#### **PROGRAM REVIEW 2008-2011**

**DIVISION:** Language Arts Division

**DEPARTMENT OR PROGRAM:** Technical Writing (TWRT)

NAME AND TITLE OF PREPARER: Marrietta Reber, Chair of Technical Writing Department

#### I. DESCRIPTION AND MISSION OF THE PROGRAM

At the request of the administration of De Anza College, our department is submitting a program review to address required areas.

The areas our program considerably addresses include:

 $\underline{X}$  Transfer  $\underline{X}$  Career/Technical  $\underline{X}$  Degree

#### A. Brief Description and Mission of the Program

Our department is a vocational education program that provides students with specific training in technical writing, project management, employment strategies, business communications, and technical publications and design. We offer a Certificate of Achievement and an A.A. in Technical Writing.

All of our core courses are cross-listed as both Business (BUS) and English (EWRT) classes to emphasize their interdisciplinary nature and appeal to students in a variety of disciplines.

Our mission is to help students obtain and improve marketable writing and management skills to gain employment, reposition themselves for a new job or industry, or win promotions in their current field.

In particular, our program caters to individuals who are looking to get into the work place after a work gap or for the first time, individuals who are gainfully employed but are seeking to update their skills so they remain on the cutting edge of industry trends, or individuals who are pursuing a new career path and need specific training to do so. Many of our students have a technical background in computer programming, engineering, or hardware and software development. Others have backgrounds in writing or training. The vast majority of our students already have at least one college degree, and many have advanced and graduate degrees.

Our department is small with only one full-time faculty member, who also serves as the department chair, and several part-time faculty, most of whom have full-time jobs in industry and are unable to contribute to curriculum development, outreach, department projects, etc.

# **B. Summary of Program's Strengths**

Our program has many strengths. Here are few of them:

Helping Students Gain Employment. Our program successfully prepares students to be competitive in the marketplace and gain employment. Our student population has a wonderful track record of gaining employment, either while enrolled in our program or shortly after completion. Our program is highly regarded in the Bay Area. I am regularly contacted by companies such as Yahoo, Google, and Oracle to announce jobs to our students because these organizations have hired our superior students in the past. For example, Sakura Ticer of Marvell Technology Group, a leading fabless semiconductor company, wrote in a recent email: "I've had the good fortune of recruiting from your program Chandana Karipineni.... I've

also hired former students of yours who completed your program or took classes from you in the past: Phillip Cline, Susan Yung, Michael Chen, and they've all had good fundamentals for writing. I have an immediate opening and would like to hire a student from your program..." Many companies in the area come to us first when new positions open. Because we developed and maintain a listsery of all of our students over the last 6 years, we pass on job announcements quickly to help De Anza alumni with their employment goals.

Preparing Students for Industry by Offering Cutting Edge Courses on Current Technology. Our department effectively prepares students for employment within a competitive Silicon Valley market, by offering courses that reflect the latest technology and tools. Three courses we have recently created are FrameMaker, Grant Writing, and an Adobe Tools class. We have offered both FrameMaker and Grant Writing successfully under the course listing of TWRT 66z: Special Topics in Technical Writing. Though FrameMaker was offered in past years at Foothill, it has not been offered in recent years, so we created a FrameMaker course within our department that we have offered regularly with great success.

Providing Access to Industry Standard Technology through Labs. Our department makes three different labs available to students, all loaded with the latest industry software to help them stay abreast of technology trends and be competitive in the job market. First, we used Perkins Grant funding to create a shared computer lab with the Business Department in AT311 where we offer state-of-the-art instruction using the latest technologies. (We also used Perkins funding to create a shared SMART classroom with the Speech Department in L49 so our instructional environment can keep up with the needs of our students and Silicon Valley technology standards.) Second, we partner with the Language Arts division at large to provide another lab for our students with relevant technology in AT103. Third, we have a small satellite lab directly outside of my office where students also have access to the full Adobe Suite software package and where they can print, even in color, for free. To continue to offer this technology, we need funding for software licensing, hardware, and printing supplies. (See "Budget Limitations")

Appealing to Life-Long Learners. Our department has great success providing education and training to life long learners. Our program naturally appeals to adults who are seeking training in a new field or profession. As a result, we have many mature students who already hold bachelor's or master's degrees and have completed years of adult employment. Currently 33% of our overall student population is age 40 or older. Our program is in a rare position of serving life long learners effectively because we are a vocational education program suited to meet the changing needs of an important industry in the area.

Improving Interpersonal and Cross-Cultural Skills. All our classes have a teamwork component. Students are taught interpersonal skills and tools for group collaboration. We also teach an extensive unit on International and Corporate Culture to help students identify aspects of their unique cultural background and how they relate in an international context. Cross-cultural communication skills are a must for writing in today's global marketplace.

