004-05	total	total female	total male	total black		total asian		total hispanic		total n.a & p.i.*		total white		total other	
				F	M	F	M	F	M	F	M	F	M	F	M
				BSTC	45	24	21	0	1	3	7	0	0	1	0
MSTC	37	17	20	0	0	1	0	0	0	0	0	14	13	5	4
PhD	10	7	3	0	0	2	1	0	0	0	0	5	2	0	0
total	92	48	44	0	1	6	8	0	0	1	0	34	29	7	5
% of total	100%	52%	48%	0%	1.10%	6.50%	8.70%	0%	0%	1.10%	0%	27%	32%	7.60%	5.40%

2005-06	total	total female	total male	total black		total asian		total hispanic		total n.a & p.i.*		total white		total other	
				F	M	F	M	F	M	F	M	F	M	F	M
				BSTC	42	18	24	2	0	3	6	1	0	0	0
MSTC	38	24	14	1	0	3	1	0	1	1	0	15	6	4	5
PhD	11	8	3	0	0	2	1	0	0	0	0	6	2	0	0
total	91	50	41	3	0	8	8	1	1	1	0	30	21	5	9
% of total	100%	55%	45%	3.30%	0%	8.80%	8.80%	1.10%	1.10%	1.10%	0%	33%	22%	5.50%	9.90%

\*n.a. = native American & p.i. = pacific islander

The most recent Annual Affirmative Action Update from the UW Equal Opportunity Office for our department faculty is below.

**UNIVERSITY OF WASHINGTON**  
**Workforce Profile - Department within College and Subcollege**  
 By Job Group and Title  
 Headcount of Faculty/Academic Personnel: October 2005

	Tenure	Total		Total Non		Total Black		Total Asian		Total Hispanic		Total Amer Ind		Total White		
		All	Female	Male	Minority	Minority	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<b>ENGINEERING - COLLEGE</b>																
<b>TECHNICAL COMMUNICATION</b>																
<b>LADDER FACULTY</b>																
0101	PROFESSOR	YES	5	2	3	0	5	0	0	0	0	0	0	0	2	3
0102	ASSOCIATE PROFESSOR	YES	3	1	2	1	2	0	0	0	1	0	0	0	1	1
0116	ASSISTANT PROFESSOR		1	1	0	0	1	0	0	0	0	0	0	0	1	0
<b>LADDER FACULTY - TOTAL</b>			9	4	5	1	8	0	0	0	1	0	0	0	4	4
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>			100%	44%	56%	11%	89%	0%	0%	0%	11%	0%	0%	0%	44%	44%
<b>NON-LADDER FACULTY</b>																
0117	SENIOR LECTURER-FULL TIME		1	0	1	1	0	0	0	0	1	0	0	0	0	0
0185	LECTURER PART-TIME		7	4	3	1	6	0	0	1	0	0	0	0	3	3
<b>NON-LADDER FACULTY - TOTAL</b>			8	4	4	2	6	0	0	1	1	0	0	0	3	3
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>			100%	50%	50%	25%	75%	0%	0%	12%	12%	0%	0%	0%	38%	38%
<b>TECHNICAL COMMUNICATION - TOTAL</b>			17	8	9	3	14	0	0	1	2	0	0	0	7	7
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>			100%	47%	53%	18%	82%	0%	0%	6%	12%	0%	0%	0%	41%	41%

Data from this same office provided information regarding our departmental staff (classified and professional):

**UNIVERSITY OF WASHINGTON**  
**Workforce Profile - Department within College and Subcollege**  
 By Job Group and Title  
 Headcount of Classified Staff - October 2005

	Grade	Total		Total		Total Non		Total Black		Total Asian		Total Hispanic		Total Amer Ind		Total White	
		All	Female	Male	Minority	Minority	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
<b>ENGINEERING - COLLEGE</b>																	
<b>TECHNICAL COMMUNICATION</b>																	
<b>UNION AND BARGAINING UNIT: 0010</b>																	
<b>CLER: OFFICE</b>																	
7244 SECRETARY SENIOR	34	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0
<b>CLER: OFFICE - TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>UNION AND BARGAINING UNIT: 0020</b>																	
<b>CLER: FISCAL</b>																	
7036 FISCAL SPECIALIST 1	39	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0
<b>CLER: FISCAL - TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>UNION AND BARGAINING UNIT: 0022</b>																	
<b>CLER: OFFICE</b>																	
7256 PROGRAM COORDINATOR	38	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>CLER: OFFICE - TOTAL</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
<b>TECHNICAL COMMUNICATION - TOTAL</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

**UNIVERSITY OF WASHINGTON**  
**Workforce Profile - Department within College and Subcollege**  
 By Job Group and Title  
 Headcount of Professional Staff - October 2005

	Grade	Total		Total		Total Non		Total Black		Total Asian		Total Hispanic		Total Amer Ind		Total White	
		All	Female	Male	Minority	Minority	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
<b>ENGINEERING - COLLEGE</b>																	
<b>TECHNICAL COMMUNICATION</b>																	
<b>PROF: COMPUTER SPECIALISTS</b>																	
<b>GRADES: 8 - 10</b>																	
1568 SENIOR COMPUTER SPECIALIST	08	2	0	2	1	1	0	0	0	1	0	0	0	0	0	0	1
<b>GRADES: 8 - 10 - TOTAL</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>50%</b>	<b>50%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>50%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>50%</b>
<b>PROF: COMPUTER SPECIALISTS - TOTAL</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>50%</b>	<b>50%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>50%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>50%</b>
<b>PROF: PRINCIPAL ASSISTANTS</b>																	
<b>GRADES: 5 - 7</b>																	
9553 ASSISTANT TO THE CHAIR	07	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0
<b>GRADES: 5 - 7 - TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>
<b>PROF: PRINCIPAL ASSISTANTS - TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>
<b>PROF: MANAGERS, ANALYSTS</b>																	
<b>GRADES: 8 - 10</b>																	
1248 ADMINISTRATOR	08	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0
<b>GRADES: 8 - 10 - TOTAL</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>PROF: MANAGERS, ANALYSTS - TOTAL</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>PROF: COUNSELORS, ADVISORS</b>																	
<b>GRADES: 5 - 7</b>																	
1347 ACADEMIC COUNSELOR	06	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>GRADES: 5 - 7 - TOTAL</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
<b>PROF: COUNSELORS, ADVISORS - TOTAL</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>GROUP AS PERCENT OF 'TOTAL ALL'</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
<b>TECHNICAL COMMUNICATION - TOTAL</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>

## E2: Comparing underrepresented faculty groups to others

Because TC is small, data comparing underrepresented groups to others do not portray a meaningful picture of our general work distribution; we have too small a number of people in each class for reliable patterns to emerge (see Appendix Id, Faculty Teaching Reports 2004-05).



For instance, one of our five associate professors was just promoted; the available data about her teaching load, service assignments, etc., reflect what we expected of her at the assistant-professor level. To further complicate matters, one of the five associate professors is a new hire and thus also a special case. Also, we have faculty who have received course releases or who have bought out of teaching with research money; these situations affect their teaching-load numbers and distort the overall interpretation. One faculty person supervises undergraduate internships, which generates a large number of student credit hours supervised without requiring the faculty effort usually involved in directed that number of student credit hours. Finally, three of our faculty (Michio Tsutsui, Masashi Kato, and Miyako McDavid) teach in the Technical Japanese Program, which has programmatic goals, teaching expectations, and service burden that are very different from those of the department as a whole.

### **E3: Recruitment and retention of underrepresented groups**

The Department of Technical Communication has long enjoyed a relatively diverse student body. Also, the Department is well balanced in regard to gender at the undergraduate, graduate, staff, and faculty levels. That being said, we are committed to improving the diversity of our community.

Over the past ten years, we have greatly increased the number and type of outreach activities that we take part in. As a small department, our first strategy has been to take advantage of all of the existing university and college activities focused on diversity. Each year the Department sends a faculty member to the meeting of the National Society of Black Engineers (UW Chapter) that is devoted to informing prospective students about the various departments in the College of Engineering. The meeting is attended by lower-division students choosing an undergraduate degree program and by current College of Engineering students considering graduate school. We

take care to provide TC literature for use by the Engineering Advising and Diversity Services (EADS) office in their recruiting trips, student events, etc. Our adviser attends as many of these events as he can and makes presentations about TC; our graduate students and undergraduates also take part in these and other recruiting and informational events.

We are also working on community college outreach; we currently have a informational piece tailored to each of the regional community colleges which tells them what courses to take to meet UW requirements, informs them about direct admission to the department, and provides them with general department information and contact information. We also placed a feature article on TC in the UW Transfer Newsletter:

[http://depts.washington.edu/trnews/sp05/article.php?ar\\_id=11](http://depts.washington.edu/trnews/sp05/article.php?ar_id=11)

The most promising development on the diversity front, however, is the recent gift of a \$100,000 undergraduate diversity fellowship/scholarship from alumna Donna Sakson, her husband and her company. The department has made this gift the centerpiece of a larger student diversity effort, planned by our adviser, Jesse Knappenberger. He has created a TC diversity Web page (<http://www.uwtc.washington.edu/diversity/>), a departmental diversity mission statement, and a TC diversity roadmap that articulates concrete enrollment targets and a detailed plan to achieve them (see Appendix R, Diversity Plan).