# C. Summary of Program's Areas of Improvement

Some of our areas of improvement include:

**Strengthening Ties With Industry to Increase Enrollment.** By more effectively advertising our department in industry, we can draw on a greater number of life long learners who wish to seek further education to make changes or advances in their careers. Reassigned time is needed to engage with industry effectively. (Please see "Budget Limitations" section.)

Keeping Up with the Latest Trends in Industry. Because technical writing is a dynamic, fast-changing, technologically-based field, constant revisions to curriculum must be made to stay abreast of current trends. Our department has worked tirelessly to develop new elective courses based on the latest industry trends such as electives on grant writing, FrameMaker software, the Adobe Suite tools, and technical editing. In addition, we have recently revised all of our core course outlines to include a hybrid online component to prepare students for working virtually in an increasingly global world. Also, we are currently beginning a project to revamp our curriculum again to add a greater focus on digital publishing and web design to keep up with industry trends toward electronic publications. We are also working on curriculum to help students put their professional portfolios online. But, to stay on top of trends, we need reassigned time and opportunities to attend workshops and conferences. (See "Budget Limitations")

Engaging in Dialog with Similar Programs. Because we are a small department with few resources and only one full-time faculty member, it is difficult to attend conferences with educators in our industry. Engaging in a dialog or attending a conference takes time, time we do not have to give since we have no reassigned time. All administrative duties are performed by the department chair who also teaches a full load, so capitalizing on opportunities to learn from others is difficult. With so much work to do and so little support, our program becomes somewhat isolated. Reassigned time and professional development time and funds are needed to attend conferences and engage with others. (See "Budget Limitations")

**Providing Increased Outreach to Targeted Populations.** With resources, funding, and reassigned time, we could outreach to targeted populations by offering employment skills training in resume writing and interviewing to programs such as Puente, FYE, Yaaba Soore, and the WRC. (See "Budget Limitations")

#### D. Expected Outcomes for Students in the Program

Expected outcomes include transfer, career goals, and certificate and degrees. 97-100% of our courses are considered Transferable, Degree Applicable, and Not Basic Skills. Our learning outcomes include:

Improving students' writing skills to be competitive in today's job market in various disciplines

Strengthening students' interpersonal skills and raising awareness of cross-cultural communication to help students function sensitively and effectively in a global market

Sharpening their project management and business communications skills to gain employment, successfully manage people and projects, and win promotions

Gaining proficiency in technical publications, document design, and visual and graphic design Attaining skills in writing for paper-based documentation as well as online formats

Achieving advanced-level skills in Microsoft Office applications

Becoming proficient in online writing and collaboration tools to prepare them for a virtual workplace in an increasingly global market with international team structure

Developing an appreciation for aesthetic expressions of humankind and artistic principles of symmetry, balance, contrast, and alignment as they relate to design and tech pubs

## II. RETENTION AND GROWTH

Please see sections below for information on our retention and growth.

# A. Response to Institutional Goal of Increased Access, Growth, & Retention

Our program had an enrollment of 239 students in 2007-2008, a growth of 27% from 2005-2006 when our enrollment was 189. Enrollment is steadily on the rise, and our numbers are climbing at an even faster rate

now due to the current downturn in the economy and the number of students who are coming back to school for additional training. To respond to goals of increased access, growth, and retention, we are:

Offering EWRT 1A sections with a Technical Writing emphasis. By offering our curriculum as a means to satisfy a general education requirement, we are better able to reach typically underrepresented students in our department, including typical college-aged students who might not otherwise be aware of potential career opportunities. EWRT 1A students create a cover letter and a resume in response to a specific job announcement for which they are qualified to teach them employment skills that will last them a lifetime. Their final project for the course is creating a professional portfolio students can use in job interviews to showcase their skills. Students who pass EWRT 1A with a technical writing emphasis have automatically gained equivalency for TWRT 61 (the first of our four required courses for the Certificate of Achievement) and need to complete only three more courses to earn our widely acclaimed Certificate of Achievement in Technical Writing. Just this quarter alone, two of my previous EWRT 1A students, students around the age of 19, are enrolled in my TWRT 62 class and are working towards getting the certificate. Indeed, 7% of our students are now 19 or less and they have a 100% success rate. And 12% of our students are between 20-24, making a total of 19% of our students falling below the age of 25. This growth is new in our department, a department that traditionally caters to older students who already have professional training. In this way, we are gradually extending our student population to include traditional college-aged students.

Offering more sections of FrameMaker (TWRT 66z: Special Topics in Technical Writing). We have been offering our course on FrameMaker more consistently with great success, increasing our overall enrollment. This software is the premier publishing tool requested in job announcements in our industry so student demand for it is high. Since Foothill stopped offering this class several years ago, and it is not offered anywhere else on De Anza campus, this course meets a specific need no one else is meeting.