*Student retention:*

Our advising staff focuses personalized attention on the retention of under-represented students. For example, we have worked with an instructor to improve the placement of a student on a project team, and we have provided funding (derived from a gift to the department) to help a student complete her studies. The department chair has also personally served as the mentor for a graduate student of color.

*Faculty recruitment and retention:*

With respect to faculty recruitment, we rely on the guidance provided in the dean's recruitment handbook, which is concrete and detailed. The faculty now has the following makeup: we have four full professors (two male and two female); five associate professors (three males and two females); no assistant professors; one (male) senior lecturer; and two (female) lecturers. We do not currently have any Black, Hispanic, or Native American faculty; we have three Asian faculty (one male associate professor, one male senior lecturer, and one female lecturer). We have a very good record of retaining faculty.

*Staff recruitment and retention:*

Our staff diversity resembles that of our faculty: good gender balance and some racial/ethnic diversity (primarily Asian and Pacific Islander). Our staff generally has little turnover.

*Factors that aid or impede efforts to recruit or retain:*

With respect to recruiting students, the lack of knowledge about the field of technical communication and low visibility of the TC department make it hard to reach students with information about us. However, once students discover us, they become quite excited about the department and stay with us. With respect to recruiting faculty, we have had difficulty identifying members of underrepresented groups in our disciplinary area; this is a problem facing the field as a whole. Over time, we hope that mechanisms like our diversity scholarship and visibility campaign will improve the diversity of the field.

**E4: Involvement with GO-MAP and OMA**

We take advantage of GO-MAP and OMA programs and opportunities to the greatest extent possible, as well as the whole range of diversity programs offered by the College of Engineering. For instance, just this September, a TC doctoral student worked with our adviser to offer a TC

event in the Bridge Program, which brings in freshman URM students interested in engineering for a week of activities. We offered a two-day Web design workshop in LUTE that acquainted a group of these students with user-centered information design and usability. Staff participated in the event as “members of your audience” to be interviewed by the students, and we had a panel of three doctoral students serve as judges for the designs that the students produced.

### **E5: Influence of diversity**

We believe that the diversity of our students, staff, and faculty supports and furthers our description of our field as global. We believe students have an affirmative experience when they find themselves discussing cultural issues and communication challenges in a group that itself includes diverse perspectives and experiences. For these reasons, we have made it one of our major goals for the next five years to increase the diversity of our program.

## ***Section F: Description of Programs***

In this section we describe our doctoral, master’s, and bachelor’s degree programs.

### **F1: Doctoral program**

The description of our doctoral program covers the objectives of the program; the benefits for the academic unit, the university, and the region; the standards of the program; the preparation of students for careers; and career options for graduates.

#### **Objectives of doctoral degree program**

The Ph.D. in technical communication is a research-based degree that will equip students to create new disciplinary knowledge and to use that knowledge to invent new strategies and technologies for solving communication problems. Students who complete the degree will be expert in analyzing a communication situation: the stakeholders involved in the communication (the designers of the communication and the audiences that the communication addresses), the

goals of the various parties to the communication, the uses to which the communication will be put, the demands created by the interaction of the possible content and the characteristics of the audiences, the larger social forces that influence the form of the communication, and other issues such as individual, cultural, and organizational constraints. They will have knowledge of the theoretical frameworks and empirical research that attempt to explain communication phenomena. They will have learned a range of methods for conducting an inquiry, from the critical/analytical to the ethnographic/descriptive to the experimental. They will have studied design processes and techniques. They will have confronted specific communication problems for which they have designed creative and intellectually justifiable solutions.

Thus TC doctoral students pursue three intertwined intellectual exercises: theoretical reasoning, empirical inquiry, and applied design. To support their development across all three of these areas, they are required to complete coursework in four thematic areas: theory, research methods, media design and applications, and society and systems.

The goals and objectives of the program are as follows:

- To prepare individuals for a career as a researcher, teacher, and intellectual leader in the discipline of technical communication
- To foster the development and dissemination of new knowledge in technical communication
- To foster the development of an international, multi-cultural perspective and a diverse, inclusive student body and workforce in technical communication
- To invent new technical and strategic solutions to technical communication problems

By completion of the course of study, technical communication doctoral students will be able to:

- Analyze a communication situation in its full complexity
- Select or develop an appropriate theoretical framework to motivate an understanding of the situation
- Select an investigative method from a broad range of methods and effectively use it for conducting an inquiry
- Confront specific communication problems and create solutions for them that can be defended theoretically

- Translate theory and research findings into technical or strategic inventions for solving communication design problems

(See Appendix Jc for student planning documents and Appendix Jd for course descriptions.)

### **Benefits for the academic unit, the university, and region**

The TC doctoral program adds strength to the college, university, and region in meeting the demand for high-technology professionals and academics. It will help create and disseminate new knowledge in two of the most important areas that we must now address: communication and the human experience of new technologies. It will enlarge our understanding of how to support, through analysis and design, the great diversity of goals and behaviors in the use of new communication tools and the array of new technologies that are becoming a part of everyday life.

Of the 38 other TC doctoral programs, we consider our closest peers to be the University of Twente (The Netherlands), Carnegie Mellon University, Georgia Tech, Rensselaer Polytechnic Institute, Texas Tech University, and the University of Minnesota. Our distinguishing feature that sets us apart from these other programs is our emphasis on empirical research and design; all but one of these programs primarily emphasizes rhetorical theoretical perspectives and approaches over empirical research and design. The program most similar to ours is found at the University of Twente, which also has a strong emphasis on empirical research.

### **Standards**

We have detailed earlier a number of departmental assessment tools that help us measure the success of the PhD program as well as the broader success of the department: student evaluations of every class, peer review and self-evaluation of every faculty member every year, Student Advisory Committee feedback, computer lab survey, etc. Informal tools that are specific to the PhD program include discussions with the Ph.D. seminar, CIDR ad hoc assessment activities, and one-on-one mentoring of the PhD students.

At this stage of our program's maturity (beginning our fifth year), we are using the following measures of our success (mapped into our program goals):

- *To prepare individuals for a career as a researcher, teacher, and intellectual leader in the discipline of technical communication*
  - Track their record of publication, including articles and conference papers co-authored with faculty and research group teams
  - Track their record of conference attendance to deliver papers or take part in conference activities (panels, workshops, colloquia, etc.)
  - Track their record of securing internships (when appropriate for them)
  - Track their participation in seeking funding for their research
- *To foster the development and dissemination fo new knowledge in technical communication*
  - Track their publications and their citation record
  - Track any invited lectures or other invited activities
  - Track awards, fellowships, admission to honor societies, or other marks of recognition and distinction
- *To foster the development of an international, multi-cultural perspective and a divers, inclusive student body and workforce in technical communication*
  - Track participation in international exchanges, workshops, and conferences
  - Track statistics on gender and ethnic diversity
- *To invent new technical and strategic solutions to technical communication problems*
  - Track adoptions by others of approaches presented in our publications
  - Track honors, awards, or other marks of recognition and distinction

The measures of success that we expect to use once we have begun graduating students (expected this academic year) are detailed in our Ph.D. proposal document (see Appendix Ka).

We have not yet encountered any factors that have impeded our ability to meet our objectives.

### **Preparation of students for careers**

We have a number of mechanisms for preparing our students for their careers. This past year, we had an unusual opportunity in that we conducted a faculty search: we had a doctoral student on the search committee, had all candidates meet with the doctoral students, and held a debriefing with the doctoral students afterwards. This was a rare opportunity to expose the

doctoral students to the full process and give them first-hand experience with the problems and issues that arise.

We also have a range of ongoing activities. For those considering careers in industry, we have a jobs database where employers can post job announcements and internships; this past year, we had 218 postings, which gave students a very rich appreciation of the range of jobs and job requirements that they might encounter. We actively encourage students to apply for internships; this past year, three of them (25%) had internships at Microsoft.

We arrange meetings with students and industry researchers when they are on campus; we have an ongoing relationship with IBM-Santa Teresa, for instance, which sends a representative to visit at least once a year. We also use our speaker series (TC521) as a mechanism to bring in professionals to talk about their work and hold discussions with students in an informal setting. For those interested in academe, the PhD program advisor posts academic jobs on a bulletin board outside her office. Our Ph.D. Teaching Fellowships and other teaching-assistant assignments provide students with a rich experience of course development, presentation, grading, etc.; the directed research groups and opportunities to serve as research assistants on funded projects expose them to a direct experience of research. For professional development, we send our students to conferences (using endowment funds dedicated to student travel). Also, this upcoming year, they will have an opportunity to take part in conference planning and operations, when the IEEE International Professional Communication Conference is held here in Seattle.