Adding a hybrid component to all of our core courses. We have recently revised our course curriculum outlines for each of our core courses to integrate an online component. This component gives students practice participating in virtual peer reviews/edits, online collaboration, and remote team structures. All of these skills are critical to individuals entering a technology field in the workplace where multinational team structures, off-shoring, and international clients are common. It also widens access to our courses.

**Updating our Curriculum to Increase Emphasis on Digital Publishing.** We are beginning a major initiative to provide instruction on electronic publishing and digital documentation. Traditionally our program has been strong in providing training in the creation and design of traditional paper-based documentation. While we don't want to eliminate this training because it is still necessary and prevalent in the industry, we do want to provide training in new technologies and methodologies related to the growing electronic publishing medium of technical writing materials. We are also adding curriculum and training materials to help students put their own professional portfolios online (rather than having them available exclusively in hard copy form) to enable our students to expand their job pool beyond geographical constraints and to showcase their skill with web pages and technology.

# **B.** Response to Institutional Goal for Targeted Populations

The Technical Writing department is committed to increasing enrollment and success of underrepresented students. Overall our program does very well at appealing to and servicing students that are typically defined as "underrepresented." We have responded to institutional goals for targeted populations by:

Increasing Access of Targeted Populations to Programs that Enhance Student Success and Retention. The final class in our certificate program (TWRT 64) is a course in which student teams

complete projects for a variety of programs on campus. Since our students are generally highly skilled, many with advanced degrees and professional experience, they can handle complex projects that benefit De Anza communities. For example, in the past two years, Technical Writing students have: created the complete website for De Anza's Student Success Center, along with designing and writing marketing brochures, program descriptions, and logos for its 9 programs; created marketing and program materials for Puente; and created the ICCE brochure. Through projects like these, our program and students enhance student success and retention of targeted populations throughout the college. We offer our services free of charge, thus helping to cut down college expenses and alleviate the budget crunch where possible.

Catering to a Diverse Demographic. In 2007-2008, white students comprised 29% of our enrollment. Our predominant ethnicity is Asian, which constituted 40% of our enrollment. Though the college wide Asian population consists largely of Vietnamese, Korean, Japanese, and Chinese, our predominant population is South East Asian from India. One of our largest demographics is Indian women who came to the US with their husbands who work in the tech industry. Many of these women were highly educated in India, particularly in the discipline of English Language and Literature, and they come to our classes seeking specific training that compliments their educational background to find employment in the U.S. In terms of other targeted populations, 5% of our students in 2007-2008 were Filipino, 4% Hispanic, and 2% Native American, and we have a 100% success rate among our Black population.

In terms of gender, our program typically serves more females than males. Approximately 36% of our students are male and 64% are female. The female withdraw percentage is also slightly lower (11% for women as compared to 13% for men). Of the females we serve, a large number of them are mothers who are seeking additional training to return to the workforce after a work gap to raise children.

#### C. Basic Skills Needs of Students

As mentioned, 100% of our courses are considered "Not Basic Skills." The content and nature of our courses requires competence in basic skills. However, the lack of basic skills does impact the student success rate for our program. Students with non-Native English speaking background struggle in our courses due to the demanding command of the English language required by the subject matter and the industry. For these students, our best method to help is coordinating with the ESL department, the Listening and Speaking Lab, and Cross-Cultural Partners to help students access the assistance they need.

We are more effective in helping students who speak English fluently but who learned English abroad (such as in India) learn to adapt their writing style to an American audience. We offer extensive training to help students demonstrate fluency in American English writing conventions such as using active voice, American spelling, and American vocabulary.

#### III. STUDENT EQUITY

Our department is taking the following measures towards decreasing the student equity gap:

## A. Progress Towards Reducing the Student Equity Gap

Structuring Students in Teams and Using Team-Building Activities. In all our courses students participate in teams to complete group projects and peer edits/reviews. These teams provide extra support to the individuals in our program, which helps with student success and retention. We also have class parties that help students network and make friends of their classmates so they have support and so they

can make valuable business connections to help them with employment. These strategies build camaraderie and increase retention and success.

Using Technology to Assist All Student Populations with Job Searching. We maintain a listsery to communicate with all our current and previous students over the last 6 years to share job openings and allow opportunities for networking. In this way, targeted populations have equal access to employment opportunities and support. We are also offering specific training in creating a free online E-Portfolio to showcase students' work to prospective employers, both those who are local and those who are distant.

**Providing Access to Useful Tools Through Our Labs.** Our three TWRT labs provide access to software tools that can help all students learn and demonstrate marketable skills.