### **Staying informed of the career options for graduates**

We are of course in the early years of this effort. At this point, we are keeping track of schools advertising for faculty positions and announcing new programs, and making sure that our



students who attend conferences meet and have opportunities to interact with faculty from a range of programs. (This year, for instance, two faculty and two doctoral students are attending the Council of Programs in Technical and Scientific Communication, which focuses on programmatic and administrative issues; they will do a trip-report panel for the Ph.D. seminar.) We similarly maintain contact with the major research labs in our area (Microsoft, Intel) and other cutting-edge industry groups. As we mature and place students in these jobs, we will maintain close contact with them to remain aware of trends and directions in the field, so as to respond to them in our curriculum and research groups.

## **F2: Master's degrees**

This section discusses the relationship of our master's degree programs to our other degree programs, discusses the measures of success of our master's programs, and our methods for staying informed of career options for master's students.

### **Relationship of master's degree programs to our other degree programs**

Typical of other “practice-oriented programs” offered at the graduate level at the University of Washington, the MSTC programs, both day and evening, “emphasize preparation of the student for professional practice at the frontiers of existing knowledge.” To the TC faculty, that means that graduates of our Master's Programs should be able to:

- Understand the epistemological traditions that inform scholarship/research and practice in the field of Technical Communication.
- Understand how the intellectual commitments of those traditions influence the processes and results of scholarly inquiry in the field of TC.
- Understand the role of theory in scholarly inquiry.
- Understand the difference between “knowledge” and “belief” and the roles each play in scholarly inquiry.
- Be familiar with the many different “research paradigms” that guide inquiry in our field and understand their relative strengths and their limitations.
- Be able to differentiate “competent” from “flawed” research (whether flawed conceptually, flawed in its design, or flawed in its execution) in the field of TC.

- Be able to formulate a question that is “important” either in terms of articulating theory or in terms of practice—be able, in other words, to tell the difference between the important and the trivial issues being addressed in the field.
- Be able to formulate a question whose scope is manageable.
- Be competent “library researchers.” Be facile, in other words, in the use of existing research literature for the purpose of addressing questions of either scholarly or practical importance.

We believe these competencies are not only essential in our graduates but also provide a reasonable conceptual basis for differentiating study at the master’s level from study at the bachelor’s and Ph.D. levels. Simply, we believe that the bachelor’s degree signifies that the student has acquired, under the guidance of members of the faculty, a complement of skills and knowledge required to practice as professionals in our field. The Master’s degree signifies, in addition, the ability to guide one’s own subsequent learning—to frame questions, to utilize existing knowledge to answer those questions, and to be able to distinguish the credible from questionable research. The Ph.D., in our view, adds to these core competencies the ability to conduct original research—to create, in other words, new knowledge.

Recipients of our MSTC, we believe, possess a set of competencies that will set them apart from the graduates of other Master’s programs in technical communication by virtue of our emphasis on the intellectual commitments, traditions, and methods in our field. We believe that our graduates will be unique in their abilities to evaluate the products of research and scholarship in our field and to perceive and appreciate the possibilities such new knowledge holds for practical application.

### **Measures of success in master's program**

Because we do not yet have any graduated Ph.D. students, we evaluate all of our graduate students, including master’s students, using levels of the standards described in Section F1. We have expectations that our master’s students will also become members of the intellectual leadership of the field, though in roles as thoughtful practitioners instead of as researchers and

academics. We encourage them to attend conferences and present papers, take part in research groups, and in other ways take part actively in the intellectual life of the community. However, we do not expect them to undertake the extensive exploration or the sustained scholarship typical of doctoral work. A growing percentage of them in fact opt for the coursework-only completion option (as opposed to the thesis or formal project option) for their master's degree. To measure our success with master's students, we rely on exit surveys and on record of employment.

Using these criteria, we believe that our master's programs are doing an excellent job of meeting their goals.

### **Staying informed of career options for graduates**

We use the same activities described in Section F1. We also poll all graduating students about their employment (see Appendix E, Placement of Graduates, Last 3 Years), monitor the main salary surveys (STC, WinUA, etc.), place these surveys on our Web site so that students can consult them directly, etc. We also maintain close contact with industry and consult industry partners about their sense of the jobs available and job requirements. To track alumni, we have an "In the Real World" feature in our newsletter for which we solicit updates from all alumni for whom we have contact information.

We constantly consult with industry and academic peers, monitor the Web sites of our peer programs, etc., so as to ensure that our curriculum and student opportunities prepare students for their careers.

### **F3: Bachelor's degree**

This section discusses the objectives of our bachelor's program, our measures of the success of the undergraduate program, undergraduate involvement in research, our steps to comply with accountability measures, and our efforts to stay informed of career options for graduates.

## **Objectives of bachelor's degree program**

Our BSTC program includes education about the field and development of professional skills in writing and visual design, research skills, and management skills needed for projects in the real world. (See Appendix Ja for our BSTC Core Competencies, Appendix Jd for a curriculum description, and Appendix Je for our BSTC planning documents.)

The program benefits the department, the university, and the region in that it educates students in the practice of a profession that continues to grow rapidly in the region and state. It provides another degree major and career alternative for students who have an interest in and aptitude for technology but who at the same time are interested in a humane perspective on the topic. Our undergraduate students are heavily recruited for well-paying professional jobs in technical writing, Web design, and usability research at companies like Boeing, Microsoft, Expedia, and IBM.

## **Measures of success in undergraduate programs**

We regularly review and update our undergraduate core competencies and compare our individual course objectives to the core competencies to make sure all competencies are being covered by the core curriculum. We require finishing undergraduates to prepare student portfolios, which are evaluated by the entire faculty; this portfolio review gives us a good understanding of what students have learned in the program. We review the exit surveys of undergraduate students and conduct follow-up surveys after one year to determine how many job offers were received on average, what salaries were offered, etc.

We continue to work on maintaining and improving the diversity of the undergraduate program. (See Section E and Appendix R for a full discussion of our recruitment and retention and diversity plan.)

Our main impediment is that students do not come into the university with any knowledge of the TC field or of our department, and as a result they find TC (if they do find TC) late in their college careers. We have tried several strategies for overcoming this lack of visibility. With respect to curriculum, to attract lower-division students, we have offered a TC100 as part of a Freshman Interest Group (FIG), an Engr101 “University Course,” and an Engr100 Honors course in collaboration with the Anita Borg Institute and the Virtual Design Center. We have also offered a 300-level Coordinated Study Option in User-Centered Design and Usability. Although none of these efforts was a complete success (for reasons of logistics, primarily), they did attract a number of students who became TC majors. We continue to increase our participation in recruiting events at the College and University levels.

### **Undergraduate involvement in research**

We have involved undergraduates in research in several ways. TC496/596 research groups are open to undergraduate students, and a number of students have taken part. However, analysis done by Turns and Ramey informed us that undergraduate participation has become lower than expected. We think that this is an effect in part of our conversion of most of the undergraduate courses to five credits, which puts the students at full-time status without the need to consider adding two or three credits of TC496. We are working harder this year to inform the students of the advantages of taking part in the research groups. Individual faculty also involve undergraduate students in their funded research. Students participate in numerous course-based projects, both in research and in design.

We hold a Research and Design Showcase every spring for the regional chapter of our professional society at which students present their work in posters. Undergraduate participation in this event has been excellent and the students are very engaged in taking part.

### **Steps to comply with accountability measures**

Increasing our undergraduate courses to five credits allows students to move through the courses as a cohort, which is identified in the literature as a measure to increase retention. 2005-06 was the first year of the new curriculum, so we haven't yet assessed its impact on the quality of student learning. We intend to address this question with a CIDR focus group and exit survey questions this year. Given the size of our program, we rely primarily on the data collected by the College of Engineering to allow us to monitor state-mandated accountability measures.

### **Staying informed of career options for graduates**

We use the same methods to stay informed of career options for our bachelor's students that were described in Sections F1 and F2 for our master's and doctoral students.

## ***Section G: Graduate Students***

This section discusses the recruitment and retention of graduate students; advising, mentoring, and professional development of these students; inclusion of graduate students in governance and decision-making; and graduate service appointments.

### **G1: Recruitment and retention**

The discussion of recruitment and retention covers recruitment/outreach programs to attract graduate students and retention rates for graduate students.

#### **Recruitment/outreach programs to attract graduate students**

We have developed several promotional pieces (posters, brochures, etc.) to advertise our program and have distributed them widely throughout the TC community. Our annual student-produced newsletter, *posTComm*, is very effective in building our recruitment; we send it out to a long list (about 3,000 recipients total) including faculty in TC programs nationally and internationally. These faculty advise their finishing undergraduates to apply to our program. We

also continue to improve our Web site. Our presence with our students at conferences and our publications enhance our national/international reputation and thus attract graduate-student applications.

We also have developed an extensive diversity recruitment plan now being implemented (see Section E and Appendix R).

We monitor our applications and the degree to which they arise from our interactions with our colleagues nationally and internationally. Given that we are a small program, we have not formalized this process, but we note where our applications come from, and when we lose an applicant we wanted to admit, where that student goes. Our losses are to very high quality programs (Stanford, Carnegie Mellon, etc.) or industry.

### **Retention rates for master's and doctoral programs**

Our attrition is very low; for instance, in our Ph.D. program's first four years, we have lost only one student. Our losses at the master's level are similarly low. Loss generally occurs because of normal life disruptions; in the dot.com rush, we occasionally lost a student to a hot job offer.