#### B. Continuation of Goal to Reduce Student Equity Gap

Offering More EWRT 1A sections with a Technical Writing emphasis. Once again, offering EWRT 1A sections with a technical writing emphasis that focus on employment training in resume writing and job hunting helps reduce the student equity gap. Through these classes, we can reach typically underrepresented students and targeted populations and teach them to create a cover letter and a resume in response to a specific job announcement, so they gain employment skills that will last a lifetime The final project for this class is creation of a professional portfolio of the student's best work that they can use in job interviews to demonstrate their unique skill set and win out over the competition.

## C. Program Challenges to Reaching Goal to Reduce Student Equity Gap

Challenges we face in reducing student equity gap include:

**Difficulty Identifying Numbers of Statistical Significance.** Because our program is small with 239 students in 2007-2008, it is very difficult for us to identify trends with target populations and make assessments based on percentages shown in the "Distribution and Success by Targeted Group." In 2007-2008, 24 students were identified as targeted. When you break those numbers down into different ethnicities, a single individual could represent 25%, 50%, 75%, or 100% of their respective demographic.

Lack of Basic Skills Focus. Since our program is not a basic skills focused program, but rather one that aims to train potential employees who are highly skilled and competitive in Silicon Valley's high-tech industry, it is difficult to provide special support to targeted groups who need basic skills education or who have fundamental problems with the English language. The level of command of English required of technical writers in industry far exceeds the level of English even a typical college grad would have. Therefore, it can be difficult for us to help students who are found to lack basic skills to reach the level of professional writers. With more resources and reassigned time, we could find additional ways to help. (See "Budget Limitations")

# IV. BUDGET LIMITATIONS

As the only full-time member of the Technical Writing department, the Chair, Marrietta Reber, needs her two release time classes per year to be restored. Not only does she have no release time to run the department, she has also been given a 0 B-budget for recent years. Please see below for more details:

## A. Limitations Placed on Program Based on Limited Funding

**Elimination of Reassigned Time.** The elimination of all reassigned time and stipends for the department chair has placed great limitations on the department. In addition, this lack of funding and reassigned time

is compounded by the fact that all other faculty members in the department are part-time instructors with full-time employment in industry who are unavailable to assist in any department initiatives. Therefore, the chair is left to manage all department duties and development herself with no personnel assistance, no budget or funding, and no reassigned time, thus severely limiting our program. From the program's creation approximately 20 years ago up until 2003, two release time courses were awarded per year so the department chair could develop and update curriculum, manage the Perkins Grant funding and paperwork, strengthen ties with industry, research new learning tools and technologies, manage faculty and scheduling, oversee the budget, etc. In 2004, release time was cut from two courses to one, and in 2005 all release time was eliminated. Since 2005, the department chair has been running the department with no compensation whatsoever, all while teaching a full load. This lack of support is limiting our ability to improve, adapt to industry trends, and market the program to new student populations to increase enrollment. The lack of support also contributes to an increasing isolation of our department from larger dialogs relevant to the industry. And it is also wearing out our faculty resources and morale.

**Elimination of All B Budget Funding.** The TWRT department has received NO B-Budget funding for the last several years. The balance has been zero. As a result, the department can not buy replacement printer cartridges to keep their student lab up and running or even allow the faculty to print teaching materials. We have no funding to purchase supplies of any kind.

#### B. Consequences of Eliminating or Reducing the Program

Consequences of eliminating or reducing the program include:

Failure to Offer Technical Writing Training in Silicon Valley. The California Employment Development Department expects the number of technical writing jobs to grow 23.3% between 2002 and 2012. So technical writing is a growing industry with extremely high demand in Silicon Valley especially. Failure to offer courses in this important technical, vocational field would be a major disservice not only to De Anza students, but to the community and local economy at large.

#### V. ADDITIONAL COMMENTS

See below for additional comments:

#### **Relationships with Other Programs**

As previously mentioned, all our core courses are cross-listed as both Business (BUS) and English (EWRT) classes to emphasize their interdisciplinary nature and appeal to students in a variety of disciplines. The curriculum and concepts taught are relevant to all three departments, but the expertise to teach these courses specifically resides within the TWRT department. In addition, we share a combined computer lab in AT311 with the Business department, one in AT103 with the Language Arts Division, and an assigned Smart classroom in L49 with the Speech department. Our curriculum compliments, but is not repeated by, the CAOS and CIS departments as well as some ARTS classes. And the AA degree allows and encourages our students to take courses in related disciplines to fulfill the requirements for the A.A. in Technical Writing.

#### State and Federal Mandates

The Technical Writing department must comply with all government regulations relating to its Perkins Grant for Vocational Education Programs. We receive annual funding from this grant, but the use of those funds are strictly limited and regulated by the grant.