To minimize attrition, we counsel students intensively. We monitor their progress and hound them unmercifully if they fall behind; we are also flexible in accommodating life events and minor changes in direction.

## **G2: Advising, Mentoring, and Professional Development**

In this section we discuss our strategies for communicating expectations and informing students of our graduation and placement record; our departmental mentoring/advising plan; and our professional development plan.

### **Communicating expectations**

We have placed extensive information about program expectations on our Web site (<http://www.uwtc.washington.edu/programs/>), and we (the faculty and advising staff) communicate intensively on an individual basis with our graduate students. We have orientation sessions for incoming graduate students. Because we have not yet completed the full Ph.D. process with a Ph.D. student, we are working closely with our Ph.D. students to understand and provide the information they need. We also use TC523, the Ph.D. seminar, to exchange information with our doctoral students. Please see Appendix Jc for the MS and PhD course of study documents.

### **Informing students of our graduation and placement record**

We provide extensive information to our students about job availability (jobs database, UW jobs fair, Center for Career Services, etc.) and salary levels (job announcements, salary surveys). Our master's program is relatively short (four to five quarters) and structured, and our students almost always proceed directly through it, so time to degree and average completion rates are known quantities. We have numerous informal ways to inform students about their career prospects (posTComm "In the Real World," profiles of alumni on our Web site, etc.). Not having graduated a Ph.D. student as yet, we are not able to provide that information.

Many of our alumni remain in the Puget Sound region and have close relationships with the department and its current students. They offer internships, hire our students, do guest talks, provide class projects, and in other ways knit the department closely into their professional lives. These relationships are also highly informative to our students about their professional prospects.



### **Departmental mentoring/advising plan**

Each year during our admissions process, we review a listing of each student's progress towards the degree (at the minimum, so as to determine the number of new offers we can make, but with the beneficial effect that we are continuously aware of progress towards degree and need for mentoring/advising). Students at each level (bachelor's, master's, Ph.D.) meet with the staff and faculty adviser frequently to monitor progress; once they have established their committee and chair, they meet at least quarterly (for coursework-only master's students; but in most cases much more frequently) as they progress through the program. The staff adviser monitors progress toward degree quarterly and communicates with students who are falling behind. Also, for students who are also teaching assistants, the director of the Engineering Communication Program monitors their performance. For a listing of the current Ph.D. students and their progress towards the degree, please see Appendix Kc.

### **Professional development plan**

We have discussed earlier our numerous ways to acquaint students with the range of jobs available and the skills/experience required for them at both the master's and doctoral level. We have also addressed many of the additional professional-development activities that we provide for our students, which include guidance in preparing teaching portfolios; support for applying for grants; career fairs and industry visits; opportunities to work with the student chapters of our two main professional societies, the Society for Technical Communication and the ACM Special Interest Group for Computer-Human Interaction; and teaching, research, and internship opportunities.

We also encourage students to submit papers to conferences and provide funding to those whose papers are accepted. We provide several different formats for students to practice their

talks ahead of time. Please see Appendix Jb for a listing of the 2005-06 student attendees at conferences.

### **G3: Graduate Students Inclusion in Governance and Decision-making**

In this section we discuss the inclusion of graduate students in governance and the grievance process.

#### **Inclusion of graduate students in governance**

We strive to include our graduate students in many ways in the governance of the department. For instance, we have quarterly meetings of the Student Advisory Committee (open to all students); we had a graduate student on our faculty search committee last year; we collaborate with graduate students in planning and conducting most of our recruitment activities, and we had a CIDR focus group to get the feedback of the PhD students about how the program was going. More generally, because our program is small, we work with our graduate students closely and have social events that encourage exchanges of ideas. Because our department also has a very flat hierarchy, our students can view themselves as colleagues and collaborators and are encouraged to express their views about the program freely.

#### **Grievance process**

We do not believe that we have had a formal grievance lodged over the past three years. We do receive feedback and even informal complaints from students, but we handle these promptly and thoroughly and they do not usually escalate to formal complaints.

At all student orientations, we tell students that they can bring a complaint to the adviser, any instructor, or the chair, and we give them contact information. We also include information about student rights on our syllabuses, with contact information for the university ombudsman.

Any student can address a complaint to the chair. If the student is in the Engineering Communication Program, the complaint will first go to the director of that program; if the student isn't satisfied with the resolution, then the complaint will come to the chair. The chair listens to the student's account, finds out what outcome he/she wants, negotiates in the cases where the outcome isn't possible or reasonable, and gets the student's agreement that if the outcome happens, the complaint will have been addressed.

If the student isn't happy with that process, or if the student goes to the ombudsman first, we then go through that office's process. In that case, the chair doesn't meet with the student separately; she works with the person against whom the complaint has been made to support him/her through the ombudsman's process of documenting the problem and meeting to discuss it, get a reasonable outcome, and move on to closure.

In cases involving people represented by unions (classified staff and teaching assistants), when a complaint arises we will work with the designated people and processes. (We have not yet had to face one of these cases.)

Staff can bring complaints to the chair if they are comfortable doing so. If they prefer, they can take a complaint to Debbie Flores, HR person for the COE.

#### **G4: Graduate Service Appointments**

This discussion of graduate service appointments covers the appointment process, the average duration of appointments, number of appointments, promotion/salary-increase criteria, supervision of graduate students, and graduate student training.

##### **Appointment process**

TA positions are advertised within the department, but also offered to incoming graduate students with their acceptance letter. There is an application form that asks them to describe

skills they would bring to the classroom and how teaching would benefit their graduate studies. If there are fewer spots than interested students, the Engineering Communication Director holds interviews. Typically, PhD students have first priority for teaching assistantships.

RA positions (both department-funded, for instance the assistant directorship of the writing center, and funded by research) are also first advertised within the department. If, after two weeks, a qualified student can not be found, the position is announced to the larger UW community through directed emails and postings on UW's website.

### **Average duration of appointment**

Academic Student Employee (ASE) appointments are usually allocated in 9-month blocks (or one academic year). Reappointments (for summer quarter or the following academic year) are dependent on satisfactory academic progress, job performance, and availability of funds. Most full-time graduate students have funding during their entire graduate program. Typically, students will teach the entire 1.5-2 years while earning their MS. Some students will teach for a year and then move on to a research assistantship. PhD students will do a mix of teaching and research assistantships during their years in the program so they get experience in both. New PhD teaching fellowships have just been awarded for the 2006-07 year.

### **Appointments**

We average fifteen TA positions and ten RA positions per quarter.

### **Promotion/Salary increase criteria**

ASEs earn salary increases as indicated by Article 14 of the UW/UAW (GSEAC) contract, based on their status in a degree program (pre-masters, doctoral, etc.) ASEs are also provided with a yearly cost of living raise equal to the amount provided to faculty members. See Article 31 of the UW/UAW (GSEAC) contract for details.

## **Supervision of graduate students**

TAs for 231/333 are supervised in several ways: early in their teaching careers they are supervised closely (through the teaching seminar TC597, classroom visits, etc.); as they move on in their teaching experiences they are encouraged to create their own course materials, etc. In an approach different from that of the COE, TC TAs teach stand-alone courses in TC 231/333; they are supported and supervised as follows:

- Syllabi and most course materials are designed by ECP director
- One-week orientation before school begins, includes Microteaching evaluation by CIDR
- CIDR TA conference required
- First two quarters of teaching, full teaching evaluation including class visit
- First two quarters of teaching, three examples of each graded assignment are reviewed by ECP director
- Weekly training meetings (1 hour)
- Mid-term course evaluations with review by ECP director
- Final course evaluations with review by ECP director

TAs for other TC courses are supervised by the faculty course coordinator for the course in question.

## **Graduate student training**

Our teaching assistants teach their own stand-alone courses. They are responsible for all teaching, grading, and meeting with students during office hours. TC231/333 instructors are trained through both an orientation before school begins, as well as ongoing weekly training sessions (TC597). Additional training is offered to the TAs through the ECP director or CIDR. Many of our TAs take advantage of CIDR resources such as class visits, structured course evaluations, etc. in the 3<sup>rd</sup> quarter, 231/333 TAs develop a teaching portfolio.

RAs are trained by individual faculty supervisors. They are encouraged to attend the RA conference offered by CIDR each Sept. They are also informed of ongoing workshops offered on campus.

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<sup>i</sup> Turns, Jennifer, and Judith Ramey, “Active and Collaborative Learning in the Practice of Research: Credit-Based Research Groups,” *Technical Communication* (the archival journal of the Society for Technical Communication), vol. 53, no. 3: August 2006, pp. 296-307.

<sup>ii</sup> Geest, Thea van der, and Jan Spyridakis, *Technical Communication* special issue, August 2000.

<sup>iii</sup> Jong, Menno de, and Judith Ramey, special issue *IEEE Transactions on Professional Communication*, 2000.

<sup>iv</sup> Blakeslee, Ann, and Rachel Spilka. 2004. The state of research in technical communication. *Technical Communication Quarterly* 13:73-92.

<sup>v</sup> Grove, Laurel. 2004. Finding funding: Writing winning proposals for research funds. *Technical Communication* 51:25-35.